

Money Management on a Shoestring

A Critical Literature Review of Financial Literacy
& Low-income People

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Research paper prepared for the
Task Force on Financial Literacy



Date of publication: February 9, 2011

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The opinions expressed in this paper do not necessarily reflect those of the Task Force. Any errors or omissions are the responsibility of the author.

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Executive Summary

This report examines evidence from the academic and policy literature about the financial literacy of low-income people. The purposes of the study are to provide a critical review of evidence about low-income people's financial literacy measurement, the programs used to promote their financial literacy, and the information uncovered about the programs by evaluations. Finally, the study was to provide recommendations about how policies might be more supportive for building low-income people's financial literacy. The paper presents some concepts useful for the study of financial literacy, and then presents findings related to the measurement of financial literacy, drawing on results from several national surveys, including four from Canada, New Zealand, the United Kingdom, and the United States. The third section presents an examination of financial literacy programs and evaluations from many countries including Australia, Canada, the UK, and the US. The conclusion pulls together key results before a series of recommendations are made at the end of the report.

Method

This report is based on a literature review using several important academic databases (see Appendix A for details). From the literature review, 152 studies were shortlisted (see Bibliography) that were sorted into measurement or program/evaluation themes. A total of 23 measurement studies were identified, and each studies' treatment of low-income people was described (see Appendix B). From this group four studies were shortlisted for discussion in Section Two. From the list of program and evaluation studies, 37 of the most relevant studies were selected for review (Appendix C) and formed the basis of Section Three.

Financial Literacy Concepts of Relevance to the Study

The literature review identified two important concepts to consider when studying low-income people's financial literacy. These concepts relate to how financial literacy needs and financial service access varies across people and time. The academic literature has identified four principal ways in which financial literacy needs vary. (1) The complexity of the economy in which one lives affects one's financial literacy needs. Studies of financial literacy today note that because of changes in the last twenty years, northern economies have become more complex so that people require more financial literacy. (2) Financial literacy needs vary over the course of one's life. This is explained by the life-cycle theory dealt with extensively in the economics literature. This model finds that some age groups, e.g., young and middle-aged adults, require the greatest financial literacy. (3) Financial literacy needs vary across social or cultural groups. People with few financial assets do not have the same literacy requirements as people with many assets. (4) Financial literacy needs vary by life goals. Often people value rising personal income. For them, advanced financial literacy is needed. In other cases, people deliberately seek to maintain or reduce their income, as with voluntary simplicity approach. For them a more basic financial literacy is required.

But financial literacy needs are one side of the financial equation. The other side is financial service supply. Geographic and socio-cultural context affects financial service options. Low-income people often face barriers to mainstream bank services and instead rely to some extent on fringe or informal banks. Reliance on these types of providers reduces the access to financial literacy resources and may even prevent people from realizing the importance of financial literacy.

Measuring Financial Literacy

A total of 23 measurement studies were identified, and each studies' treatment of low-income people was described (Appendix B). From this group, four surveys were shortlisted for discussion in Section Two, including the Statistics Canada 2009 *Canadian Financial Capability Survey*; the UK Financial Service Authority (FSA) 2006 *Survey of Financial*

Capability; the US Financial Industry Regulatory Authority (FINRA) 2009 National Survey, a component of *National Financial Capability Study*; and, the New Zealand Retirement Commission 2009 *Financial Knowledge Survey*.

The measurement of financial literacy generally involves one-off questions or indexes made up of a number of questions, or both. These questions or indexes are what are used as the indicators of financial literacy. The questions come in many forms, often falling within a continuum such as objective-subjective, basic-advanced, budgeting-planning, and savings-credit. Combining these questions into indexes is an interesting step but involves important assumptions about the weighting of different factors.

The studies in general and the four studies in particular provide evidence that low-income people face higher rates of illiteracy than do non-poor people in areas of advanced financial literacy. But indicators of basic financial literacy find little differences between these groups. For instance, the results of the FINRA survey were similar to those of the Canadian survey in terms of much larger gaps for more advanced financial literacy levels. And these results are similar to those reported for the British survey (FSA 2006). Because of presentation limitations in the New Zealand survey, it is not clear if its results were similar to these. But the Canadian, US, and UK survey results demonstrate a greater gap between low-income versus non-poor people for more advanced as compared with basic literacy issues.

Program Delivery and Evaluations

From the list of program and evaluation studies, 37 of the most relevant studies were selected for review (Appendix (C)) and formed the basis of Section Three. In terms of programs and evaluations of financial literacy, this study identified programs in Australia, Canada, the UK, and the US that had a bearing on the situation of low-income people. For the purposes of this study, there were four ways by which financial literacy is delivered to low-income people: (1) as a stand-alone program with general literacy goals, (2) as a stand-

alone program with particular literacy and behavioural goals, (3) as a component of a financial inclusion program, and (4) as a component of an asset-building program.

Program Delivery

The Canadian studies of financial literacy resources for various groups (newcomers and disabled people) point to a paucity of government resources on financial literacy, particularly for newcomers. They also note the need to balance education initiatives with improved regulation to achieve consumer financial well-being. These reports noted the balance required between universality of programming and meeting particular needs. Universality of programs allows for consistent delivery and evaluations but threatens the relevance of programming to particular people and communities.

The US literature was the most extensive with regard to financial literacy programs for low-income people. There is agreement in the literature that low-income people in general have lower levels of financial literacy than do non-poor people. The tension in this literature relates to whether lower financial literacy is a particular weakness of low-income people, or whether it reflects smaller assets and greater barriers than among the non-poor. Sherradan and Boshara (2008) argued that financial literacy programs must be designed with a better knowledge of the realities that low-income people face.

Evaluations

The evidence about stand-alone financial literacy programs is limited. Results from Australia's *Money Minded* program indicate that stand-alone financial literacy training is valued by participants and can improve their subjective valuation of their financial literacy.

Evaluations of stand-alone programs that have a particular goal reinforce the necessity of careful program design, in this case with respect to default options for programs such as retirement pensions. Defaults set too low may lead to sub-optimal savings; defaults set too high may reduce participation. The US evidence found that financial education stimulated pension savings among low-income workers. Focused financial literacy can also lower

house delinquency rates. There was little information about the costs of these programs. Regarding unbanked programs such as *Progress Loans* in Australia, evidence is that the combination of access to small loans and financial literacy leads to good repayment rates and builds participants' financial confidence. Evaluation of the US unbanked programs – FLLIP (without the matched-savings component), *Get Checking*, *Money Smart*, and credit counselling – demonstrate that they can improve the financial knowledge and financial behaviour of participants. Benefits include better knowledge and attitudes about banks, more careful reconciliation of chequing account balance, and improved financial knowledge and behaviour.

The literature on individual development accounts (IDAs) and their relationship to financial literacy is more extensive. The evidence for asset-building from Australia (*Saver Plus*) indicates that participants valued financial literacy training, particularly with respect to improving their planning. Many participants successfully completed the program and purchased their assets. Evaluations of the Canadian *Learn\$ave* program demonstrate that the savings-and-literacy group outperformed the control group in terms of asset accumulation but not in terms of net wealth. The costs of the different programs were not evaluated, nor were the costs compared to those of other types of assistance programs. The US literature seems to be in consensus that IDAs with some financial literacy training can be an effective means to build savings and financial literacy. Evidence from the *American Dream Demonstration*, a US-based IDA pilot program, suggests that roughly 10 to 12 hours of financial literacy training offered within IDA programs can boost participants' savings, improve their basic financial habits (such as budgeting), and improve their attitude about finances.

Program Design

Regarding program design, an evaluation of the Australian-based *Saver Plus* program noted the need for clear objectives, simple and balanced design, commitment by stakeholders, relevant and motivating content, credibility of program, and participant support (Chant Link and Associates 2009, pp.15-16). Evaluations need to be designed that are

comprehensive and allow flexibility. Comprehensive evaluations allow for comparisons between programs while flexibility allows evaluations to respond to the needs of particular people and communities. Consistent with best practices in evaluation, the process of the evaluation needs to be integrated into program design and to have a participatory dimension. Evaluation of the US-based FLLIP program and the *Get Checking* program noted the importance of addressing the felt needs of participants. Other design features included the importance of stakeholder collaboration, and that curriculum includes information on government programs and supports. The *Money Smart* evaluation pointed out that financial literacy needs vary – e.g., some people have a greater and some a lesser need for a mainstream bank account – and that indicators of program impact must reflect people’s different goals.

The program and evaluation literature reviewed here examined stand-alone financial literacy programs and comprehensive programs that include a financial literacy component. Data limitations prevent comment on causation and on the cost side of these programs. Impact evaluations demonstrate that when financial literacy is combined with other programming (e.g., asset accumulation, credit, asset-building), it can generate added benefits. In terms of program design, a key result is to balance consistency of programs with flexibility. Consistency offers greater scope for rational allocation of support and evaluations that are comparable. But flexibility is needed to ensure that programs meet the felt needs of the participants. Other important program design features include ensuring sufficient incentives for participants, keeping financial literacy training short, and making sure the venue is conveniently located.

Recommendations

Four recommendations were made regarding ways to address problems in measuring financial literacy, and seven recommendations were made regarding program delivery and evaluation.

1) Introduction

This report examines evidence from the academic and policy literature on the topic of financial literacy of low-income people. The purposes of the study are to provide a critical review of evidence about low-income and at-risk people on how their financial literacy is measured, what programs are used to promote their financial literacy, and what evaluations of the programs uncover about them. Finally, the study provides recommendations about how policies might be more supportive for building low-income people's financial literacy.

Financial literacy has become a prominent concern among policymakers in the last five to ten years. Rising household debt, declining savings rates, growing complexity of financial products, and the devolution of asset-building to the individual (from the employer or state) all point to the need for greater financial literacy for citizens. But studies of financial literacy are still quite recent, and the literature has not expanded substantially to study literacy in different segments of the population. A common conclusion of national reviews is that, on average, financial literacy levels are insufficient and that low-income people are the least literate. This study will not address the former point – that average levels of financial literacy are insufficient – but it will critically review the data and the notion that low-income people are acutely illiterate.

Programs to promote financial literacy take many forms, from school- and work-based to non-profit offerings and as a component of more comprehensive programs such as an asset-building program. The literature is quite limited in terms of its examination of low-income people's experiences with stand-alone financial literacy programs. So, to examine the issue of financial literacy programs for low-income people, this study relies on the asset-building and financial inclusion literatures. These types of programs seek to assist participants to build household assets and get a bank account, and they often include a financial literacy component.

This report is based on a literature review using several important academic databases (Appendix B). From the literature review, 152 references that were sorted into measurement or programs/evaluations were shortlisted (see Bibliography). A total of 23 measurement studies were identified, and each study's treatment of low-income people was described (Appendix C). From this group, four studies were shortlisted for discussion in Section Two. From the list of program and evaluation studies, 37 of the most relevant were selected for review (Appendix D) and formed the basis of Section Three.

Concepts needed to undergird this study will be presented in the remainder of this section. This includes defining key concepts of importance for a discussion of low-income people's financial literacy needs and resources. Section Two presents findings related to the measurement of financial literacy, drawing on results from several national surveys from Canada, New Zealand, the UK, and the US. The third section presents an examination of financial literacy programs and evaluations from Australia, Canada, the UK, and the US. The conclusion pulls together key results before a series of recommendations are made at the end of the report.

a) Financial Literacy Needs & Financial Access Vary

Financial literacy is defined by the Canadian Task Force on Financial Literacy as a situation in which consumers "hav[e] the knowledge, skills and confidence to make responsible financial decisions." (Task Force 2010, p.10) But rather than an end in itself, presumably, financial literacy is a means to improved well-being. People will "invest" in financial literacy to the extent that they perceive they need it to meet their financial and life goals. This suggests the financial literacy requirements will vary. Some people and groups need more and some need less. The literature has identified four principal ways in which financial literacy needs vary: (1) the complexity of the economy in which one lives, (2) over the course of one's life, (3) across social or cultural groups, and (4) based on one's life goals.

(1) Studies of financial literacy today note that because of changes in the last twenty years, northern economies have become more complex so that people require more financial literacy. Notable examples of this are the increased responsibility individuals have regarding pensions and health care. Indeed, greater financial literacy is needed to deal with the growing complexity of our economy, often related with the process of financialization (Dore 2008; Langley 2007). Financialization refers to “the increasing role of financial motives, financial markets, financial actors and financial institutions in the operation of the domestic and international economies.” (Dore 2008) As financialization proceeds, individuals must gain a better understanding of how they are affected by financial markets and actors.

(2) A second way in which financial literacy needs vary relates to the individual’s age. This is explained by the life-cycle theory, dealt with extensively in the economics literature.¹ It finds that over a lifetime a person seeks to even-out annual income by borrowing in lean times and saving in relatively rich times. This suggests that the very young and very old have modest financial literacy needs, when they are borrowing from others or from their own savings. Meanwhile, young and middle-aged adults have relatively greater financial literacy needs because of the need to make strategic investment decisions about retirement savings, among other things.

(3) But financial position varies among people at a point in time, and this affects financial literacy needs as well (Buckland 2010; Lucey and Giannangelo 2006; Lyons and Neelakantan 2008). This presents a third way in which financial literacy needs vary across people. Some people are poor, some are middle-income, and some are rich. One way to

1 Life cycle theory has been embraced by orthodox, neoclassical economics. Behavioural economics has deepened our understanding of the life-cycle theory with evidence that people’s rational behaviour is often limited because of behaviours such as framing, mental accounting, and self-control (Shefrin and Thaler 1988). Behavioural economics drops the assumption held in neoclassical economics of human rationality and instead uses experiments and field studies to understand what appears to be irrational behaviour. The implications of the behavioural life cycle model are that people are tempted to consume too much today, forsaking savings and future income.

show the variations in financial literacy needs is by considering the types of assets people hold or plans to purchase (Table 1). Almost everyone (excluding the ultra rich) needs to monitor their spending in order to stay within their income. The purpose of monitoring one's income and spending, budgeting, is to control spending in order to avoid unsustainable debt.²

Household budgeting can be done in a variety of ways including formal household budget and mental accounting (Table 1). In addition to keeping weekly or biweekly spending within one's income, almost everyone purchases small assets, such as clothing and household items, and has to deal with small crises (e.g., a minor illness), and small life events (a child's birthday). These small items, outside of the weekly or biweekly spending, require accumulation of either savings or debt. These can be achieved through financial services available from informal (e.g., friend/family member, local store), fringe (e.g., pawnshop, cheque-casher, payday lender, finance company), or mainstream banks (bank, credit union, trust company). For instance, one can borrow funds from a friend or a payday lender or through a credit card. Savings can be achieved through stashing money at home or through a bank savings account. The range of people making large purchases is narrower, limited to people with middle and upper incomes. They hold large assets, such as cars and houses, and deal with major life events, such as post-secondary education and retirement. To purchase these types of major assets, people generally use more sophisticated financial services than for small items, almost exclusively from mainstream banks. These include credit products such as large bank loans and mortgages, and savings products such as mutual funds, stocks, bonds, and registered pension savings.

2 Unsustainable debt is debt that is greater than what one can be expected to repay, including debt incurred for investment purposes that raises one's future income.

Table 1: Financial Activities and Strategies/Services

Activity		Purpose	Financial Strategies/Services	Relevant Social Groups
Household Budget	Monitoring income and spending on regular basis	Control spending in weekly or biweekly periods to avoid unsustainable debt	-Formal household budget -'Mental' household budget	All groups
Small Assets	Purchase small assets such as clothing, household item; small crises (minor illness); small life events (e.g., child's birthday)	Purchase small assets	Savings & credit services: -Informal: borrow from friend/family, save at home -Fringe bank: pawn shop or payday loan -Mainstream bank: credit card, savings account, direct debit	All groups but the very poorest
Large Assets	Purchase major assets such as car, house; large crises (death, natural hazard); large life events (e.g., education, retirement)	Purchase large assets	Mainstream bank savings or credit services: -Credit: large bank loan, mortgage -Savings: mutual funds, stocks, bonds, RRSP, RESP	Middle-income and rich groups

(4) A final way in which peoples' financial literacy needs vary is based on their financial and life goals. Many people value rising personal income. Others deliberately seek to maintain or reduce their income, as with a voluntary simplicity approach.³ Of course, one's income position affects such choices. For instance, an upper-income family with a goal to increase its income would likely need to do some budgeting, certainly engage in a lot of small planning and engage in many large plans. A middle-income family with a goal to reduce its spending would also likely have a budget. It would purchase small items but would be less likely to purchase large items. A low-income family with a goal to hold on to

3 Voluntary simplicity is a concept and a movement that values a more deliberate lifestyle based on what people value for themselves, their relationships, the environment, and their faith. It often advocates a modest lifestyle as a means to improved well-being, for people who can voluntarily make such choices (Burch 2000; Elgin 1993).

its income level in the future would make minimal small purchases and few if any large purchases. Financial strategies also vary by income and life goals. To the extent that financial literacy is dependent on one's financial strategies, this means that different people will have different financial literacy requirements.

As we have seen, the complexity of the economy one lives in — age, income and asset position, and goals — have implications for financial literacy needs. But geographic and socio-cultural context affects financial service options. Low-income people often face barriers to mainstream bank services and instead rely to some extent on fringe or informal banks. Fringe banks have opened many branches in inner cities while mainstream banks have shut them down, and this affects accessibility. Fringe banks charge fees, which, while high, are upfront, while mainstream bank accounts can lead to unexpected debits. Mainstream bank services are sometimes impractical because of basic design features such as cheque-cashing hold periods and personal identification requirements. These same rules are not as problematic at some fringe banks. Many low-income people do not believe that mainstream bank services are available to them, so they rely on fringe banks, which offer only transaction services (and not savings and credit services). Finally, some low-income people feel better treated (more respected) by staff at fringe banks than at mainstream banks. For these reasons, many low-income people rely on fringe banks, at least for some periods, and for some of their financial services. But the fees are high, only transaction services are available, and fringe banks are weakly regulated, if at all. This limits the financial service options available to low-income people.

b) Low-income Population

How many people in Canada are likely to be focused on basic finances, and therefore basic financial literacy? If a family is spending the majority of its income on basic necessities then it is less likely to plan for large assets. This means that it is less likely to seek more sophisticated financial services and less likely to educate themselves about these services. A useful indicator of a “basic necessities” family is Statistics Canada low-income cut-off (LICO). LICO is a measure of low income, defined as an income level requiring the family to

spend more than 20 per cent over the average on basic necessities of food, clothing and shelter. For 2007, LICO was set at an income level for a family that must spend 63 per cent (the average family spent 43 per cent) or more on basic necessities. Nine per cent, or just under 3 million out of 33 million Canadians, were estimated to live below the low-income cut-off in 2007 (Table 2). With 37 per cent or less of their income to spend on non-basic necessities, almost 3 million Canadians are likely to require at least basic financial literacy. This is not to say that advanced financial literacy would not be interesting or useful for this group. It might be of intrinsic interest to some: knowledge for its own sake. And it might be useful for others: even with tiny savings, some inventive people with low-income may be able to use advanced financial literacy to their benefit. However, for most people living with low-income there are many more pressing needs than an in-depth knowledge of financial markets.

Table 2: Canadian 2007 Population*

Population	Population with more than Low-income	Population with Low-income*
32,976,026	30,024,026	2,952,000
	91.0%	9.0%

*Population and low-income population data are from CHASS (2010a, 2010b).

National level studies of financial exclusion in Canada are limited. It is estimated that 3 per cent of the adult population have no bank account, but that this proportion rises to 8 per cent among low-income adults (McKay 1998). In addition to being more likely to not have an account, low-income people are also 36 per cent more likely to not have a credit card (Buckland and Dong 2006) and more likely to have been refused a credit card (Simpson and Buckland 2009).

2) Measuring Financial Literacy of Low-income People

This section reviews studies dealing with financial literacy measurement that have reference to low-income people. This presentation is based on a general literature review

(details in Appendix B) of studies categorized as “measuring” or “programs and evaluations.” The former group of studies were reviewed, and a short list of particularly relevant studies was generated (details in Appendix C).

a) How is Financial Literacy Measured?

Measuring financial literacy is almost universally done at the individual level.⁴ Virtually all studies apply one measure, or series of measures, to the entire population.⁵ Kempson and Atkinson (2009) provide a useful overview of national-level measures of financial literacy. This section summarizes the ways in which financial literacy indicators are typically categorized and scored within this literature.

Questions seeking to measure financial literacy are sometimes described as objective or subjective. In some cases, questions involve financial problem solving, e.g., “How much will \$100 be worth in one year if it is invested at a 10 per cent interest rate?” The US *Jump\$tart* Coalition Survey on Financial Literacy is made up entirely of these types of questions. The questions are described as objective, as it is assumed that there is one correct answer. In some cases, objective questions do not have one simple answer (Mandell 2009).⁶ Subjective questions ask respondents to evaluate some aspect of their own financial literacy,

4 That is, questions are directed at individuals, and not at social groups such as families, communities, or ethnic groups. This approach is consistent with a view that sees society as the sum of its individuals.

5 There was only one case identified in the literature review of a national-level study in which the author referred to different measures for different groups of people (Lusardi 2008a).

6 For instance, question 18, below, presents a question and a correct answer. But the correct answer to this question contains many unstated assumptions (Don needs improved computer skills for his position, Don takes the correct classes to meet these skills gaps, Don’s remuneration is based on his skill level, etc.), that, if dropped, can prompt a different answer.

Question 18. Don and Bill work together in the finance department of the same company. Bill spends his free time taking work related classes to improve his computer skills, while Don spends his free time socializing with friends and working out at a fitness center. After five years what is likely to be true?

- a) Don will make more money because he is more social.
- b) Don will make more because Bill is likely to be laid off.
- c) Bill will make more money because he is more valuable to his company.
- d) Don and Bill will continue to make the same money.

The answer to this question is c) Bill will make more money because he is more valuable to his company. (Mandell 2009, p.48).

e.g., “How well do you understand how risk affects investment return?” A limitation of subjective questions is that often people are overly confident about their knowledge.

Another approach is to group together a series of questions into different dimensions of financial literacy, such as budgeting, planning, investment, and information. Respondents are asked a series of questions that are placed within one of these broad categories. This particular categorization scheme is amenable to fitting within basic and advanced literacies, as defined as the literacy needed for people with few and those with many assets. For those satisfied with low asset levels, basic financial literacy would require knowledge about budgeting (e.g., daily or regular budget balancing, tracking expenditure), some planning (e.g., credit, savings, debt), some information (e.g., financial advice), and some miscellaneous activities (e.g., bank access). To gain advanced literacy, it would be helpful for people with high asset levels to know about such matters as investment (e.g., retirement, mortgage, investment products, insurance), planning (for large assets), information (e.g., macro-economy), and some miscellaneous needs (e.g., for insurance).

In addition, many financial literacy measures examine knowledge, skills, and attitude. For instance, understanding the *concept* of the risk-reward trade-off for investments is one thing, but applying this knowledge to choosing the best investment product is an additional important *skill*. Having an *attitude* of willingness to learn is another important ingredient.

A final point to make about measuring financial literacy is that there are a variety of ways in which financial literacy questions are utilized. In some cases individual questions are used, in other cases groups of questions are brought together in some way (e.g., via a category index), and in some cases a complete index is generated. The advantage of an index is that it brings together a lot of information in one indicator. But the disadvantage is that an index can introduce another layer of complexity and generate data that appears more objective than it is.

b) What Do Studies Find About Financial Literacy Among Low-income People?

A complete list of studies considered is found in Appendix B, along with a description of the financial literacy measures used and some examples of results related to low-income people. In some cases, studies do not present financial literacy data by income level but they do refer to variables that may be correlated. Not surprisingly, the vast majority of financial literacy studies that refer to low-income people find that their literacy levels are lower than those of the non-poor people. Only a small minority of studies either pointed to the financial literacy strengths of low-income people (Buckland 2010, Kempson and Atkinson 2009) or questioned the universality of measures of financial literacy (Lusardi 2008a, Lucey 2005). Because of its importance, the note by Kempson and Atkinson is quoted at length:

When attempting to measure someone's level of financial literacy (or capability) it is important that they are asked questions that are relevant to their personal and economic circumstances. For example, asking someone on a subsistence income questions about the stock market would, generally speaking, be inappropriate as they would be unlikely ever to put money into investments. Even so, some surveys have knowledge questions of this type that are asked of everybody. Likewise, asking a Muslim whether or not they have some form of life or income protection insurance would be inappropriate as insurance is *haram* under Shariah law. Yet some surveys rely exclusively on questions relating to insurance cover to assess whether people have engaged with financial planning...Finally, someone living on a very low income may be inclined to plan for unexpected or known expenses in the future but be unable to do so; while another person on a high income may have more money than they can spend and build up a reserve of money for such expenses without ever planning to do so (Kempson and Atkinson 2009, p.16).

The sample of studies identified is, with one exception (for South Africa) from the global North (countries sometimes referred to as developed). The sample is in fact even more narrow in that, with the exception of a Dutch and a Singapore study, all the studies are from English-speaking countries (Australia, Canada, Ireland, New Zealand, UK, US). The largest number of studies come from the US, and financial literacy indicators are not as centralized there as in other countries.

The earliest contemporary national surveys of financial literacy are components of other surveys, undertaken in the United States. For example, Hilgert, Hogarth and Beverly (2003) studied a series of questions related to financial literacy within the *Survey of Consumers*. But by the middle of the decade stand-alone national surveys were developed, including the UK's 2006 *Survey of Financial Capability*, New Zealand's 2006 *Financial Knowledge Survey* (repeated in 2009), and Australia's 2006 survey of financial literacy (Financial Literacy Foundation 2007). Other national surveys were undertaken around this time in Singapore (The *Money Sense* Financial Education Steering Committee 2005). Authorities in Ireland (O'Donnell 2009) and the Netherlands (Netherlands Ministry of Finance 2009) undertook national surveys in 2008. Statistics Canada undertook the *Canadian Survey of Financial Capability* in 2009.

As mentioned above, the situation in the US is different than in other countries in the sample. More studies and surveys were identified and there did not seem to be one authority responsible for the surveying of financial literacy, as is the case in the other countries in the sample. Several studies used components from other national surveys (Survey of Consumers, Health and Retirement Survey, National Longitudinal Survey of Youth, and RAND Corporation's American Life Panel). National surveys include the Financial Industry Regulatory Authority 2009 National Survey, a component of *National Financial Capability Study*, and the many iterations of the *Jump\$tart Coalition* Survey.

For illustration purposes, we consider four studies of national level surveys that refer to low-income people:

- Arrowsmith and Pignal (2010) study of the Statistics Canada 2009 *Canadian Financial Capability Survey*
- The UK Financial Service Authority 2006 *Survey of Financial Capability* (FSA 2006; Atkinson et al. 2007)
- The US Financial Industry Regulatory Authority 2009 National Survey, a component of *National Financial Capability Study* (Lusardi et al. 2009)
- The New Zealand Retirement Commission 2009 *Financial Knowledge Survey* (Colmar Brunton 2009)

i) Canada: 2009 *Canadian Financial Capability Survey*

The 2009 *Canadian Financial Capability Survey* was a national level survey that interviewed over 15,500 people. Undertaken by Statistics Canada, this was the first national survey fully devoted to the topic. It uses the concept of financial *capability* to deliberately emphasize the importance of responsibility, in addition to knowledge and skills, for achieving good financial outcomes (Arrowsmith and Pignal 2010, p.10). It uses the four-category financial capability model based on the UK's financial capability concept: "money management," "keeping track," "choosing financial products," and "staying informed." The authors' analysis includes a breakdown for the data by income and asset quintiles. Some of the results were also presented by education level, which may have a relationship with income.

The results of the survey find that, across virtually all questions about financial literacy, higher income respondents performed better than lower income respondents. The important exception to this is for the issue of having a household budget. Across the income quintiles, there is just as high a proportion with a budget in the bottom quintile as in the top quintile (49 per cent) (Table 3). There is a slightly higher proportion, between 52 and 54 per cent, in the intervening quintiles. In terms of not keeping up with bill payments, the proportion declines with income quintile, and the difference between the lowest and highest income quintile is 5 percentage points (Table 5). For more advanced types of

financial literacies, such as preparing for retirement, the gap between the bottom and top quintiles is much higher, at 47 percentage points. The gap is also high regarding the question of saving for children's post-secondary education, at 35 percentage points.

The results from the survey are instructive and point to some strengths and gaps in financial literacy for low-income people. The gaps between lowest and highest income quintiles are much higher for advanced financial literacy than for basic financial literacy questions. In fact, in terms of having a household budget, there is no gap. These results reinforce the point that low-income people are less likely to benefit from, and therefore less likely to have, more advanced financial literacy.

**Table 3: Selected Results by Income Quintiles,
from Arrowsmith and Pignal (2010)**

Question	Respondents Reporting Affirmatively, by Income Quintile (Per cent)					Difference (Percentage points) Highest Quintile (Per cent) - Lowest Quintile (Per cent)
	Lowest Quintile				Highest Quintile	
<i>Basic</i>						
Household budget	49	52	54	53	49	0
Not keeping up with bills	6	4	2	1	1	-5
Checking bank account daily	8	11	14	17	18	10
<i>Advanced</i>						
Saving for children's post-secondary education	48	57	68	77	83	35
Preparing for retirement	37	61	74	80	84	47
Life insurance coverage	45	62	71	78	77	32
Staying informed	Data not presented by income level					

This survey provides useful insights into the state of financial literacy among low-income Canadians. It provides evidence that for basic financial literacy issues – such as keeping a

household budget – low-income Canadians do as well as non-poor Canadians. The results also clearly show that low-income Canadians are not as proficient in some advanced financial literacy issues as non-poor people. But this result supports the view that low-income people are rational, not the reverse because they have a lesser need for advanced financial literacy. This is not to argue that low-income people do not face gaps in their financial literacy but to say that the gap we see between low- and high-income people is, in part, a reflection of their different realities.

ii) New Zealand: The New Zealand 2009 Financial Knowledge Survey

The New Zealand Retirement Commission undertook its second national survey in 2009, the *Survey on Financial Knowledge* (Colmar Brunton 2009). The survey interviewed 850 people and compared these results with those from the 2006 survey (Colmar Brunton 2006). The report developed an overall score from the individual questions and then divided the sample into low, medium, and high financial knowledge. The survey asked questions from four areas: basic mathematical ability, competence with basic and advanced financial activities, and responsible decision-making.” (Colmar Brunton 2009, p.7)

The results included reference to income level for some particular questions and for the overall financial knowledge score. Because only a portion of the data were presented in the report, sometimes identifying data on the income-financial literacy relationship was difficult. But, for a basic skill, only 54 per cent of those with a household income less than \$20,000 were likely to have a budget — 10 per cent less than average. (Colmar Brunton 2009, p.68) For the overall financial knowledge index, income was an important factor: low-income people were highly represented in the low knowledge category and non-poor people were highly represented in the medium and high knowledge categories (Colmar Brunton 2009, p.17).

iii) UK: 2006 UK Survey of Financial Capability

Along with New Zealand, Australia, and Singapore, the UK was one of the first countries to develop a national-level survey focused on the topic of financial literacy. Implemented by the UK Financial Services Authority in 2006, it garnered considerable analysis and resulted

in several publications (e.g., Financial Services Authority [FSA] 2006a, Atkinson et al. 2007, Atkinson 2007). The survey involved interviewing 5,328 people, and the questionnaire was divided into four areas: managing money, planning ahead, choosing products, and ‘staying informed.’⁷ Besides reporting on results from each question, some analysts developed clusters of people to rank and characterize their level of financial literacy (Atkinson et al., 2007).

The results of the FSA survey are presented in a more rudimentary form (FSA 2006) and a more elaborate form (Atkinson et al. 2007). In terms of references to low-income people, the following is a sampling of some key results:

- **Making ends meet:** “It is striking the difficulty in making ends meet is not restricted to people with low incomes. Similar proportions of people on higher and lower incomes say that they sometimes run out of money at the end of the week or the month.” (FSA 2006, p.11)
- **Tracking of finances:** no clear correlation with demographic factors (including income)
- **Planning ahead:** “Although the data show that people with higher incomes are likely to be better at planning ahead, it also tells us that, on average, they are only slightly better: plenty of higher earners are not doing well on this component.” (FSA 2006, p.16)
- **Choosing financial products:** some correlations were found between literacy levels and housing tenure (renters vs. home-owners), which may correlate with income
- **Staying informed:** the results found a strong correlation with income and education. (FSA 2006, p.21)

7 The FSA survey categories are similar to those used by Statistics Canada. One obvious difference is the former uses “planning ahead” as its second category and the latter uses “keeping track.” The questions that fit within these two titles have significant overlap.

The analysis by Atkinson et al. (2007) used the FSA survey data and identified characteristics of groups that scored weaker in each of the five areas. They combined these results to rank different groups of people facing varying areas of weakness. They concluded that middle and high-income people were among the most financially literate, and that low-income people (with the exception of older respondents) were less financially literate.

iv) US: The FINRA 2009 National Survey, *National Financial Capability Study*

The Investor Education Foundation of the Financial Industry Regulatory Authority (FINRA) undertook a national survey of financial capability in 2009 as a part of a larger project, the *National Financial Capability Study* (Lusardi et al. 2009). FINRA is an independent organization that regulates the securities industry in the US. The survey interviewed 1,488 people, with questions fitting areas described as: key measures (e.g., status, pension, debt), literacy (e.g., financial calculations and concepts), behaviours (e.g., credit, savings, mortgage, financial advice), and attitudes (e.g., accessing information, personal preferences). The last category included, under self-perceptions, a question about satisfaction with one's financial condition (Lusardi et al. 2009, p.14). There is a presentation of the data on the basis of unbanked and banked, but no composite indexes were presented.

The report included direct and indirect reference (via correlates such as education and ethnicity) to the situation of low-income people. Data breakdown by income was for three groups: low-income (less than \$25,000 per year); middle-income (between \$25,000 and \$75,000 per year); and high-income (greater than \$75,000 per year). For instance, regarding a more basic financial literacy issue, keeping spending within income, the results found that the low-income group (16 per cent) was a little more likely to spend more than they earned last year than the middle-income (11 per cent) and high-income (five per cent) groups (Lusardi et al. 2009, p.15). Low-income respondents were also more likely (27 per cent) to find it difficult to cover expenses than non-poor groups (nine per cent and three per cent) (Lusardi et al. 2009, p.15). Lower-income groups (13 per cent) were much less likely than the other groups (61 per cent and 83 per cent) to have retirement plans

(Lusardi *et al.* 2009, p.25). Low-income respondents (49 per cent) were also substantially less likely than others (61 per cent and 78 per cent) to keep up regularly with financial news.

The gaps between the low- and high-income groups for these types of basic financial literacy issues are slightly higher than the gaps seen in the *Canadian Survey of Financial Capability*, but not far off. Similarly, the results of the FINRA survey were similar to the Canadian survey in terms of much larger gaps for more advanced financial literacy levels. And these results are similar to those reported for the British survey (FSA 2006). Because of presentation limitations in the New Zealand survey, it is not clear if its results were similar to these. But the Canadian, US, and UK survey results demonstrate a greater gap in advanced literacy issues between low-income and non-poor people than in basic literacy issues.

For a more nuanced understanding of financial literacy levels, it would be useful to ask respondents to explain what they value, and particularly what are their life and financial goals. Connecting these responses with data on asset levels would provide a more useful evaluation of the sufficiency of their financial literacy. As discussed in the introduction, a middle-income person who wants to reduce his or her asset level would need only a modest level of financial literacy. On the other hand, if the person has a high level of assets and plans to expand them further, then the most advanced financial literacy may be needed.

How do the national surveys examine respondents' life and financial goals? It varies across surveys, but all the surveys ask questions about planning and goal making (see Appendix D). The Canadian and UK surveys seem to have the highest number of questions about planning. These questions, however, are often close-ended, and do not invite respondents to explain their views. The US survey had only one question using the word "plan." But, as mentioned above, the US survey includes a question about the respondent's satisfaction

with finances, a useful question to determine the individual's goals. The New Zealand survey is the exception in that it explicitly asks respondents if they have financial goals.

3) Financial Literacy Programs & Evaluations that Involve Low-income People

This section reviews studies that present financial literacy programs and evaluations that refer to low-income people. A financial literacy program is understood as an effort that is made by some party to build an individual or group of individuals' financial literacy. This report is focused on efforts that, at least in part, work with low-income people. The literature review identified only programs that work with adults, so there is no reference to child-based programs. The OECD defines financial education as follows:

Financial education is the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being (OECD 2005, p.26).

An evaluation is an integral part of a programming process and can examine various issues such as impact on participants, costs of delivery, and program design. In the past twenty years, evaluation methods have changed in terms of content, with more emphasis today on non-economic impact and, in terms of process, on participatory evaluation (Reidar 2004; Stoeker 2005).

This presentation is based on a general literature review (details in Appendix B). All the studies were categorized as falling under "measuring" or "programs and evaluations." The latter group of studies were then reviewed and a short list, of particularly relevant studies, was generated. A study-by-study summary of the most relevant articles was written (details in Appendix C).

Through the literature review, four ways were identified by which financial literacy is delivered to low-income people: (1) as a stand-alone program with general literacy goals, (2) as a stand-alone program with particular literacy or behavioural goals, (3) as a component of a financial inclusion program, and (4) as a component of an asset-building program.

- (1) The first type of program offers financial literacy on its own with the broad purpose of improving the participants' literacy levels. Examples of this approach are the *Money Minded* program in Australia and many local programs in Canada (see SEDI references below). These programs are generally offered on their own. These programs include a curriculum and a means to deliver them. Curriculum is general in nature and covers topics such as budgeting, planning, and investing.
- (2) A second type of stand-alone financial literacy program seeks to enhance a particular financial literacy or behaviour. These programs are limited to education or training, but their goal is more focused. Rather than improving general or overall financial literacy, these programs seek to affect particular literacies or behaviours. Two common goals are to boost saving for retirement (e.g., the US *Quick Enrolment* program) or increase saving for house purchase. The literacy training is tailored around the goal of retirement savings, for example. In this case, the literacy curriculum would be more limited in scope than curriculum associated with the first type of stand-alone program.
- (3) A third type of program is termed a financial inclusion (or banked or unbanked) program. These programs often have a financial literacy component, which is combined with one or more additional components (e.g., accessing credit, opening a bank account). Here the literacy is intended to ensure that the new or returning client understands the rights and responsibilities of bank services. Examples of these programs include the US Federal Deposit Insurance Corporation's *Money Smart* program, which seeks to help people open a bank account. Another example is ANZ Bank's *Progress*

Loans, which helps people to access small loans. Along with financial literacy, participants receive assistance in opening an account or in accessing small loans.

- (4) A final type of financial literacy program is as a component of an asset-building program. Participants receive matched savings, assistance to open a bank account, and, often, financial literacy training. *Learn\$ave* is a large asset-building program in Canada and the *American Dream Demonstration* is one based in the US. A central goal of these programs is to increase participants' savings in order to facilitate greater investment and improved economic well-being.

The focus of this literature review was to identify key programs and evaluations of financial literacy that are relevant to low-income people. The majority of these studies (70 per cent) are evaluation-oriented (evaluations or discussion of evaluations) and only 30 per cent are program-oriented. One reason for this breakdown is that program documents tend to be more descriptive, less analytical, and not housed in academic journals. Thus, there is limited information on program design features. What can be said about program design is that these programs range in duration, from a one-day session (as in the case of some unbanked training) to programs that run for one or two years (as with asset-building programs). In terms of the costs borne by program participants, they generally include time to participate in meetings and surveys, contributions such as personal savings associated with IDAs, and fees for different types of services, including financial literacy training fees. Fees for training range from zero to small fees, which may cover costs for incidental services, such as snacks. In Canada, SEDI found that about one-third of financial literacy services charged a fee that ranged from \$5 to \$125, and two-thirds charged no fee (SEDI 2006, p.18). Limited evidence for programs in other countries examined here is consistent with this.⁸

8 A complicating factor in identifying design features is that programs are often delivered by a number of smaller organizations. For instance, the ANZ Bank program *Money Minded* is offered by non-profit organizations across Australia. At least one of these organizations, The Benevolent Society, stated there was no fee for their workshop (Benevolent Society 2006. "Money Minded," available:

The reviewed literature focused primarily on short courses offered to adults in a semi-formal setting, in a stand-alone format or within a more comprehensive program (e.g., financial inclusion and asset-building programs). These studies were most common in the US and Australia.

a) Programs

This section draws on studies from Canada and the US. The Canadian literature is focused on identification and description of financial literacy programs, and the US literature was more comparative and analytical.

Several of the Canadian studies can be characterized as identifying and describing financial literacy programs for particular groups (SEDI 2009, 2008b, 2008c, 2006). SEDI (2006) divided financial literacy materials into two categories: products (e.g., websites or brochures) and services (e.g., individual or group-based training). It found that products were more often targeted towards non-poor people, and services towards low-income people. The financial literacy services identified were primarily offered to low-income people or those relying on social assistance, provided within a group context; they had multiple purposes and most frequently included topics of saving, budgeting, and credit/debt (SEDI 2006, p.15-17). Data limitations prevented a comprehensive review. The authors warned that the supply of financial literacy must match up with demand and noted the existence of a supply-side market of financial capability products and services that is relatively healthy in size and scale but perhaps somewhat disjointed, limited in scope and haphazard from the perspective of supplying information, education and advice to raise financial capability levels among all Canadian citizens (SEDI 2006, p.24).

www.bensoc.org.au/director/whatwedo/findaservice.cfm?item_id=02E3D858C9992F6CE0B557541CABFD45, accessed 31 May 2010). The FDIC *Money Smart* program in the US is offered through participating financial institutions. In one case, Alternatives Federal Credit Union, it charged a sliding scale fee, depending on one's income, of \$20 to \$100 for seven-week sessions that included snacks (Alternatives Federal Credit Union undated. "Moneywise," available: www.alternatives.org/moneywise.html, accessed 4 June 2010).

SEDI (2008b, 2008c), using a literature review, environmental scan, and key informant interviews, described the nature of financial literacy resources for people with disabilities and newcomer Canadians. There very few financial literacy resources available for people with disabilities (SEDI 2008b). What was available was primarily from the non-profit sector, and there were few resources from government, banks, and the corporate sector. The study argued that due to the complex nature of financial decisions for disabled and low-income disabled people, targeted support is needed. They noted that other resources, including those that can make services accessible, are important:

[E]ducational supports in financial literacy should not come at the expense of campaigns that push for improved benefits and supports, especially financial supports. By one informant's estimation "the need to remove barriers is much more pressing than the need to learn to navigate around them" (SEDI 2008b, p.ii).

Financial literacy resources for newcomer Canadians have been designed in a top-down manner (SEDI 2008c). Financial literacy materials must be tailored to meet participants' felt needs. For instance, the study pointed out that a financial literacy curriculum should pay less attention to basic literacy issues and topics such as payday loans, and more to home ownership. While financial literacy is delivered to this group largely by the non-profit sector, the study recommends that it also be provided by employers and banks, and with second language courses (SEDI 2008c, p.24-25).

The SEDI studies are important documents, as they identify and describe financial literacy resources currently available for certain vulnerable groups, particularly disabled people and newcomers. The conclusions reached in these studies are useful. They point to a paucity of government resources on financial literacy, particularly for newcomers. Considering the correlation between disability (Morissette and Drolet 2000) and newcomer (Picot et al. 2009) status and low incomes, these results highlight the lack of financial literacy resources for some low-income people. The results point to the need to

balance education initiatives with other initiatives – expanding and updating regulation, enforcement of existing regulations – that are important to achieve consumer financial well-being. Finally, these reports point to the need to strike a balance in literacy programs between universality and meeting particular needs. Universality of process and content has certain benefits (for instance, in terms of evaluation) but this must be weighed against the felt needs of participants.

Several US-based studies could be characterized as addressing program issues with reference to low-income people. The studies point out the particular barriers and contexts in which low-income people live. For financial literacy programs to be successful, they must be adapted to overcome these barriers and appropriate in these contexts. Lucey and Giannangelo (2006) discuss the social and economic challenges faced by disadvantaged students and recommend that “[i]nstructional processes should pursue student-centered models allowing embrace of human commonalities.” (Lucey and Giannangelo 2006, p.281) Lyons and Neelakantan (2008) argue for placing financial literacy within a clear theoretical framework that understands the role of institutions such as exogenous financial shocks, limited access to financial services, and changes in life circumstances (Lyons and Neelakantan 2008, p.109).

Many financial education programs that target low-income consumers focus primarily on helping them increase savings and reduce debt. However, Scholz and Seshadri (2007) have used life cycle theory to show that low-income households are already behaving optimally. While we would like them to save more and build wealth, they are doing the best they can, given their financial constraints. Thus, if financial education programs ignore what theory suggests, they may fail simply because they have set infeasible goals for their target audience (Lyons and Neelakantan 2008, p.110).

There is also some literature on several small loan programs in the US that have a financial literacy component. The Federal Deposit Insurance Corporation (FDIC) in the US has run

the *Small-Dollar Loan Pilot Program* since February 2008 to “illustrate how banks can profitably offer affordable small-dollar loans as an alternative to high-cost financial products, such as payday loans and fee-based overdraft protection.” (FDIC 2010b)⁹ Of the 31 banks participating in the program, sixteen bank programs have a financial literacy component. Other financial institutions are developing small loans programs. Many credit unions have developed small loans as a way of supporting their clients who rely on payday loans (Pierce 2008; M. Williams 2007). Some of these credit union small loans programs involve a financial literacy component as well.

The US literature takes for granted that providing financial literacy within comprehensive programs such as asset building and financial inclusion is sensible. The literature groups these programs in with school and work-based financial literacy efforts. The asset-building literature itself has been quite extensively used to understand financial literacy program impact on low-income people. The consensus appears to be that financial literacy training within an asset-building program is an effective way to support savings and boost financial literacy. Indeed, the growing interest in financial literacy may be lending support for asset-building at a time when their cost effectiveness is increasingly questioned (Sherradan 2009).

b) Evaluations

Twenty-five studies dealing with evaluations of financial literacy programs involving low-income people were reviewed for this section. Evaluations examined either program impact or program design. Impact evaluations examined knowledge, skills, attitudes and behaviour.¹⁰ Summaries of each study can be found in Appendix C. These studies are

9 For more information see Federal Deposit Insurance Corporation 2010b. ‘Small-Dollar Loan Pilot Program, available: www.fdic.gov/small-dollar-loans, accessed 10 May 2010.

10 This mixing of knowledge, skills, attitudes on the one hand, and behaviour on the other, complicates analysis of the impact evaluation results. This is because an education program is primarily about changing the former (knowledge, skills and attitudes) with the assumption that improved knowledge will lead to better behaviour. But as a literature review, this study must rely on the indicators used in the reviewed studies. Also, since many of these programs’ goals include non-literacy goals (such as credit repair, asset accumulation or house purchase), changed behaviour is a logical indicator of impact.

categorized (Table 5) and discussed (below) as general financial literacy programs, focused financial literacy programs, financial inclusion programs, and asset-building programs.

Table 5: Evaluation-oriented Studies by Type

Country/ Region	General financial literacy programs	Focused financial literacy programs	Financial inclusion programs	Asset-building programs
OECD/ Cross-national		1 Study Credit/Debt counselling (OECD 2005, ch.5)	1 Study (OECD 2005, ch.6)	
Australia	2 Studies <i>Money Minded</i> (Russell & Brooks 2009; Tippet & Kluvers 2007)		1 Study <i>Progress Loan</i> (Vawser & Associates 2009)	2 Studies <i>Saver Plus</i> (Russell et al. 2008; Chant Link & Associates 2009)
Canada	1 Study Various local projects (SEDI 2008a)			2 Studies <i>Learn\$ave</i> (Leckie, Hui, Tattie and Cao 2009; Leckie, Dowie & Gyorfi-Dyke 2008)
US		3 Studies House pre- purchase counselling (Braunstein & Welch 2002) Worker retirement savings (Gonyea 2007) <i>Quick Enrollment</i> (Lusardi 2008a)	5 Studies <i>FLLIP</i> (Financial Links of Low-income People) (Anderson, Zhand & Scott 2007) <i>Get Checking</i> (Haynes- Bordas, Kiss & Yilmazer 2008) <i>Money Smart</i> (Lyons & Scherpf 2005) Credit counselling course (Meier & Sprenger 2007) Banking technology issues (Servon & Kaestner 2008)	7 Studies <i>American Dream Demonstration</i> (among other programs such as <i>FLLIP</i>) (Carpenter 2008; Clancy, Grinstein-Weiss & Schreiner 2001; Friedman 2005; Grinstein-Weiss et al. 2008; Han, Grinstein- Weiss & Sherraden 2009; Sherradan & Boshara 2008; Wheeler-Brooks & Scanlon 2009)

i) General Financial Literacy

There have been only a few studies examining stand-alone, general financial literacy programs, notably one for a large national program in Australia and one of many local projects in Canada. Almost 80,000 Australians completed the stand-alone financial literacy program (*Money Minded*), which is particularly designed for low-income people.

Russell & Brooks (2009) reported on a participatory evaluation that found more participants set financial goals after completing the *Money Minded* course, that they reported having more savings, felt less stress regarding finances, had improved knowledge about financial products and fees, and had better management behaviours (e.g., budgeting, shopping habits, keeping track of expenses, managing debt)(Russell & Brooks 2009, p.17). SEDI (2008a) presented a literature review of financial literacy evaluations and presented five case studies of financial literacy programs. Based on this research, the authors conclude that evaluations must balance the need for consistency and rigour with the need for participant input and flexibility.

The results from these few studies point to the need for general stand-alone financial literacy programs to balance fulfilling core curriculum requirements with meeting participants' felt needs. There are indications that, if properly designed, they can promote greater awareness and change financial behaviour.

ii) Focused Financial Literacy Programs

Some identified financial literacy programs are stand-alone, i.e., they are not a component of a more comprehensive program, but they have a focused goal, such as retirement savings, credit repair, or house purchase.

Regarding retirement savings, two US-based studies are of note. Lusardi (2008a) found that work-based retirement savings seminars had a stronger effect on workers with low income and low levels of education than on non-poor workers. She found that careful program design, including simplified defaults, can facilitate pension savings. An example of this is *Quick Enrollment*, a program that allows workers to enroll in a 401(k) pension savings plan, is inexpensive for employers, and is popular among African-American and low-income workers (Lusardi 2008a, p.27). Lusardi concluded that financial literacy and

defaults complement one another:

Combining default options with financial education programs or financial advice may prevent workers from saving at sub-optimal rates. Moreover, the combination may help workers evaluate their total savings, not only pension but also private savings and, for example, help them save for their children's education, to build a buffer to insure against shocks, or for other reasons (Lusardi 2008a, p.31).

Gonyea (2007) presented results from a survey of approximately 300 low-wage US workers regarding retirement savings. The results found that workers with greater financial literacy were 30 per cent more likely to be saving for retirement, and those workers "who understood their employer's defined-contribution program were twice as likely to report having retirement funds." (Gonyea 2007, p.457)

With respect to credit education programs, one OECD study identified four evaluations and concluded that one-on-one counselling is effective, participants should establish personal goals, and personal contact between staff and participants is important. It also noted that mortgage education is important because it can reduce delinquency rates, but it is expensive to provide. Braunstein and Welch (2002) note that evaluations of pre-purchase counselling in the US are limited, though they noted one study that found lower delinquency rates among those receiving this assistance (Braunstein and Welch 2002, p. 450).

These studies, evaluating stand-alone financial literacy programs that are focused on a particular goal, reinforce the necessity of careful program design, in this case with respect to default options for programs such as retirement pensions. But the US evidence found that financial education to promote retirement savings could be effective in stimulating saving among low-income workers. Focused financial literacy can also lower house delinquency rates. There was little information about the costs of these programs.

iii) Financial Inclusion Programs

Financial inclusion programs are similar to the focused financial literacy programs (above). They include a financial literacy component in order to achieve a particular goal, in this case to bring the participant into a relationship, or a deeper relationship, with a bank. There are usually some other components of the program such as assisting the participant to open a bank account or access a loan.

Two such programs were identified in Australia. One was the *Step Up Loan* program offered by National Australia Bank and other was ANZ Bank's *Progress Loans* (Buckland 2009).

Evaluations of the *Progress Loan* program found that default rates were low (Buckland 2009), and results from this program found additional benefits, including access to lower cost loans and subjective evaluations of well-being (less stress and greater independence and self-confidence). Even with a limited financial literacy component, approximately one-third of respondents felt that after completing the program they were better at budgeting and managing their money (Vawser & Associates 2009, p.15).

There were a larger number and variety of studies about financial inclusion programs in the US than in other countries. An evaluation of the Federal Deposit Insurance Corporation's *Money Smart* program, which seeks to assist unbanked people to open a bank account, found that 80 per cent of participants did open an account after the training. However, the evaluation noted the financial literacy needs of participants varied considerably and argued: "The bottom line is that the best measure of program 'success' may not be the number of accounts opened, but whether the program has provided the participant with the financial skills and tools needed to make that decision on their own." (Lyons and Scherpf 2005, p.18) Another evaluation considered *Get Checking*, a program that provides financial literacy in order to assist people who have lost their bank account privileges. The evaluation found that participants were more careful with their finances after the program: "In particular, a high percentage of the respondents of the follow-up survey indicated that they record financial transactions and communicate with financial

institutions since the completion of the program.” (Haynes-Bordas, Kiss and Yilmazer 2008, p.383-386)

A study that examined another financial literacy program¹¹ intended to assist people to become banked found that many participants initially relied on fringe banks, not on mainstream banks, and had negative attitudes about mainstream banks (Anderson, Zhand and Scott 2007, p.449). The authors also noted that financial literacy training improved participants’ understanding of, and attitudes towards, banks, especially regarding costs of mainstream bank services. An evaluation of a credit-counselling course offered to drop-in clients at an income tax assistance office found that those who chose to acquire information and take the credit counselling course “do not discount the future as much as those who choose not to acquire information. This result has implications for financial education programs.” (Meier & Sprenger 2007, p.1) An evaluation that examined how participants were impacted by a bank technology training program found that “the intervention changed participants’ perceptions of the ease of technological literacy and of the usefulness of financial literacy.” (Servon and Kaestner 2008, p.299-300)

The OECD (2005) literature review on unbanked programs noted several points about program design. This included the following points: local organizations are best placed to reach hard-to-reach groups; having clear program goals is important; financial literacy levels among the unbanked and underbanked populations vary substantially, so one way to address this diversity of need is to offer modular education; and, after completing the training, participants need on-going support.

The evidence from these studies shows that financial inclusion programs with a financial literacy component can improve the financial knowledge and behaviour of participants. Attitudes about mainstream banks change; bank accounts are opened; balances are regularly checked; and, where credit is made available, loans are paid back. These studies

11 *Financial Links for Low-Income People* (FLLIP) includes an asset-building component for some participants, but the participants of this study did not engage in asset-building.

also revealed important results regarding program design. Once again, results noted the importance of meeting participants' felt needs, working with local partners, and providing on-going, not just one-time, financial literacy training.

iv) Asset-building Programs

The asset-building programs of greatest relevance to this discussion are matched-savings or Individual Development Account (IDA) programs. These programs seek to increase assets held by low-income households and very often include financial literacy training. They are found in many countries, but available literature limits discussion to programs in Australia, Canada, and the US.

Evaluations of an IDA program in Australia, *Saver Plus*, address impact and program design. Results found that many participants of *Saver Plus* achieved their savings goals. Evaluations demonstrate that *Saver Plus* helped participants save for their identified goals,¹² and that participants were satisfied with the financial literacy training, particularly valuing discussion about setting goals as part of a plan to save (Russell et al. 2008, p.5). The second evaluation of *Saver Plus* was completed in 2009 (Chant Link and Associates 2009). The study found that the *Saver Plus* affected attitudinal and material change in participants. The study presented lessons learned from the program, which include the need for clear objectives, simple and balanced design, commitment by stakeholders, relevant and motivating content, credibility of program, and participant support of the program (Chant Link and Associates 2009, p.15-16).

The Canadian *Learn\$ave* evaluations have focused on program impact. They have found that a higher proportion of participants regularly save than a comparable sample from a control group. But the results found no difference between these groups in terms of total financial savings (all financial assets including bank accounts, investments, and pension funds) or net worth (all financial and physical assets) (Leckie et al. 2009, p.26-30).

12 The evaluations did not address the issue of savings fungibility, whereby a participant may meet IDA program goals by reducing savings in another area.

The participants receiving matched-savings and financial literacy training saved 6 per cent more than the matched-savings only group (Leckie et al. 2009, p.20). All participants were also more likely to set financial goals, engage in budgeting, and have a positive attitude about formal education than were the control group, but those participants receiving financial literacy training were the most likely to do so (Leckie et al. 2009, p.33; Voyer 2010, p.21-22).

US evaluations of asset-building considered impact and program design. In terms of impact, several studies note that a limited amount of financial literacy training – between 8 and 10 hours – can promote IDA program outcomes (Sherradan and Boshara 2008; Carpenter 2008; Clancy, Grinstein-Weiss and Schreiner 2001). Studies found that financial education improved budgeting habits, increased savings and improved attitudes (e.g., optimism, persistence, self-reliance) (Carpenter 2008, p.11), and resulted in more successful first-time house purchases (Grinstein-Weiss et al., p.731).

In terms of other program design insights, lack of transportation and child care were identified as constraints to participating in financial education (Carpenter 2008). Friedman (2005) recommends that curriculum should include information relevant to participants with practical examples; that appropriate venue and provider be used; and that the programs be designed to encourage completion by engaging the felt needs of the participants. Wheeler-Brooks and Scanlon (2009) found that lack of employment and pressure to spend were important barriers to save among young people. Meanwhile, useful account structures, individual strategies, and parental support were identified as facilitating saving. The authors concluded that financial literacy must be on-going, as benefits from one-time programs may be quickly lost. An important study by Sherradan and Boshara (2008) argue that there is a need to balance research on financial literacy with research on the supply side of the financial services market:

The manner in which financial institutions interact with consumers can encourage or discourage good results. Currently, the playing field in financial

services is uneven. Sophisticated marketers and sellers are promoting complex products to a weakly informed consumer base. Research, policy, and regulatory changes should encourage rethinking of the role of financial institutions in this regard (Sherradan and Boshara 2008, p.288).

The evidence from the programs in Australia, Canada and the US indicates that IDAs can boost participants' savings in order for them to meet a savings goal. The IDA literature is particularly helpful in thinking about financial literacy and low-income people. IDAs are among the few financially-oriented programs that target low-income people. At their root, IDAs seek to change participants' financial behaviours by encouraging them to accumulate assets to improve their livelihoods. Evidence from these studies shows that a certain amount of financial literacy, focused on topics of relevance to participants, can boost participants' savings, improve their basic financial habits such as budgeting, and their attitude about finances. Other successful program design features include addressing transportation and child-care obstacles of participants; presenting clear objectives; addressing lack of employment and pressure to spend as barriers to save; fostering useful account structures; and providing support for participants once the program is completed. As Sherradan and Boshara (2008) note, financial literacy and illiteracy – for low-income and non-poor people alike – does not happen in a vacuum or a frictionless market. Instead, people gain and lose literacies within a unique social context. The financial literacy of low-income people must be evaluated with knowledge of this context. We do not know how cost-effective the IDA program is, but adding a 10-hour financial literacy course into an IDA program would probably not add a large additional cost.

c) Discussion of Programs and Evaluations

In terms of programs and evaluations of financial literacy, this study has identified programs in Australia, Canada, the UK, and the US that have a bearing on the situation of low-income people. The programs included stand-alone financial literacy programs or financial literacy bundled with other supports (e.g., matched-savings or credit). In some cases, the program goal was to raise general financial literacy levels and in other cases

accumulating assets or improving one's financial position were the principal program objectives. The evaluation literature examined impact and design features, but there were no evaluations with cost data or comparing cost data across programs.

The Canadian studies of financial literacy resources for various groups (newcomers and disabled people) point to a paucity of government resources on financial literacy, particularly for newcomers. They also note the need to balance education initiatives with improved regulation to achieve consumer financial well-being. These reports noted the balance required between achieving universality of programming and meeting particular needs. Universality of programs allows for consistent delivery and evaluations but threatens the relevance of programming to particular people and communities.

The US literature was the most extensive with regard to financial literacy programs for low-income people. There is agreement in the literature that low-income people, in general, have lower levels of financial literacy than do non-poor people. The tension in this literature relates to whether lower financial literacy is a particular weakness of low-income people, or whether it reflects they have fewer assets and face greater barriers than the non-poor. Sherradan and Boshara (2008) argued that financial literacy programs must be designed with a better knowledge of the realities that low-income people face.

The evidence about stand-alone financial literacy programs is limited. Results from Australia (*Money Minded*) are that stand-alone financial literacy training is valued by participants and can improve their subjective valuation of their financial literacy.

Evaluations of stand-alone programs that have a particular goal reinforce the necessity of careful program design, in this case with respect to default options for programs such as retirement pensions. Defaults set too low may lead to sub-optimal savings; defaults set too high may reduce participation. The US evidence found that financial education stimulated

pension savings among low-income workers. Focused financial literacy can also lower house delinquency rates. There was little information about the costs of these programs.

Unbanked programs such as *Progress Loans* in Australia suggest that the combination of access to small loans and financial literacy leads to good repayment rates and improved financial self-confidence. Evaluation of the US unbanked programs – FLLIP (without the matched-savings component), *Get Checking*, *Money Smart*, and credit counselling – has found that they can improve financial knowledge and financial behaviour of participants. Benefits include better knowledge and attitudes about banks, more careful reconciliation of chequing account balance, and improved financial knowledge and behaviour.

The literature on IDAs and their relationship to financial literacy is more extensive. The evidence for asset-building from Australia (*Saver Plus*) reveals that participants valued financial literacy training, particularly with respect to improving their planning. Many participants successfully completed the program and purchased their assets. Evaluations of the Canadian *Learn\$ave* program demonstrate that the savings-and-literacy group outperformed a control group in terms of asset accumulation but not in terms of net wealth. The costs of the different programs were not evaluated, nor were the costs compared to those of other types of assistance programs. The US literature seems to be in consensus that IDAs with some financial literacy training can be an effective means to build savings and financial literacy. Evidence from the *American Dream Demonstration*, a US-based IDA pilot program, discloses that roughly 10 to 12 hours of financial literacy training offered within IDA programs can boost participants' savings, improve their basic financial habits (such as budgeting), and improve their attitude about finances.

Regarding program design, an evaluation of the Australian-based *Saver Plus* program noted the need for clear objectives, simple and balanced design, commitment by stakeholders, relevant and motivating content, credibility of program, and participant support of the program (Chant Link and Associates 2009, p.15-16). Evaluations need to be designed that are comprehensive and allow flexibility. Comprehensive evaluations allow for comparisons

between programs, while flexibility allows evaluations to respond to the needs of particular people and communities. Consistent with best practices, the process of evaluation needs to be integrated into program design and to have a participatory dimension. Evaluation of the US-based FLLIP program and the *Get Checking* program noted the importance of considering the felt needs of participants. Other design features included the importance of stakeholder collaboration, and including information on government programs and supports in literacy curriculum. The *Money Smart* evaluation pointed out that financial literacy needs vary – e.g., some people have a greater and some a lesser need for a mainstream bank account – and that indicators of program impact must reflect people’s differing goals.

4) Conclusion

This report critically explored the literature that measures, presents programs, and evaluates programs targeting the financial literacy of low-income people.

Financial literacy is an issue of growing concern among policymakers in several Northern nations, including Canada. This review has found that the literature which relates to low-income people is the richest in the US. The literature in other countries, including Canada, is modest and is more descriptive in nature. Across the literature, financial literacy is generally measured using one or more universal indicators, similar to how IQ was used to measure universal intelligence in the 1950s. However, some studies have identified the need to relate indicators to what people value or feel that they need.

The measurement of financial literacy generally involves the responses to either one-off questions or indexes made up of a number of questions. The questions come in many forms, often falling within a continuum, such as objective-subjective, basic-advanced, budgeting-planning, and savings-credit. Combining these questions into indexes is an interesting step but involves important assumptions about the weighting of different factors.

The studies reported here consistently found evidence that financial literacy was lower for low-income people than it was for the non-poor. This is not surprising if one assumes that financial literacy, general education levels, and income levels are correlated. The precise reason for the correlation has not been the subject of these studies. One explanation, noted above, is that people invest in financial literacy – like other literacies – when it benefits them and when it is available to them. If people have few assets and low income, and there are few banks in their neighbourhood, then knowledge about the stock market may not be helpful or easily accessible.

The evidence demonstrates that low-income people score as well or nearly as well as non-poor people on what some refer to as basic financial literacy – for instance, keeping a household budget. In more advanced areas of financial literacy, for instance choosing investment products, there is evidence of a larger literacy gap between low-income people and the non-poor.

The program and evaluation literature reviewed here examined stand-alone financial literacy programs and comprehensive programs that include a financial literacy component. Data limitations prevent comment on causation and on the cost side of these programs. Impact evaluations demonstrate that when financial literacy is combined with other programming (e.g., asset accumulation, credit, asset-building), then it can generate added benefits. In terms of program design, a key result is to balance consistency of programs with flexibility. Consistency offers greater scope for rational allocation of support and evaluations that are comparable. But flexibility is needed to ensure that programs meet the felt needs of the participants. Other important program design features include ensuring sufficient incentives for participants, keeping financial literacy training short, and making sure the venue is conveniently located.

5) Recommendations

1. The Measurement of Financial Literacy

1.1. Include Indicators of What People Value in Terms of Literacy, Finances, and Well-being

For indicators of financial literacy to be meaningful, they must measure something that is important to people. A national survey about financial literacy can yield helpful insights about people's technical knowledge. However, a complete understanding of financial knowledge, skill, and attitudes must be based on an understanding what people value. Once there is a clear understanding about what people value, this can be combined with standard understandings of what is needed to operate within a financialized economy, to develop a comprehensive understanding of people's financial literacy. This approach to measurement could lead to some important insights. For instance, it may be that people value knowledge about investing but do not have, or perceive they have, access to investment services.

A better understanding of what low-income people value could be achieved by (1) engaging in qualitative research methods such as open-ended surveys and focus-group discussions, or by (2) inserting questions into surveys that ask respondents about what is important to them in terms of literacy, finances, well-being (e.g., see FINRA study, under self-perceptions, a question about satisfaction with financial condition [Lusardi et al. 2009, p.14]).

1.2. Move from One Universal Indicator to Appropriate Indicators of Financial Literacy

For most people financial literacy is a means to an end. The level of financial literacy needed depends on a person's economy, age, assets and goals. A rich person aspiring to become richer will have advanced financial literacy needs. A low-income person seeking a higher financial position will have more modest financial literacy needs. This has implications for measurement and programming (discussed below). Regarding measurement, realistic standards of financial literacy should be used for different groups of people. There is no clear reason for everyone to become an expert on investments and planning. Using universal indicators that demonstrate low-income people are particularly

weak is misleading and possibly dangerous. It is misleading because not everyone needs to be an expert in finances, and it may be dangerous because of the opportunity cost. If personal and social resources are funnelled into financial literacy and away from other important tasks, then poverty may deepen.

One way to address this issue is to determine financial literacies needed for different groups. Lusardi (2008a) used basic and advanced financial literacies as a means to distinguish between two different types. Basic financial literacy might combine the knowledge, skills, and attitude needed by the low- and modest middle-income groups, and the advanced literacy might include what is needed by wealthy segments of the population.

One point of caution is needed. Since this study has not identified evidence on the cause-and-effect issue – simply put, whether a lack of advanced financial literacy or low-income came first – measuring financial literacy must be careful around issues of causation. This is discussed next.

1.3. Identify Supply-side Constraints to Improved Financial Literacy

There is an important cause-and-effect issue showing the relationship between financial literacy, access to financial services, and well-being. Low-income people may have weak access to mainstream financial services because they live in neighbourhoods with weak financial services or because they do not have a family history of using mainstream financial services. With poor access to financial services, people may not realize how these services could assist them. It is hard to value something one is not aware of or know about.

Two recommendations flow from this. *First, that financial literacy surveys include questions to determine the accessibility of financial services (e.g., Colmar Burton 2009, Table C, p.15).*

Second, financial services need to be more accessible for low-income people. This is discussed below.

1.4. Connect Financial Literacy Indicators with National Indicators of Well-being

There is a growing literature on the theory (e.g., Sen 1999, Nusbaum 2006) and measurement on human well-being. This literature includes a growing set of indicators of quality of life (United Nations Development Program 2009, Institute of Wellbeing 2009). Little effort has been made to link financial literacy theory and indicators with the theory and measurement of human well-being. But for financial literacy to be effectively measured, it needs to be rooted in a deeper conceptual framework. Without a deeper framework, the risk is that financial literacy indicators are not measuring things that people value. Consequently, action taken on these measures will not lead to the desired outcome.

It is recommended that a means be established to integrate thinking and measuring financial literacy within a broader concept of well-being, such as the Canadian Index of Well-being.

2. Financial literacy programs and evaluations

2.1. Connect Financial Literacy Content and Process that is Valued by Participants

Financial literacy needs vary across the population, and this has implications for programming. The program literature reviewed in this report found that people involved in programs – whether stand-alone financial literacy or comprehensive programs such as IDAs – are most satisfied when they value the content of the program and the program requirements are practical. This means that the content of the financial literacy must be shaped by an understanding of what is important to participants. Having flexible content is related to the program process. Programming and evaluation should balance consistent and comprehensive programming with a flexible and participatory process. Finally, the logistics of financial literacy programs, things like its duration and location, must also be tailored with participants in mind.

The government should promote financial literacy programs for low-income people that to a significant extent meet their felt needs in a convenient way. This may be as a component of other programs (discussed below), or as a stand-alone program.

2.2. Determine the Costs of Financial Literacy Programs

The evaluation literature reviewed here addressed impact and program design. It is recommended that the Task Force encourage evaluations that include impact and design questions *and* cost questions. It would be useful to examine the costs programs with financial literacy components, and to be able to compare these costs with other means of improving well-being. This will allow for a comparison of these programs with others to determine the most effective way to utilize scarce resources.

It is recommended that cost evaluations be done of programs for low-income people which have a financial literacy component, e.g., Learn\$ave. The costs should be compared with the costs for other programs, such as other registered pension programs.

2.3. Improve Financial Service Provision for Low-income People

The literature reviewed for this study took financial service availability as given. Other literature has identified access to financial services as a barrier for low-income people to improve their financial lives (Buckland and Martin 2005, Caskey 2008, Sherradan and Barr 2005). With inaccessible mainstream bank services, many low-income people rely heavily on fringe banks – pawnshops, cheque-cashers, payday lenders – for financial services. These firms are not well regulated, their services are expensive, and these services can only weakly assist people to improve the financial lives.

Two recommendations flow from this. *First, the federal government should require that mainstream banks demonstrate a contribution to financial inclusion. This could be done by requiring the banks to contribute to a financial inclusion fund itself used to support financial inclusion. As a first step, the Task Force could recommend that financial inclusion be a major issue to be addressed in the next review of banking.*

Second, the federal government should regulate fringe banks as they do with mainstream banks, in order to protect low-income consumers. This regulation would include disallowing problematic services, as recommended by Sherradan and Boshura (2008).

2.4. If It Proves Cost-effective, Add Financial Literacy to Comprehensive Programs for Low-income People

The literature from Australia, Canada and the US demonstrates that financial literacy training can effectively build literacy and meet other program goals when it is a component of unbanked or IDA programs. It is assumed that short training courses (10-12 hours) on basic financial literacy would not be expensive to offer (but note recommendation above to determine the cost). This should be tested. At a more general level, Sherradan and Boshara (2008) recommended that financial education be embedded in “policies and programs rather than left to individuals to access in an unstructured ‘market’ of information.” (p.288)

If cost analyses demonstrate that short courses on financial literacy are cost-effective, then it is recommended that government identify other programs (e.g., employment, social assistance) and organizations (local organizations) through which financial literacy training could be offered to low-income people.

Another recommendation from Sherradan and Boshara (2008) is that financial literacy be provided at the point-of-sale. This recommendation is premised on the idea of the “learning moment,” and that the purchase of a good or service presents an opportunity for this experience. Point-of-sale financial literacy should be promoted through Canadian government programs and banks.

2.5. Expand the Scope of IDAs and Unbanked Projects in Canada

Learn\$ave is the only national IDA program in Canada. There are a few unbanked projects in Canada (see Buckland 2008). There is evidence that IDA programs have a positive impact on household finances and literacies. Cost analysis of *Learn\$ave*, and comparison with other programs, is not complete.

Once these analyses have been completed, and if they demonstrate IDAs are cost-effective, keeping in mind the costs for programs such as RRSPs, the government should fund a scaled-up version of the program, available for all low-income people. Government should consider

recommendations from Sherradan (2009) to offer IDAs, at least in part, directly through mainstream banks.

2.6. Train Institutional Staff about Low-income Financial Needs and Barriers

Low-income people face unique and complex financial needs and barriers (e.g., Stapleton 2010, Shillington 2003). Staff working in institutions that assist low-income people with their finances may not be aware of this. Thus, training staff about low-income people's financial needs and barriers is important (Sherradan and Boshara 2008). The advice institutional staff are able to provide to low-income people will be more effective.

Thus, it is recommended that the government require staff at relevant agencies be trained on the financial needs and barriers faced by low-income people. These institutions would include organizations such as mainstream banks; trusts and credit unions; and federal, provincial, and municipal social service agencies.

2.7. Include Evaluation Within Program Planning and Include a Process Component

Evaluation is a critical part of programming, and it should be integrated into the process from the beginning. To be effective, evaluations need to include a process component that allows for participation of the program clients.

The government should ensure that evaluations with a process component are integrated into financial literacy programs intended for low-income people.

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Appendix A. Overall Literature Review Method

The literature review relied particularly on journal articles and policy- and practice-oriented reports, but at least one search engine (*Econlit*) included books within its collection. These resources were identified through the use of academic, policy/practice, and mixed search engines, as follows. The academic search engines included *Econlit* and *Web of Knowledge*. (*JSTOR* was also used but did not prove useful.) To identify particularly current literature, the US-based *Social Science Research Network* eLibrary (www.ssrn.com/) was used. Policy- and practice-oriented studies for Canada were identified from the websites of SEDI's Canadian Centre for Financial Literacy (www.theccfl.ca/home.aspx), and the Financial Consumer Agency of Canada website (www.fcac-acfc.gc.ca/eng/default.asp). The OECD *Financial Education Gateway* (www.financial-education.org/) was a good source for a variety of studies, and *Google Scholar* provided some results (scholar.google.ca/).

The search method involved a combination of keywords and a subject heading. The keywords included "financial literacy," "financial capability," and "financial education." For *Econlit*, keywords and the subject heading "personal finance" was used (but titles from some countries, e.g., China and Turkey, were excluded). These search terms were modified with words such as "poor," "poor people," "poverty," and "low-income." Results were limited to the 2000s. In addition, the term "asset building" was used as keyword to obtain more studies.

Appendix B. Studies Measuring Financial Literacy with Reference to Low-income People

Method

- From literature review, 152 references were shortlisted (see Bibliography & Overall Literature Review Method)
- These were sorted into Measuring, Program, & Evaluation.
- A total of 23 measurement studies included below refer to the treatment of low-income people. Four of these studies were shortlisted for discussion in the text.
- For each study, the survey method, financial literacy concept, and evidence on basic and advanced financial literacy outcomes for people on low incomes were identified. Basic financial literacy relates to household budgeting, and advanced financial literacy relates to larger purchases, such as a house, and seeking professional financial advice.

Agency	Author	Year	Survey Method	Financial Literacy Concept	Low-income Reference
Canada					
Statistics Canada	Arrowsmith & Pignal 2010	2009	National survey 15,500 people	Budget, planning, choosing, information	-Direct reference & via correlates (education and tenure) -Basic: Linear relationship between “Not keeping up” and income, running from 6%, 4%, 2%, 1%, 1% (p.24). -Advanced: “there is a clear trend across all domains to observe an increase in “using advice” from the lowest income quintile to the highest income quintile.” (p.67) -Composite index: “there is no doubt that better performance along at least three out of the four scales [<i>not</i> the ‘Making ends Meet’ scale] improves as personal income increases.” (p.116)
Canadian Foundation for Economic Education	The Strategic Council	2008	1,000 respondents	Economic and financial confidence and knowledge	-Find that financial literacy related to education, income, gender, and age (p.8) -Responses are broken down within 4 income groups: e.g., see p.49

Agency	Author	Year	Survey Method	Financial Literacy Concept	Low-income Reference
	Buckland 2010	2009	Qualitative field surveys 82 people	Respondent identified concept: budget, credit/savings, policies	-Direct reference: "this article has found evidence of adequate literacy among many respondents in terms of limiting spending, diversifying income, avoiding excessive credit and awareness of the general nature of relative market prices. The evidence is consistent with the situated learning theory that states that the context matters in terms of learning." (Buckland 2010)
United States					
FINRA ¹³ Investor Education Foundation	Lusardi <i>et al.</i> 2009	2009	National survey 1,488 people	Capability, literacy, behaviours, attitudes	-Direct reference & via correlates (education, ethnicity) -Basic: Lower income groups (<25k), compared with higher income groups (25-75k, >75k), a little more likely to spend more than they earned last year (16%, 11%, 5%), & more likely to find it difficult to cover expenses (27%, 9%, 3%) (p.15). -Advanced: Lower-income groups less likely than other groups to have retirement plans (13%, 61%, 83%) (p.25).
The National Foundation for Credit Counselling	Harris Interactive Inc. 2010	2010	National survey 2,028 adults	Budgeting, savings, debt, housing, knowledge	-Comparison to 2008 survey results -Direct reference and indirect (ethnicity) -Basic: 10% people income <\$35k trouble paying bills; people with income >\$100k least trouble paying bills (p.6) -Advanced: low-income much more likely than others to save for retirement (p.6)
Survey of Consumers	Hilgert, Hogarth & Beverly 2003	2001	Federal Reserve National Triennial Survey 1,004 people	Cash-flow, credit, savings, investment, other	-Financial practices indexes; rated low, medium & high: high rating declines with sophistication: table 2 (p.312) -Indirect reference through rating

¹³ Financial Industry Regulatory Authority

Agency	Author	Year	Survey Method	Financial Literacy Concept	Low-income Reference
American Life Panel (RAND Corp.)	Hung, Parker & Yoong 2009	2006-2009	4 iterations of the American Life Panel (ALP) ¹⁴	Basic, investing, insurance	-Literature review -Direct reference: "Financial literacy is higher for men, older individuals, those with bachelors' degrees or more, and those with higher income." (not paginated) "In particular, financial literacy increases with education and income, as one would expect." (2 nd to last page of text)
Various	Lusardi 2008	Various	Various: HRS, NLSY, ALP, Jump\$tart Coalition Survey	<i>Basic and advanced</i> financial literacy concepts used (p.7)	-Literature review -Direct reference: large influences on fin lit: gender (especially older women), education, ethnicity (African-American and Hispanics)
National Longitudinal Survey of Youth	Lusardi, Mitchell, and Curto 2010	2008	National Longitudinal Survey of Youth 1997 (NLSY) 7,417 people	3 questions	-Indirect reference to gender and ethnicity: "Financial literacy was strongly related to sociodemographic characteristics and family financial sophistication. Specifically, a college-educated male whose parents had stocks and retirement savings was about 45 percentage points more likely to know about risk diversification than a female with less than a high school education whose parents were not wealthy. These findings have implications for consumer policy." (p.2)
Health & Retirement Study	Lusardi & Mitchell 2008	2004	2004 Health & Retirement Study (HRS) 50+ age	3 questions on fin lit; 3 questions on retirement	-No direct reference -Indirectly: "older women in the United States display very low levels of financial literacy." (p.416)

¹⁴ Note comment from Lusardi (2008) re sample for ALP: "The average age of the ALP sample is about 53, and most respondents are between the ages of 40 and 60. The sample is composed mostly of highly educated (over half have at least a college education) and high-income (almost 30 percent earn \$100,000 or more) respondents. This sample characteristic is partly due to the fact that the survey is done online, and frequent internet users are not a representative sample of the U.S. population." (p.9)

Agency	Author	Year	Survey Method	Financial Literacy Concept	Low-income Reference
Jumpstart Coalition for Personal Financial Literacy	Mandell 2008	2008	National survey students 5,030 high school and college students	Income, money management, saving and investing, spending and credit	-4 subject areas identified -Direct evidence that parent's income positively affects their test scores -"Since standard of living is a multiplicative function of both financial resources (income and wealth) and the ability to use those resources efficiently (financial literacy), we find it increasingly disturbing that those with less income and education are saddled with the additional disadvantage of not possessing the ability to spend what they have efficiently. It is no great surprise to learn that the current financial crisis began with the sub-prime mortgages that were marketed primarily to those with less income, education, and presumably less financial literacy than those who were eligible for prime mortgages. Financial literacy clearly has ongoing macroeconomic ramifications." (Mandell 2009, p.6)
Jumpstart Coalition for Personal Financial Literacy	Lucey 2005				-Assessing reliability and validity of Jump\$tart Survey -found evidence of social bias: "it appears least agreed-upon items involved topics middle and upper economic class students may recognize or experience, but lower economic class students may not." (p.292)
United Kingdom					
	Atkinson et al. 2007	2006	National survey 5,328 people	Budget, planning, choosing, information	-Direct reference & via correlates (education and tenure) -Six clusters identified based on # of areas of weakness (0 to 5): low-income (other income) groups more populated in clusters with more (less) weaknesses

Agency	Author	Year	Survey Method	Financial Literacy Concept	Low-income Reference
Financial Services Authority	FSA 2006	2006	National survey 5,328 people	Budget, planning, choosing, information	-Direct reference & via correlates (education and tenure) -Basic: “people on higher income are slightly more likely to be less capable at keeping track [of their spending].” (p.12) -Advanced: “There was a strong correlation between keeping informed about financial matters and both income and general levels of education.” (p.21)
Ireland					
Central Bank and Financial Services Authority of Ireland	O'Donnell 2009	2008	National survey ~1,500 people	Budget, planning, choosing, information	-Direct reference & via correlates (education, work status) -Basic: no difficulties likelihood keeping up with bills and commitments increases with higher income quintiles (approximate: 50%, 52%, 62%, 65%, 73%) (p.13) -Advanced: having a private pension rises substantially with higher income quintiles (approximate: 5%, 13%, 28%, 47%, 61%) (p.27)
Australia					
Financial Literacy Foundation	Financial Literacy Foundation 2007	~2006	National survey 7,500 people	Budgeting, saving, investing, credit and debt, planning and retirement, protecting money, information and advice	-Detailed information about the relationship to income is unavailable but there is reference in Appendix 2 (p.67) to the existence of relationships (but nothing about the size of the relationship): -Basic: “Ability to keep track of everyday spending” decreases with income (p.69) -Advanced: “Ability to understand rights and responsibilities when dealing with money” increases with income (p.68)
New Zealand					
Retirement Commission	Colmar Brunton 2006	2005		Math, understanding, competence, responsibility	-Direct reference & via correlates -Reference to Maori and Pacific Islanders

Agency	Author	Year	Survey Method	Financial Literacy Concept	Low-income Reference
Retirement Commission	Colmar Brunton 2009	2009	National survey 850 people	Math, understanding, competence, responsibility	-Comparison with 2006 -Direct reference but sometimes difficult to interpret -3+2 = 5 knowledge levels identified (low, medium, high): low (other) income people more likely in low (other) knowledge groups -Table C (p.15) charts product ownership by knowledge group -Basic: "those with a household income less than \$20,000 are less likely than average to have a budget (54% vs 64% respectively)." (p.68)
Germany					
	Bucher-Koenen, Tabea	2008	National panel survey with 1,241 randomly selected	3 objective questions	-Financial literacy levels correlated with income, gender, and education
Netherlands					
Ministry of Finance	Netherlands Ministry of Finance 2009	2008	National survey 3,941 Students	Awareness, knowledge & skills, behaviour	-No reference to income level but there is reference to immigrants
Singapore					
Monetary Authority of Singapore	The Money-SENSE Financial Education Steering Committee 2005	2005	National survey 2,023 people	Money management, planning, investment	-Direct reference -Basic: low-income less likely than average to track spending: 54% vs. 39% (p.21) -Advanced: low-income more likely than average to not engage in financial planning: 36% vs. 17% (p.35) -3 financial literacy index generated & 5 groups by quintile: low-income over-represented in all low literacy quintiles and under-represented in high literacy quintiles (p.81)
South Africa					
Finmark Trust, Finscope	Finmark Trust various, Finscope 2009	2005	National survey 3,900 people	Financial services, socio-economic, financial literacy,	-Relationship to being banked accented -More holistic concept of financial literacy: related to access to financial services (e.g., p.47)

Agency	Author	Year	Survey Method	Financial Literacy Concept	Low-income Reference
OECD					
OECD	OECD 2005	Various	Various	Various	<p>-Reference to direct evidence (p.43):</p> <p>-Australia: low financial literacy associated with low formal education, unemployment, low income, low savings, being single, young or old</p> <p>-UK: low (high) financial literacy associated with low (high) social grade, low (high) income, young (young couples, old)</p> <p>-Korea & US: low financial literacy associated with students with less educated parents, low income, and low professional expectations</p>

Appendix C. Short List of Studies of Programs and Evaluations of Financial Literacy Education

Method

- From literature review, 152 references were shortlisted (see Bibliography & Overall Literature Review Method)
- These were sorted into Measuring, Program, & Evaluation
 - o All Program & Evaluation studies were compiled, leading to 14 pages of references.
 - o Noted the almost complete dominance of literature from and about the US. A few studies for UK, Australia, Germany (unavailable)
 - o Deleted studies (unless specific reference to low-income or minority group): not available, editorials, in foreign language (e.g., one in German), to do workplace/employee issues, retirement, youth, US studies from special fields (e.g., Nursing Economics)
 - o Included some studies (that would have otherwise been deleted) for under-(or un) represented countries
- With each study, identify the survey method, the scope of the study (e.g., national or local program), and references to low-income people, or related topic
- From this list, 37 of the most relevant studies were selected for review (table below). These are summarized, study-by-study below, and form the basis of section 3 (immediately below).

1) Australia

All of the studies reviewed about Australia were evaluations. This included evaluations of a financial literacy program, *Money Minded*, evaluations of an IDA program, *Saver Plus*, and an evaluation of an unbanked project *Progress Loans*. The evaluations rely on subjective evaluations by participants, and the IDA evaluations did not investigate the financial literacy-savings relationship in depth.

a) Stand-alone Financial Literacy

Russell & Brooks (2009) examined the impact on participants of a financial literacy program, *Money Minded*, which focused on case studies of high school students. Almost 80,000 Australians, mainly low-income people, completed *Money Minded*.

The curriculum was developed by ANZ Bank¹⁵ and offered through different non-profits such as The Benevolent Society,¹⁶ which provides it at no fee, and the Brotherhood of St. Laurence.¹⁷ Two evaluations were available for this program (Russell and Brooks 2009; Tippet and Kluvers 2007). Results from one evaluation found that more participants who set financial goals, reported having savings (Russell & Brooks 2009, p.17), less stress regarding finances (Russell & Brooks 2009, p.17), improved knowledge about financial products and fees (Russell & Brooks 2009, p.17), and better management behaviours (e.g., budgeting, shopping habits, keeping track of expenses, managing debt)(Russell & Brooks 2009, p.17). These evaluations provide evidence that stand-alone financial literacy training can lead to improved financial literacy, based on subjective perceptions of participants and instructors.

b) Individual Development Account (IDA)

The IDA-related evaluations reviewed for Australia were of *Saver Plus*, a program sponsored by ANZ bank since 2004, which includes money management training and is targeted towards low-income people. Russell et al. (2008) offered an interim evaluation of *Saver Plus*. A total of 261 of the 1,439 participants had completed the program during for the interim period April 2006 through December 2007. *Saver Plus* uses the content from the *Money Minded* program – a financial literacy program in Australia – for its financial

¹⁵ ANZ Bank 2010. "Corporate Responsibility: Money Minded," available at www.anz.com/about-us/corporate-responsibility/community/financial-literacy-inclusion/programs/money-minded, accessed 31 May 2010.

¹⁶ For more information see Benevolent Society 2006. 'Money Minded,' available at www.bensoc.org.au/director/whatwedo/findaservice.cfm?item_id=02E3D858C9992F6CE0B557541CABFD45, accessed 31 May 2010.

¹⁷ Brotherhood of St. Laurence 2010. 'Money Minded,' available at www.bsl.org.au/Services/Money-matters/MoneyMinded.aspx, accessed 31 May 2010.

literacy training. Positive impacts of *Saver Plus* include achieving savings goals. Participants found that the general topic “Planning and Saving” and the sub-topic about setting goals were the most useful ones for them. Other reported relevant topics included “Saving and Spending” and “Money Planning” (Russell et al. 2008, p.5).

Another evaluation of *Saver Plus* was completed in 2009 (Chant Link and Associates 2009). The study found that the *Saver Plus* impact included attitudinal and material change in the participants, but that the impact varied. Furthermore, it found evidence to support behavioural economic hypotheses (framing, altruism, and short-term time preference), and hypotheses from orthodox economics. Finally, the study presented lessons learned from the program, which include the need for clear objectives, simple and balanced design, commitment by stakeholders, relevant and motivating content, credibility of program, and participant support of the program (Chant Link and Associates 2009, p.15-16).

c) Unbanked

There were two identified small loan programs in Australia with a financial literacy component: *Progress loan* and *Step Up loan*. An evaluation was identified of the *Progress Loan* program. The *Progress loan* is a consumer loan "to enable low-income consumers to access affordable, fair and safe mainstream finance to obtain necessary items." (Vawser & Associates 2009)¹⁸ The loan ranges in size from \$A500 to \$A3,000, and is offered by ANZ Bank in conjunction with The Brotherhood of St. Laurence, a charity with a base in Victoria. The Brotherhood of St. Laurence Loan Officers provide several supports, including general financial literacy information to ensure that the borrower is able to repay the loan (Brotherhood of St. Laurence 2010). Default rates have been kept low (Buckland 2009) and results from this program found additional benefits. These benefits included access to lower cost loans and subjective evaluations of well-being (less stress and greater independence and self-confidence). Even with a limited financial literacy component,

¹⁸ For more information see ANZ Bank 2010, ‘Corporate Responsibility: Progress Loans,’ available at www.anz.com/about-us/corporate-responsibility/community/financial-literacy-inclusion/programs/progress-loans/, accessed 10 May 2010.

approximately one-third of respondents felt that after the program they were better at budgeting and managing their money (Vawser & Associates 2009, p.15).

A similar program is offered by the National Australia Bank, in conjunction with The Good Shepherd Youth and Family Service: the *Step Up Loan*,¹⁹ a consumer loan that ranges in size from \$A800 to \$A3,000. The non-profit staff meet with the clients, who work on financial literacy topics, including household budgeting, credit history, debt, bill payments, and bank account issues (National Australia Bank 2010).

2) Canada

There were several studies identified for Canada that related to the topic of financial literacy education and evaluation for low-income people. This literature is focused on identification and description of financial literacy programs, and there were some evaluations of an asset-building program.

a) Programs

Several of the studies can be characterized as identifying and describing financial literacy programs for particular groups in Canada (SEDI 2009, 2008b, 2008c, 2006).

SEDI (2006) categorized financial literacy materials into two groups: products (e.g., websites or brochures) and services (e.g., individual or group-based training). It found that, where targeted to particular audiences, products were more often targeted towards non-poor people and services towards low-income people. The financial literacy services identified were primarily offered to low-income people or those relying on social assistance, provided within a group context, had multiple purposes, and most frequently included topics of savings, budgeting, and credit/debt (SEDI 2006, p.15-17). The authors noted that data limitations prevented a comprehensive review and warned that the supply of financial literacy must match up with demand. They also noted the existence of

¹⁹ For more information see National Australia Bank, "Step Up Loans," available at nab.com.au/wps/wcm/connect/nab/nab/home/About_Us/4/3/4/?ncID=ZBA, accessed 11 May 2010.

...a supply-side market of financial capability products and services that is relatively healthy in size and scale but perhaps somewhat disjointed, limited in scope and haphazard from the perspective of supplying information, education and advice to raise financial capability levels among all Canadian citizens (SEDI 2006, p.24).

SEDI (2008b), using a literature review, environmental scan, and key informant interviews, described the nature of financial literacy resources for people with disabilities. This study found that very few financial literacy resources were available for people with disabilities. What was available was primarily from the non-profit sector; there were few resources from government, bank, and the corporate sector. The study argued that due to the complex nature of financial decisions for disabled and low-income disabled people, targeted support is needed. They noted that other resources, including those that can make services accessible, are important:

[E]ducational supports in financial literacy should not come at the expense of campaigns that push for improved benefits and supports, especially financial supports. By one informant's estimation, "the need to remove barriers is much more pressing than the need to learn to navigate around them" (SEDI 2008b, p.ii).

SEDI (2008c), using a literature review, environmental scan, and key informant interviews, described the nature of financial literacy resources for newcomers. The results included the recognition that financial literacy resources have been designed in a top-down manner. To better match literacy materials with needs, participants' felt needs must be met. For instance, the study pointed out that a financial literacy curriculum should pay less attention to basic literacy issues and topics such as payday loans, and more about home ownership. As financial literacy is delivered to this group largely by the non-profit sector, the study recommends that it also be provided by employers, banks, and with ESL courses (SEDI 2008c, p.24-25).

SEDI (2009) draws on an environmental scan and key informant interviews to examine the importance of financial literacy for low-income Albertans. The study reviewed financial literacy initiatives in Canada and internationally and identified the latest trends in some countries. The report noted that low-income people are often superior budgeters (SEDI 2009, p.36), and that low-income people as a group are difficult to reach with financial literacy programs (SEDI 2009, p.36). The study noted, with reference to low-income people, that:

There is a growing awareness that the right balance needs to be struck between a) focusing on increasing individuals' financial literacy and b) creating more regulation and public policy to both protect consumers in the long run and get people back on their feet and headed in an appropriate direction more immediately (SEDI 2009, p.24).

b) Evaluations

There were several studies about Canadian programs that were evaluation-oriented. Some are more literature review, and some are evaluations or analyses of an asset-building program.

i) General

SEDI (2008a) presented a literature review of financial literacy evaluation and discussed five case studies of financial literacy programs. Each case study described the program, its history, and, if available, evaluation results. Based on this research the authors conclude that evaluations must balance the need for consistency and rigour with the need for participant input and flexibility.

Effective financial literacy interventions will be able to gauge client knowledge, attitudes and behaviours through an open-ended needs assessment process and will also employ the means by which to respond to gaps in an individual's skills, confidence and knowledge (p.34).

Cakebread (2009) examined different ways in which financial literacy schemes have been evaluated. She noted that financial literacy schemes face many of the problems faced by evaluations in general (e.g., done as an after-thought, difficulty evaluating long-term impact, and reliance on self-assessments):

[R]espondents said that what they are doing is not telling them what they want to know. And what most of them want to know is whether or not the program has had a meaningful impact: has an individual changed behaviour as a result? (Cakebread 2009, p.22).

Particular challenges to evaluation include evaluating longitudinal data and macro-level impact data (i.e., how it is affecting the entire population). The author argued that one of the most important problems is the lack of a formal and consistent approach to data generation (Cakebread 2009, p.20). The author argues that financial literacy providers are most interested in the following information: baseline data for comparison; consensus on a series of agreed-upon and shared goals for providing financial education and a series of shared outcomes; longitudinal data; access to expertise and resources; understanding who is being reached with the material; and ability to measure behavioural change (Cakebread 2009, p.25-26). To address these data needs, the author developed an evaluation framework as follows (Cakebread 2009, p.32-33):

1. Defining the problem
2. Setting the objectives
3. Collecting the data
4. Assessing the cost-benefit/value for money
5. Measuring the impact
6. Refining the program

ii) Individual Development Account (IDA)

The Canadian *Learn\$ave* program is an IDA pilot program that includes a financial literacy component for some participants. It uses an experimental design which allows for

evaluation of program impact on participants at different points of time. So far two evaluations have been completed: at 18 months and 40 months after the start of the program (Leckie, Hui, Tattrie and Cao 2009; Leckie, Dowie & Gyorfi-Dyke 2008). The experimental design allows for comparison among three groups: participants who participated in the matched-savings component, participants who received matched-savings and financial literacy training (savings-and-literacy), and a control group.

Results of the 40-month evaluation found that the participants saved more than did the control group but no impact was identified on net savings (Leckie et al. 2009, p.26) or net worth (Leckie et al. 2009, p.30). The study also found that participants spent more on education than the control group (Leckie et al. 2009, p.40). At both the 18- and 40-month periods, the group that received the money management did slightly better, in terms of savings, than the other groups (Leckie et al. 2009, p.24). The authors downplay this difference, but it is not clear why they do so, as it appears to be a tangible difference. Both the matched-savings group and the savings-and-literacy groups were more likely to have a household budget and set financial goals than the control group (Leckie et al. 2009, p.26). The studies also found that participants were more likely than the control group to have a positive attitude about education (Leckie et al. 2009, p.33), but those who also completed the financial literacy training were not more positive than matched-savings only group.

3) UK

The one study identified from the UK on this topic included an evaluation of financial literacy education (Atkinson 2008).²⁰ The author presented a literature review and key informant interviews of financial education initiatives in the UK and other countries, including 70 evaluations. One section of the study, "Low-income Households," included several useful insights. The study found that financial literacy for this group is often delivered by non-profit organizations, the courses tend to be short in duration (10-15

²⁰ Four other studies (one for the UK and Germany) were identified on the topic for the UK. One of these was a literature review, two were theoretical and one was an evaluation. The literature review examined worker retirement savings in the UK and Germany. The two theoretical studies were concerned to understand financial literacy or consumer empowerment in the broader context of neoliberal political and economic structures. The evaluation focused on IDA programs.

hours), and they are often done as a part of a larger program (e.g., IDA) (Atkinson 2008, p.53). Regarding UK asset-building programs (The *Community Finance and Learning Initiative* starting in 2002 and the *Savings Gateway*), the study contained some important points with reference to financial literacy:

- Participants preferred short financial literacy courses (Atkinson 2008, p.54)
- Recruitment of participants was challenging, and the encouragement of participants (including financial encouragement) was important
- The venue needs to be accessible
- The financial literacy of participants varies from basic to more advanced.

Atkinson (2008) concluded that evaluations of financial literacy place often too much emphasis on savings as the key indicator when improved budgeting may be just as important. The report included an evaluation design and implementation framework (Atkinson 2008, p.74).

4) US

The majority of reviewed studies were from the US. Several of these studies focused on the general topic of financial literacy programs and most were evaluations. The majority of the evaluations related to asset-building programs and several others dealt with financial inclusion projects.

a) Programs

Lucey and Giannangelo (2006) conducted an important study on the topic of financial literacy and low-income people. It is a theoretical analysis of financial literacy education within the US school system including a discussion of social and economic challenges faced by disadvantaged students plus recommendations. One recommendation is that “Instructional processes should pursue student-centered models allowing embrace of human commonalities.” (Lucey and Giannangelo 2006, p.281) This is because there is a diversity of financial literacies and financial literacy needs. For instance, the study notes that the *Jump\$tart* Coalition financial literacy survey does not measure for financial literacy content that is “appropriate for the students’ socioeconomic contexts.” (Lucey and

Giannangelo 2006, p.277) The authors argue that teachers must teach and assess financial literacy that is appropriate to students from a variety of backgrounds. They note that the literature

indicates that underrepresented children possess strikingly less financial understandings than their White peers. An urban society comprised of culturally diverse populations should not ignore its multicultural financial learning patterns. Failure to do so leaves underrepresented socioeconomic groups at risk (Lucey and Giannangelo 2006, p.269).

Lusardi (2008a) presents a literature review that includes reference to some of the author's own original examination of savings behaviour, in its relationship to financial literacy. The study includes some limited reference to low-income people and ethnicity and to IDA programs. For instance, "This paper shows that financial illiteracy is widespread among the U.S. population and particularly acute among specific demographic groups, such as those with low education, women, African-Americans, and Hispanics." (Lusardi 2008a, p.1) The author notes that this is partly related to the lack of retirement planning among the specified groups (Lusardi 2008a, p.5). Moreover, in common with low-income groups, these people lack information about important public supports, such as Social Security (Lusardi 2008a, p.12), and about mortgages (Lusardi 2008a, p.13). The author argues that financial education and pension savings plans with default options are complements, not substitutes, and she finds evidence of the reinforcing relationship between financial literacy and wealth:

She [Lusardi 1999] finds that planning continues to be a determinant of wealth even after accounting for many other reasons why wealth may be low. According to her estimates, at the mean, those who do not plan hold from 10 to 15 per cent less wealth than those who plan (Lusardi 2008a, p.8).

Lyons and Neelakantan (2008) apply the transtheoretic model of change to understand financial behaviour of individuals. This model posits that “behavior change involves progressing through a series of stages, with individuals commonly relapsing before successfully giving up negative behaviors or engaging in positive behaviors.” (Lyons and Neelakantan 2008, p.108) The authors argue for placing financial literacy within a clear theoretical framework that understands the role of institutions such as exogenous financial shocks, limited access to financial services, and changes in life circumstances (Lyons and Neelakantan 2008, p.109). Without a theoretical foundation to analyze data, results may be biased by implicit, and faulty, assumptions about cause-and-effect. For instance, the authors raise the example of the low savings rate among low-income people:

Many financial education programs that target low-income consumers focus primarily on helping them increase savings and reduce debt. However, Scholz and Seshadri (2007) have used life cycle theory to show that low-income households are already behaving optimally. While we would like them to save more and build wealth, they are doing the best they can, given their financial constraints. Thus, if financial education programs ignore what theory suggests, they may fail simply because they have set infeasible goals for their target audience (Lyons and Neelakantan 2008, p.110).

Martin (2007) provides a literature review of financial literacy education related to retirement and general savings (workplace, school, and other programs such as IDAs), home-ownership and credit counselling in the US. The author notes the finding for IDA programs about the positive relationship between financial literacy training time and savings (Martin 2007, p.15-16).

Finally, there are several small loan programs in the US with a financial literacy component. The Federal Deposit Insurance Corporation (FDIC) in the US has run a *Small-Dollar Loan Pilot Program* since February 2008 to “illustrate how banks can profitably offer affordable small-dollar loans as an alternative to high-cost financial products, such as payday loans

and fee-based overdraft protection.” (FDIC 2010b)²¹ Of the 31 banks participating in the program, 16, around one-half, have a financial literacy component. Other financial institutions are developing small loans programs. Many credit unions have developed small loans as a way of supporting their clients who rely on payday loans (Pierce 2008; M. Williams 2007). Some of these loans programs involve a financial literacy component.

b) Evaluations

The majority of the US studies involved evaluations, and most of these related to asset-building and unbanked programs.

i) General

Braunstein and Welch (2002) review the literature on financial literacy programs and evaluations, including homebuyer, savings, workplace, and general financial literacy programs in the US. As with some other studies referred to below, they note results from studies of asset-building programs. Since those results are found elsewhere, of greater interest here are their comments about homebuyer counselling programs. They note that pre-purchase counselling, which includes a financial literacy component, has been a part of affordable housing programs and community development programs in the US, targeting people (and communities) with low income, low savings, or bad credit records (Braunstein and Welch 2002, p.450). While evidence is limited, they noted one study that found lower delinquency rates among those receiving this assistance (Braunstein and Welch 2002, p.450):

Borrowers receiving counseling had, on average, a 19 per cent lower ninety-day delinquency rate than borrowers with “equivalent observable characteristics” not receiving counseling. Those who received individual counseling had a 34 per cent lower delinquency rate than those who received no counseling, and those who received classroom and home study training

²¹ For more information see www.fdic.gov/small-dollarloans

had 26 per cent and 21 per cent lower delinquency rates respectively (Braunstein and Welch 2002, p.450).

Gonyea (2007) presented results from a survey of approximately 300 low-wage workers in US Northeast, regarding retirement savings. The results were that financial literacy levels had a positive effect on the retirement savings of low-wage workers:

Individuals with a greater understanding of types of retirement investment and savings options were 30 per cent more likely to have started to accrue retirement funds. Workers who understood their employer's defined-contribution program were twice as likely to report having retirement funds (Gonyea 2007, p.457).

Lusardi (2008a) reviewed evaluations from a variety of financial education schemes, many of which have reference to low-income people. The author notes the important impact of IDAs for raising the savings rates of low-income people (Lusardi 2008a, p.32). With respect to retirement savings, she notes that work-based retirement savings seminars have a particularly strong effect on workers "at the bottom of the wealth distribution and those with low education." (Lusardi 2008a, p.20-21) She notes that adjustments to pension design can effectively increase participation rates among low-income workers. For instance, *Quick Enrollment*, a program that allows workers to enroll in a 401(k) pension savings plan with defaults, is a low-cost program for employers and is popular among African-American and low-income workers (Lusardi 2008a, p.27). Finally, Lusardi notes that strengthening basic financial literacy among low-income people is clearly possible:

While it is not possible to transform low literacy individuals into financial wizards, it is feasible to emphasize simple rules and good financial behavior, such as diversification, exploitation of the power of interest compounding, and taking advantage of tax incentives and employers' pension matches (Lusardi 2008a, p.30).

ii) Individual Development Account (IDA)

There were several US studies on IDAs related to the topic of financial literacy and low-income people. Most of these were evaluations or analyses and a couple were literature reviews. Probably most important for this study was the one by Sherradan and Boshara (2009).

Friedman (2005) presents a literature review of evaluations of IDA programs with financial literacy components in the US and makes recommendations about program design. These include: that the curriculum should include information relevant to participants with practical examples; that venue and provider should be appropriate; and that the program should be designed to encourage completion by engaging the felt needs of the participants.

In her literature review, Carpenter (2008) identified five studies of IDAs that included a focus on financial education. Carpenter notes that the financial literacy curriculum in IDA programs generally includes basic financial education (budgeting, credit, and planning) and training specific to the asset being purchased (e.g., homeownership for a house purchase-based IDA). She noted the result from the American Dream Demonstration program that “between 8 and 10 hours was linked to a greater likelihood of savings, but additional hours were not.” (Carpenter 2008, p.10-11) Studies found that financial education improved budgeting habits, increased savings and improved attitudes (e.g., optimism, persistence, self-reliance) (Carpenter 2008, p.11). Lack of transportation and child-care were identified as constraints to participating in financial education.

Clancy, Grinstein-Weiss and Schreiner (2001) examine the impact of financial education in IDA programs, using data from 14 American Dream Demonstration sites involving 2,378 participants. “The results seem to suggest that a few hours of general financial education increases saving a lot, although the effects may diminish or reverse as hours increase.” (Clancy, Grinstein-Weiss and Schreiner 2001, p.7) Grinstein-Weiss et al. (2008) examine data from the Tulsa American Dream Demonstration IDA participants regarding impact of IDA on homeownership. They argue that IDAs that include financial education are an

important means to build the success of first-time house buyer (Grinstein-Weiss et al., p.731). Han, Grinstein-Weiss and Sherraden (2009), using data from 1,103 IDA participants in Tulsa, include an analysis of the impact of financial education. They note that “there is no evidence that satisfaction with the current financial situation and being hopeful about one’s financial future are respectively associated with asset accumulation.” (Han, Grinstein-Weiss and Sherraden 2009, p.236)

An important study by Sherradan and Boshara (2008) used data from the American Dream Demonstration to examine participant savings performance. Results identified the relationship between financial education and savings:

...one to ten hours of education is positively associated with AMND [average monthly net deposit], but there is no discernable relationship after ten hours. This is a very meaningful effect (p.284).

The study presents eight institutional characteristics important in the IDA design and argues for “getting institutions right.” This point reflects the institutional theory behind the analysis, which is in tension with the neoliberal ‘get prices right’ concept. The authors conclude with some critical points including the point, raised by others, that causation among financial literacy programs, financial knowledge, and responsible action is multi-directional. There is a need to balance research on financial literacy with research on the supply side of the financial services market:

The manner in which financial institutions interact with consumers can encourage or discourage good results. Currently, the playing field in financial services is uneven. Sophisticated marketers and sellers are promoting complex products to a weakly informed consumer base. Research, policy, and regulatory changes should encourage rethinking of the role of financial institutions in this regard (Sherradan and Boshara 2008, p.288).

Finally, the authors make a number of important recommendations flowing from the analysis, related to financial education:

- Embed financial education in “policies and programs rather than left to individuals to access in an unstructured ‘market’ of information” (Sherradan and Boshara 2008, p.288)
- Financial education must fit the person’s needs; this will require segmenting consumers into particular types of education
- Positive strategies are needed such as elimination of detrimental products (e.g., universal default and over-the-limit fees of credit cards)
- Better training is needed for financial educators who work with low-income people
- Better financial education is required for youth and adults
- Point-of-sale education might be useful
- Link income tax refund recipients with IDAs

Wheeler-Brooks and Scanlon (2009) examine young people’s participation in an IDA program, drawing on surveys of 30 low-income San Francisco youths (15 to 20 years old) with IDAs. The results found that lack of employment and pressure to spend were important barriers to save. Meanwhile, useful account structures, individual strategies, and parental support were identified as facilitators of savings. The authors concluded that financial literacy must be on-going, as benefits from one-time programs may be quickly lost. The authors identified practical goals as an important means to building savings:

[T]he study does provide support for the behavioral perspective which argues that savings are a result of behavioral actions by individuals (Shefrin and Thaler, 1988; Schreiner et al., 2001). In this study, youth reported developing strategies that helped them to successfully deposit money. Utilizing a portion of the financial education classes to help youth build and identify specific savings strategies may be prudent (Wheeler-Brooks and Scanlon 2009, p.763).

iii) Unbanked

Several studies from the US involved an analysis or evaluation of a particular unbanked project.

Anderson, Zhand and Scott (2007) present an analysis of the impact of financial management training on people relying on a social assistance program (Temporary Assistance for Needy Families, TANF) and planning to enter the workforce. The results come from a survey of 88 participants of the *Financial Links for Low-Income People* (FLLIP) program in Chicago. The FLLIP program has a number of sites, some which offer matched-savings and financial education and others that offer financial education alone. The research found that many participants initially relied on fringe banks, not on mainstream banks, and had negative attitudes about mainstream banks (Anderson, Zhand and Scott 2007, p.449). The authors also noted that financial literacy training improved participants' understanding of, and attitudes towards, banks, especially regarding costs of mainstream banks services. The authors' recommendations included:

- For a successful outcome, collaboration with financial institutions and other key actors is important.
- Financial literacy training must be clearly intended to empower participants.
- It is important to include information about public benefits in financial education program. (Anderson, Zhand and Scott 2007, p.450)

Haynes-Bordas, Kiss and Yilmazer (2008) analyse the impact of an unbanked project on participants in the US. The project is *Get Checking*, which is a "second-chance" program — that is, one that assists people who have had their banking privileges revoked and are now seeking to regain them. The method involved a follow-up survey of 161 of the 1,483 participants who were involved in the program in Indiana between 2003 and 2005. The survey sought to learn what financial management skills the participants gained from the program. Results found that, after receiving the training, older people (greater than 45 years old), and those with incomes over \$US50,321 were more likely to reconcile their

cheque book. Non-whites and men were more likely to record their transactions (Haynes-Bordas, Kiss and Yilmazer 2008, p.375-378).

The results of this study provide evidence that the Get Checking program was effective in improving the financial management actions of the participants, especially the behaviors that led the participants to experience problems previously. In particular, a high percentage of the respondents of the follow-up survey indicated that they record financial transactions and communicate with financial institutions since the completion of the program. (Haynes-Bordas, Kiss and Yilmazer 2008, p.383-386)

The authors also noted that financial decision-making varies across socio-economic groups. “The findings of this study suggest that the saving and investment decisions of Non-whites are different than Whites because of their financial management skills.” (p.386)

Lyons and Scherpf (2005) present an examination of an unbanked program, the Federal Deposit Insurance Corporation’s *Money Smart* program. It is a financial literacy training program intended to encourage people to get a bank account. *Money Smart* is “a comprehensive financial education curriculum designed to help individuals outside the financial mainstream enhance their financial skills and create positive banking relationships.” (FDIC 2010a) This study’s method involved pre- and post-surveys of 226 participants from the Chicago area. An important result was that most participants – 74 out of 92, or 80 per cent – who were unbanked, became banked (Lyons and Scherpf 2005, p.17). The vast majority of the group provided positive subjective evaluations of the program: “they were more financially knowledgeable, were better able to manage their finances, and were able to use what they learned on their own.” (Lyons and Scherpf 2005, p.14)

Lyons and Scherpf (2005) also found evidence of differential financial needs and financial literacy needs within the sample. They noted that over 70 per cent of respondents cited “lack of money” as a reason for not having a bank account. For some of these respondents a

mainstream bank account may not meet their needs, the authors submit. (Lyons and Scherpf 2005, p.17) Thus, the authors conclude, the goal of *Money Smart* should not be to promote financial inclusion but to help people to choose financial services based on clarified goals and needs. “The bottom line is that the best measure of program ‘success’ may not be the number of accounts opened, but whether the program has provided the participant with the financial skills and tools needed to make that decision on their own.” (Lyons and Scherpf 2005, p.18)

Meier & Sprenger (2007) report on a field study that investigates how time preferences affect decisions regarding participating in a short credit counselling course. The method involved offering a short credit counselling course to drop-in clients of a tax assistance office in Boston. Just fewer than nine hundred clients were freely offered the credit counselling service and asked to answer a series of questions meant to determine their time preferences regarding money. Time preference of money refers to people’s attitude about future income. Somebody who highly values future income will be more likely to put money aside today – i.e., to save – to have income in the future. On the other hand, people who place little value in future income will be less likely to save today. An interesting result was that

[T]hose who choose to acquire information [and take the credit counselling course] do not discount the future as much as those who choose not to acquire information. This result has implications for financial education programs (Meier & Sprenger 2007, p.1).

One important implication of this study is that how people value the future will have a powerful affect on whether future planning – regarding savings, pensions, and credit repair – is judged important.

Another study by Servon and Kaestner (2008) examined how a sample of people was affected by financial literacy regarding banking technology issues. The study was based on

a demonstration program of a major bank, in Boston, Newark, and New York City. The study involved 243 participants and a control group, using quantitative and qualitative methods. Some results were identified: "In the case of the Program, the intervention changed participants' perceptions of the ease of technological literacy and of the usefulness of financial literacy." (p.299-300) But, overall, the results found limited quantitative changes over the study period. However, the qualitative methods found that there were implementation problems, and if these were overcome, positive results would be possible.

	Format Source E = Evaluation P = Program	Country	Citation	Method	Scope	Low-income Reference
1	E	Canada	Cakebread, Caroline 2009.	Examines nature and challenges of evaluating financial literacy education.	Canada, US, UK	-Develops a framework for evaluation that builds on work by O'Connell (OECD) and Lyons (US)
2	P	Canada IDA	Leckie, Norm, Michael Dowie and Chad Gyorf-Dyke 2008.	Evaluation of Learnsave project impact using controlled experiment	Survey of 2,583 participants in Learnsave (with and without financial management training) and control, Canada	-Financial management course did not affect total savings -But financial management training beneficial effect on budgeting and goal-setting
3	E	Canada	Social and Enterprise Development Innovations (SEDI). 2009.	Title not aligned with content, which focuses on financial literacy	Environmental scan and key informant interviews	-Comment about US fin lit for low-income people: "There is a growing awareness that the right balance needs to be struck between a) focusing on increasing individuals' financial literacy and b) creating more regulation and public policy to both protect consumers in the long run and get people back on their feet and headed in an appropriate direction more immediately." (p.24) -Low-income people superior budgeters (p.36) -Reaching low-income people difficult (p.36)
4	P	Canada	Social and Enterprise Development Innovations (SEDI). 2008a.	Literature review of financial literacy education evaluation & description of local and national financial education projects	Includes 5 case studies of financial education	-Some cases studies refer to programs specifically for low-income people
5	P	Canada	Social and Enterprise Development Innovations (SEDI). 2008b.	Describes nature of financial literacy resources for people with disabilities	Lit review, environmental scan and key informant interviews	-Accessibility of resources important -Limited government support for these resources
6	E	Canada	Social and Enterprise Development Innovations (SEDI). 2008c.	Describes nature of financial literacy resources for newcomers	Lit review, environmental scan and key informant interviews	-Need to better match literacy materials with needs: more client-driven -Less about basic lit & payday loans; more about home ownership -Delivery by banks suggested

	Format Source E = Evaluation P = Program	Country	Citation	Method	Scope	Low-income Reference
7	E	Canada	Social and Enterprise Development Innovations (SEDI). 2006.		Environmental scan	-Large and diverse actors in the field
		US literature:				
1	E OECD	US IDA	Anderson, Steve et al. 2002.	Examines financial training component of FLLIP program impact. FLLIP has IDA & financial management training, but both are not offered at all sites	FLLIP participants regarding their knowledge (not savings)	-Evidence of 'knowledge gains,' especially re work and public benefits (p.8)
2	E	US IDS, Unbanked	Anderson, Steven G., Min Zhand, and Jeff Scott 2007.	Analysis of impact of financial literacy as part of an unbanked program	TANF program, US	-Considers relationship between unbanked programs (e.g., TANF, IDAs, CRA, banking projects) and financial literacy -TANF led to improved financial literacy
3	E OECD	US	Bell, Elizabeth et al. 2005.	Analysis of retirement preparations	Low-income people	-Call for financial education as a component of strategy to raise savings
4	E,P	US IDA	Braunstein, Sandra, and Carolyn Welch. 2002.	Review of the literature on financial literacy programs and evaluations	Homebuyer, savings, workplace, & general financial literacy programs in the US	-Discussion of financial literacy in the context of broader programs, including asset-building (IDA) -Reference to low-income people re homebuyer and asset-building programs
5		US IDA	Clancy, Margaret, Michal Grinstein-Weiss & Mark Schreiner 2001.	Examines impact of fin ed in IDA programs	Data from 14 IDA sites, 2,378 participants	-Evidence that fin ed increases savings
6	OECD	US IDA	Vitt, Lois A., <i>et al.</i> , 2000	A manual for providing financial literacy	For low-income adults and youth in the US	-Reference to low-income people and to IDAs
7	E	US Unbanked	Federal Deposit Insurance Corporation 2009c.	Small Loan Programs Offered by FIs		-See Introduction
8	E	US	Fox, Jonathon et al. 2005.	Analysis of evaluations of financial literacy programs	US financial literacy education programs	-Recommendations for improved evaluation

	Format Source E = Evaluation P = Program	Country	Citation	Method	Scope	Low-income Reference
9	E,P OECD	US IDA	Friedman, Pamela 2005.	Literature review		-Note IDA literature found fin ed useful -Recommendations on fin ed design
10	E,P	US	Gonyea, Judith G. 2007.	Survey low-wage workers regarding retirement savings	Survey > 300 low-wage workers in Northeast, US	-Finds level of financial literacy has a positive affect on retirement savings of low-wage workers (p.457)
11	P	US IDA	Grinstein- Weiss, Michal, et al. 2008.	Tulsa IDA study	US	-Posit that fin education is important for success of first-time house buyer (p.731)
12	P	US IDA	Han, Chang- Keun, Michal Grinstein- Weiss, and Michael Sherraden 2009.	Analysis of IDA impact on participants	1,103 IDA participants in Tulsa, US	-‘Having a budget or spending plan’ not a significant variable in explaining asset accumulation
13	E,P	US	Haynes- Bordas, Rebecca, D. E. Kiss, and Tansel Yilmazer. 2008.	Analysis of impact of ‘unbanked’ project on participants	‘Get Checking’ is a ‘second-chance’ program to assist unbanked back into a banking relationship, US	-Discuss notion of unbanked programs as means to build financial literacy -Reference to low-income and ethnicity
14	E,P OECD	US	Jacob, Katy et al. 2000.	Review of delivery channels of financial literacy	US	-Examines special needs for low-income people -Recommendations for strengthening financial literacy for low-income people
15	E,P	US	Lucey, T. A., and D. M. Giannangelo. 2006.	Theoretical analysis of financial literacy education within the school system	US school system	-Discussion of social and economic challenges faced by disadvantaged students -Includes recommendations
16	E,P SSRN	US IDA	Lusardi , Annamaria 2008.	Literature review	US	-Limited reference to low-income people and ethnicity -Reference to IDAs -Argues that financial education and defaults are complements, not substitutes
17	E,P	US	Lyons, A. C., and U. Neelakantan. 2008.	Theoretical analysis of financial literacy	US	-Argues for placing financial literacy within a clear theoretical framework that understands the role of institutions -Example of low savings rate of low-income people

	Format Source E = Evaluation P = Program	Country	Citation	Method	Scope	Low-income Reference
18	E,P OECD	US Unbanked	Lyons, Angela and Erik Scherpf 2005.	Examination of an unbanked program	FDIC's 'Money Smart' program	-Reference to low-income people -Reference to unbanked -Good question about indicators of success (p.18)
19	E,P	US IDA	Martin, Matthew 2007.	Literature review of financial literacy education	Retirement & savings (workplace, school, other [IDA]), home- ownership & credit counseling in the US	-Discussion of the role of IDAs
20	E	US	Meier, Stephan, and Charles Sprenger. 2007.	Examines behaviour of people regarding credit counseling, focused on time preference issue	872 low-income people coming to tax assistance office in Boston, US	-“those who choose to acquire information do not discount the future as much as those who choose not to acquire information. This result has implications for financial education programs.” (p.1)
21	E OECD	US	Muñiz <i>et al.</i> 2004.	Focus group, literature review, and field visits to analyze financial education programs	Latino communities and people in US	-Effective education needs to be tied to 'teachable moments,' customized, community- based, relevant, and outcome-focused
22	E	US Unbanked	Pierce N. 2008.	Small Loan Programs Offered by FIs		-See reference p.107
23	E,P OECD	US IDA	Rand, Dory 2004.	Describes FLLIP program	125 graduates of FLLIP	-Notes benefits of education (p.12) -Notes benefits of IDAs (p.13): savings indicators reported
24	E	US Unbanked	Servon, L. J., and R. Kaestner 2008.	Examines how a sample of people affected by financial literacy regarding banking technology issues	Demonstration program of a major bank, in Boston, Newark, & New York City, US. Involved 243 participants, and control group using quant. & qual. Methods	-Limited quantitative change but qualitative methods found that there were implementation barriers so that if these are addressed then positive affects likely -“In the case of the Program, the intervention changed participants’ perceptions of the ease of technological literacy and of the usefulness of financial literacy.” (p.299- 300)
25	P	US IDA	Sherradan, Michael and Ray Boshara 2008.	Examines evidence of IDAs and savings	American Dream Demonstration, US	-Argues for “getting institutions right” -Need for financial education and addressing other constraints to savings

	Format Source E = Evaluation P = Program	Country	Citation	Method	Scope	Low-income Reference
26	E,P	US IDA	Wheeler-Brooks, Jennifer, and Edward Scanlon. 2009.	Examines young IDA program participants challenges to save	30 low-income San Francisco youths with IDAs	-Identified barriers to save: lack of employment, pressure to spend -Identified facilitators of savings: account structures, individual strategies, parental support -Insights about financial education: "the study does provide support for the behavioral perspective which argues that savings are a result of behavioral actions by individuals (Shefrin and Thaler, 1988; Schreiner et al., 2001). In this study, youth reported developing strategies that helped them to successfully deposit money. Utilizing a portion of the financial education classes to help youth build and identify specific savings strategies may be prudent." (p.763) -Also need for reinforcing financial education, as it is lost
27	E	US Unbanked	Williams M. 2007.	Small Loan Programs Offered by FIs		-See references p.8, 16, etc.
28	E,P SSRN	US	Willis, L.E. 2008.	Critical review of concept and theory related to financial literacy		
1	E	UK	Atkinson, Adele 2008.	Literature review & 'personal contact' for a "comprehensive literature review of past evaluations of the effectiveness of financial capability initiatives and financial education more broadly, both in the UK and other countries." (p.14)	70 evaluations from UK and other countries	-Points to challenges in evaluations: too much focus on savings; budgeting improves -Presents an evaluation design and implementation framework (p.74)
2	E,P	UK	Brennan, Carol, and Martin Coppack 2008.	Critical analysis of financial literacy as a way to consumer empowerment	Examination of UK's Office of Fair Trading & Financial Services Authority	-Reference to disadvantaged consumers
3	E,P	UK	Finlayson, A. 2009.	Theoretical critique of asset-based government policy	UK	-May have relevance for Introduction section
4	E OECD	UK IDA	Kempson, Elaine et al 2005.	Evaluation of UK IDA program		

	Format Source E = Evaluation P = Program	Country	Citation	Method	Scope	Low-income Reference
1	E	Germany, UK	Oehler, Andreas, and Christina Werner 2008.	Literature review that examines growing individual responsibility regarding pension planning in UK and Germany		-Financial education is a means to encourage individual to take more responsibility re pension planning -Need better evaluation -Need to bring financial education closer to people's lives (p.278)
1	E,P OECD	New Zealand	O'Connell 2007	Literature review of academic and policy- related literature	For: New Zealand, Australia, Canada, the UK and US.	-Identified 3 types of evaluations -Limited and mixed evidence about relationships: financial education→ financial literacy→ effective financial behaviours -"It is not clear how the benefits of improved financial literacy vary across the income distribution. For example, Lusardi found that the positive effect of retirement seminars on financial wealth decreased steadily moving to higher quartiles of wealth ¹⁶ . But the most affluent students have led the recent improvement in financial literacy in the Jumpstart initiative." (p.15)
1	E	Australia IDA	Chant Link and Associates 2009.	Examines Saver Plus which is ANZ's matched-savings scheme with money management training for low-income people		-Program positive impacts include attitude (emotions), financial skills, increased savings
2	E OECD	Australia	Russell, R., Brooks, R. 2009.	Examines impact of a financial literacy program, MoneyMinded, on a group of participants. Includes case studies	Almost 80,000 Australians completed MoneyMinded	-Results include more savings, less stress re finances, knowledge about financial products, behaviours (p.17)
3	E OECD	Australia IDA	Russell, Roslyn et al. 2008.	Analysis of Saver Plus impact. It is ANZ's matched-savings scheme with money management training for low-income people	1,439 participants	-Positive impacts include achieving savings goals, and financial education
4	E OECD	Australia	Russell, Roslyn, <i>et al</i> , 2006.	Examination of pilot financial education program for young people	104 students in Years 7 and 8	-Better understanding of financial issues such as credit cards and cell phone

	Format Source E = Evaluation P = Program	Country	Citation	Method	Scope	Low-income Reference
5	E,P OECD	Australia IDA, Unbanked	Russell, Roslyn, Rob Brooks, and Aruna Nair, 2005.	Evaluation plan for a savings program for low-income Australians		
6	E,P OECD	Australia	Tippet, John and Ron Kluvers 2007.	Evaluation of financial literacy education program by interviewing staff	'Money Minded,' an adult financial literacy program, by ANZ Bank, Australia	-Reference to people with low-income
1		OECD Unbanked	OECD 2005.	Literature review of financial literacy levels and education programs	Identified 109 financial education projects for the unbanked in Australia, Canada, UK, and US	-Chapter (6) & Annex (D) on unbanked programs -Relationship between bank access & financial literacy
2		OECD	Smith, Barbar A. and Fiona Stewart 2008.	Literature review including current financial education programs and recommendations to improve them	OECD, reference to financial education in US, and reference to New Zealand and other countries	-Reference to Bayer et al. 1996 about low-income workers more affected re pension savings (p.356)

Appendix D. Questions about Personal Planning from Select National Financial Literacy Surveys

Method: Searched for words ‘goal’ or ‘plan’ in Canadian, New Zealand, UK, and US questionnaires. These questions were placed below, organized by questionnaire.

1. Canadian Survey of Financial Capability

FM_R01 This next section will deal with the longer term financial planning required to achieve many financial goals such as owning a home or for a child’s postsecondary education.

This section includes several questions about planning, including:

FM_Q02 If you had to make an unexpected expenditure today of \$500, how would you pay for this expense?

FM_Q03 And if the expenditure were \$5,000, how would you pay for this expense?

ME_Q01 Excluding home purchases (principal residence) and the possible cost of your children’s higher education, do you plan to make any purchases or expenditures of \$10,000 or more in the next three years?

ME_Q07 Do you have any plans to purchase a house in the next five years?

EF_R01 I would now like to ask some questions about any financial plans for your child or children in the event that they attend postsecondary education such as college, university or a trade apprenticeship or vocational school.

RP_Q01 Are you financially preparing for your retirement either on your own or through an employer pension plan?

FM_R01 This next section will deal with the longer term financial planning required to achieve many financial goals such as owning a home or for a child's postsecondary education.

ME_R01 I would now like to ask a few questions about how you are planning for your future purchases or major expenditures such as a new car, a cottage, or a child's upcoming wedding.

2. UK FSA Survey of Financial Capability

QBplan SHOWCARD B10. Do you {and your partner} (*extra text if lives with partner*) plan ahead to make sure you have the money to pay for these expenses? CODE ONLY ONE.

SECTION C - PLANNING AHEAD

This section includes many questions about planning, including:

Qpla SHOWCARD C12. I will now read you some statements made by other people about planning ahead. Please tell me how strongly you agree or disagree with them.

"I tend to live for today and let tomorrow take care of itself."

"I always make sure I have money saved for a rainy day."

"I find it more satisfying to spend money than to save it for the long term."

Qpla4 SHOWCARD C12. I will now read you a statement made by other people about planning ahead. Please tell me how strongly you agree or disagree with it.

"If I had to choose, I would rather have a good standard of living today than save for retirement."

3. The New Zealand 2009 Financial Knowledge Survey

Section on: Goal Setting, Long Term Goals and Financial Planning

This section includes the following questions:

Q14a) Do you have financial goals?

CODE ONE ONLY.

P162 Yes	1	GO TO Q14b
No	2	GO TO Q15
Don't understand the question	3	
Don't know the answer		

Q14b) Are these goals written down?

NOTE: A WRITTEN HIRE PURCHASE CONTRACT IS NOT A WRITTEN DOWN GOAL

CODE ONE ONLY

P34 Yes	1
No	2
Don't understand the question	3
Don't know the answer	4

Q16) I am going to read out some statements about financial plans and would like you to tell me whether you think the statement is true, false, or whether you don't know.

CODE ONE PER LINE.

P36S/ P37 True	False	Don't know	Don't understand	
a) Financial plans are set up once and you use that same plan throughout your life	1	2	3	4
b) Financial plans should take into account possible changes in your life	1	2	3	4

c) Financial planning is about investment only	1	2	3	4
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INTERVIEWERS PLEASE USE THE SPACE BELOW TO RECORD ANY UNCERTAINTY AND WHAT RESPONDENTS COMMENTS ARE IF THERE ARE ANY ISSUES (eg asking what is a financial goal or financial plan; is this different from a budget? etc)

4. US FINRA Financial Capability Survey

C1) Do you [IF Q.A7a = 1 OR 2 INSERT: or your [spouse/partner]] have any retirement plans through a current or previous employer, like a pension plan or a 401(k)?