Asia-Pacific
Economic Cooperation

APEC Guidebook on Financial and Economic Literacy in Basic Education

Human Resources Development Working Group

2014

APEC Project: HRD 06 2012A

Produced by

Project Overseer
LUO Ping
APEC Project of Education on Financial and Economic Literacy
Director
Division of International Organization
Department of International Cooperation and Exchange
Ministry of Education of the People's Republic of China

Edited by
WANG Yan
National Institute of Education Sciences of China
Tel: +86 10 62003844
Fax: +86 10 62003844
Email: wangy@nies.net.cn; ywang08@live.com

For
Asia-Pacific Economic Cooperation Secretariat
35 Heng Mui Keng Terrace
Singapore 119616
Tel: (65) 68919 600
Fax: (65) 68919 690
Email: info@apec.org
Website: www.apec.org

APEC#214-HR-03.1
ISBN number: 978-981-09-2617-5

APEC Guidebook on Financial and Economic Literacy in Basic Education

Human Resources Development Working Group

2014

Foreword

Sustainable economic growth and prosperity in the Asia-Pacific region is premised on a workforce better prepared for employment and the job market. It has been widely recognized that economic and financial literacy is essential to such preparation and the economic well-being for individuals and for the economy as a whole. Research shows that the economic and financial literacy that a person acquires early in their life could have a large impact on their behavior and performance regarding economic activities later on in their workplace, regardless of whether they work in the economic sector or in other sectors. Furthermore, the economic decisions that citizens make will in varying degree impact on the economic performance of institutions, a sector and the economy in its entirety.

Internationally, interest in financial literacy has been increasing. Yet most of the programs related to financial and economic literacy have been initiated by the financial sector, as opposed to the field of education, and focus on the financial competencies of adults, rather than those of teenagers. Moreover, most research involves data in the context of a single economy, while there is a lack of relevant cross-national research and endeavors to synthesize best practices. Such research could inform related policy decisions regionally, thus to facilitate integrated economic development in the APEC region.

Aiming at filling that gap, my colleagues and I proposed to implement the Project of Education on Financial and Economic Literacy, to build on existing efforts relating to financial and economic literacy in basic education globally and regionally. The project consists of three major activities: In the first place, the Project started with a Conference on Financial and Economic Literacy in Basic Education held from 24-26 April 2012, in Beijing, China, which brought together representatives from 12 economies such as Brunei, Chile, China, Indonesia, Malaysia, Mexico, New Zealand, Peru, Thailand, Viet Nam and international organizations such as the OECD and ADB. At the conference, the participants discussed issues on challenges, curricula and policies relating to financial and economic literacy. The workshop also identified the economies with the best practices of education in financial and economic literacy, aiming to identify a number of potential case studies. Later, six case studies on best practices in financial and economic literacy in basic education were completed.

The final goal was the publication of a Guidebook on Financial and Economic Literacy in Basic Education that demonstrates how to design and implement learning activities related to financial and economic literacy in primary and lower secondary schools. In order to reach consensus on a number of major issues, a Workshop on the Guidebook on Financial and Economic Literacy in Basic Education was organized in Washington, D.C., the USA on 26-28 September 2012. The workshop invited representatives from the World Bank, OECD, Aflatoun, and China and Youth Finance International to share the most recent research findings and international perspectives. Representatives from Australia, Canada, China, Chile, Indonesia, Malaysia, Mexico, Peru, and the United States exchanged their respective experiences in pushing forward education in financial and economic literacy. Then, the participants discussed the framework of each chapter of the APEC Guidebook on Financial and Economic Literacy in Basic Education led by a panel of seven experts, namely, Alodia Santos, Tahira Hira, Jennifer M. Quick, Jared Penner, Gary Rabbior, Chiara Monticone and Theodore R. Daniels. The Society for Financial Education and Professional Development, Inc. provided assistance to the organizing of the Workshop.

Consensus was reached on the major points to be covered in the chapters focusing on six topics. The results from the Workshop served as a framework and foundation for drafting the chapters of the Guidebook. Thanks to the voluntary contribution by Annamaria Lusardi and Theodore R. Daniels, the Guidebook took shape in its final form, consisting of seven chapters in the following order, viz. Prelude, Rationale for the Financial and Economic Literacy, Curriculum Development, Resource Mobilization, Successful Implementation, Cultural Differences, Assessment and Evaluation. The case reports of six typical APEC economies—Australia, Canada, China, Indonesia, Mexico and the United States—were also included in the Guidebook as appendices.

The Project adopts a cross-sector approach. We synthesized the previous endeavors on education in financial and economic literacy from various sectors, esp. The financial sector and the field of education by engaging with representatives from various disciplines to participate in the proposed activities in the project, including an assessment of the status of the education in financial and economic literacy in the APEC economies, development of the guidebook, and the extension of best practices.

This is a joint initiative, that means, it is based on the efforts, knowledge and wisdom of experts from all the APEC economies and at the same time it is hoped to benefit all the economies in the APEC region in the long run. By distilling lessons from the APEC region and sharing best practices, we hope to make a contribution to laying a solid foundation for employability and productivity of the workforce in economies in the APEC region through education in economic and financial literacy, especially for developing economies, in the changing economic circumstances.

Luo Ping
Project Overseer
APEC Project of Education on Financial and Economic Literacy
Director
Division of International Organization
Department of International Cooperation and Exchange
Ministry of Education of the People's Republic of China

Acknowledgements

The Guidebook is the result of the APEC Project Education in Financial and Economic Literacy in Basic Education led by Luo Ping, Director of the Division of International Organization of the Ministry of Education of the People's Republic of China.

The project was carried out with technical guidance provided by Wang Yan from the National Institute of Education Sciences of the People's Republic of China. The authors of the seven chapters include Annamaria Lusardi, Alodia Santos, Jennifer M. Quick, Jared Penner, Gary Rabbior, Theodore R. Daniels, and Chiara Monticone. The case reports were written by Jennifer M. Quick (Australia), Jane Rooney (Canada), Gao Zhenyu (China), Apriyanti Wulandari (Indonesia), Sara Gutiérrez López Portillo (Mexico), and Theodore R. Daniels (USA). Gary Rabbior, Juan José Serrato Velasco, Jared Penner, and Li Ming acted as peer reviewers. Wang Yan, as editor of the Guidebook, reviewed and revised all the chapters and case reports of the Guidebook.

The project benefited from the contributions made by participants of the Conference on Financial and Economic Literacy in Basic Education held from 24-26 April 2013, particularly Chiara Monticone (OECD), Theodore R. Daniels (USA), Guntur Sugiyarto (Asian Development Bank), Asmadi Tuah (Brunei), Mazlan Abang (Brunei), Eduardo Silva (Chile), Gao Zhenyu (China), Li Ming (China), Guo Xiaohu (China), Apriyanti Wulandari (Indonesia), Catur Dyah Fajarini (Indonesia), Ismayati Bt Ismail (Malaysia), Noor Zaila Wahab (Malaysia), Juan José Serrato Velasco (Mexico), Sara Gutiérrez López Portillo (Mexico), Robyn Scott (New Zealand), Verónica Alvarado Bonhote (Peru), Verónica Villarán (Peru), Alexander E. Zubarev (The Russian Federation), Viktoria S. Peshekhonova (The Russian Federation), Benchamat Montien (Thailand), Sudawan Kruapanich (Thailand), Pham Kim Thanh (Viet Nam), Tran Viet Phuong (Viet Nam) who presented lectures on education in financial and economic literacy in APEC regions..

The Framework for the Guidebook was created during the Workshop on the Guidebook on Financial and Economic Literacy in Basic Education held at Washington, D.C. from 27-28 October 2013, with invited speakers including Siegfried Zottel (World Bank), Annamaria Lusardi (Global Financial Literacy Excellence Center) and presentations on case reports of their own economy made by Noor Zaila Wahab (Malaysia), Patricia Andrade (Peru), Sara Gutiérrez López Portillo (Mexico), Maria Francisca Vial (Chile), Apriyanti Wulandari (Indonesia), Laura Levine (USA), Nguyen Hoang Linh (Viet Nam), Gao Zhenyu (China), and Tian Xinkuan (China), as well as participants such as Meng Xiangyi (China), Edith Harvey (USA), etc. Alodia Santos, Tahira Hira, Jennifer M. Quick, Jared Penner, Gary Rabbior, Chiara Monticone and Theodore R. Daniels led six sessions which resulted in thrust and the main points to be covered in each chapter of the Guidebook. Adriana De Kanter (APEC) and Theodore R. Daniels provided support to the Workshop as co-sponsors of the Workshop.

Throughout the course of the project, Ms. Adriana De Kanter, coordinator of the APEC Education Network provide ongoing support. Yang Cancan, from the Ministry of Education of China assisted with drafting the proposal and also coordination for implementation of project. Guo Xiaoying provided excellent administrative support to the project including organizing both the conference and the workshop.

Edwin Baak assisted copyediting the manuscript of the Guidebook.

Contents

Chapter I Prelude

Financial Education in Schools: Making it Work[1]

Just as reading and writing allows people to experience productive lives, financial literacy—the understanding of financial concepts—provides individuals with the skills they need to make informed decisions Never has the need for such knowledge been greater. Shifts in modern society have given individuals far more responsibility and power over decisions about money matters at the same time that consumers' financial options have become increasingly complex.

Although the need for financial literacy has grown, studies reveal that most people do not grasp the concepts at the basis of financial decision-making (Lusardi & Mitchell, 2014). This is the case even in countries with well-developed financial markets. For example, a study using the US FINRA (Financial Industry Regulatory Authority) National Financial Capability Study assessed an individual's understanding of critical concepts affecting money management: such as interest rates (and compounding interest), inflation, and risk diversification. *Less than one-third of the adult population* can answer all three questions correctly (Lusardi & Mitchell, 2011d). These questions have been asked in as many as eleven other countries (Australia, France, Germany, Italy, Japan, New Zealand, Romania, Russia, the Netherlands, Sweden, and Switzerland) and findings are similar: financial literacy is very low around the world (Lusardi & Mitchell, 2014).

This discrepancy between what people know and what they *need* to know carries serious economic and social consequences, not just for individuals but also for society. The 2008-2009 global financial crisis and its still-debilitating effects stand as a vivid reminder of that. Remediating financial illiteracy should be a national goal and there is no better place to start than *before* individuals are faced with life-affecting financial decisions, i.e., in schools.

---

[1] Annamaria Lusardi, Denit Trust Distinguished Scholar & Professor of Economics and Accountancy, Director, Global Financial Literacy Excellence Center (GFLEC), The George Washington University School of Business, USA.

[2] Australia, Flemish Community of Belgium, Colombia, Croatia, Czech Republic, Estonia, France,

Why Introduce Financial Education into the School Curricula

There may be no single solution for the lack of financial literacy, but there are many reasons why introducing financial education into the school curricula would be a powerful step in the right direction.

- ***Financial knowledge should precede financial decisions.*** Young people are already engaged with the financial marketplace and have to make many financial decisions. For example, the young may own cellphones linked to often complex contracts; if they drive, they have to decide about car insurance, and may work in family businesses. The young also face a life-changing decision with deep and far-reaching consequences: whether or not to continue their education and, for example, finish high school or go to college.

- ***An early start helps young people form positive attitudes around money.*** Or, to put it another way: It is easier to learn good financial habits when young than to un-learn bad ones later in life. Research shows that financial literacy affects behavior. Those who understand financial concepts are more likely to make wise choices about money (Lusardi & Mitchell, 2014).

- ***Financial literacy translates into a better life.*** Studies have found that people who are financially literate generally have a higher standard of living, especially in their retirement years, than those who are not financially literate. Knowledge matters! (Lusardi & Mitchell, 2014).

- ***How else will people learn?*** Given the low financial literacy of adults, even parents who are willing to teach their children about money may not themselves be equipped to do so. Furthermore, the financial decisions that parents confronted in their lifetimes may be very different from those their children will face.

- ***Financial literacy is a lifelong learning process.*** The financial decisions facing someone at age 17 are very different than those facing someone at age 71. And the types of financial offerings available on the market also change over time. An early grounding in financial literacy could foster an interest or habit for acquiring knowledge throughout the life cycle.

- ***Financial education in school levels the playing field.*** Everyone should have a chance to learn about finance and the economy. By working to make all students financially literate, differences in knowledge resulting from family background may be mitigated. The less money a person possesses, the more important it is that he/she handle it well, make good money decisions, and stretch his/her money as far as possible. Ironically, the poor often pay higher prices and rates than the affluent. They need financial knowledge to minimize costs and maximize the value they can get from the money that they have.
- ***It is cost effective to educate the young.*** Ignoring the current serious gap in knowledge will prove expensive for individuals without financial literacy skills and for society as a whole. In the extreme, the consequences of poor financial understanding could entail massive regulatory overhaul or other sweeping measures. Furthermore, financial education might even help reduce youth crime levels.
- ***Financially literate youth grow into responsible citizens.*** There is a cornerstone of economic theory: Where there are well-informed consumers, you will find vigorous competition and efficient markets. In other words, financially knowledgeable consumers are good for business, good for the economy, good for the economy and, in this age of globalization, good for the world. Over the long run, financial education and improved financial literacy can lead to less dependence later in life and thereby can help reduce social welfare costs that are incurred when a person becomes dependent, or partially dependent, on society for his/her well-being.

Preparing Today's Youth for Tomorrow's Financial Decisions

The law of interest compounding, the concept of risk and risk diversification, and other money management precepts are like other conventions of financial knowledge: They are based on scientific principles. The groundwork for this sort of understanding is best laid in a formal educational setting that can provide context.

In other words, the acquisition of financial literacy is a long-term process that, for most people, requires the assistance of institutions outside the home. Rigorous school-based learning with trained teachers is an ideal foundation to begin this transfer of knowledge.

There are five important imperatives for teaching young people about financial literacy.

- ***A solid curriculum backed with resources.*** In a market economy, everyone is expected to participate in the financial markets, creating a need for universal financial literacy. A core curriculum is necessary to meet that goal. Furthermore, to ensure success, adequate resources must be allocated to implement the new courses. A curriculum requirement must not be symbolic; it must be deep and complete.
- ***Specifically trained instructors.*** A majority of teachers feel uncomfortable and unprepared to lead financial literacy instruction. Teachers indicated that money management education is important and said they themselves would benefit from such education (Way & Holden, 2009).
- ***Avoiding a one-size-fits-all approach.*** For teenagers, a clear understanding of youth involvement, youth popular culture, and positive peer influence is needed. Gaming, social networking, and other channels of learning used by teenagers can be effective tools for instruction (Mandell, 2008). In-school education programs might also need tailoring to accommodate the special needs of sub-populations, including students from different race/ethnicity, and females who, research shows, tend to have lower financial literacy levels.
- ***Mandatory courses.*** Financial education is like all other education. If it is important, it should be mandated. Studies show that when students are mandated to take a financial education course, they perform much better in financial literacy assessments than students in states with no personal finance mandates. There is also an equity factor. By requiring that all students be provided with financial knowledge, everyone is given a chance to acquire the skills they need to navigate today's complex economic environment.
- ***Involvement of parents.*** Parents, grandparents, and other family members have an interest in seeing their children financially knowledgeable. Parents and friends can also be "ambassadors" for financial literacy, advocating for programs in schools, libraries, and other community venues.

Measuring Effectiveness of Financial Literacy Programs

It is one thing to design a financial literacy program for young people. It is quite another to design a financial literacy program for teenagers that works—with metrics to prove it. Studies suggest that carefully crafted experiments can and do detect important improvements in knowledge. (Walstad, Rebeck, & MacDonald, 2010)

The need for financial literacy in school and to evaluate its effectiveness is championed by the Organisation for Economic Co-operation and Development (OECD). Every three years, the OECD's Programme for International Student Assessment (PISA) evaluates whether teenagers are prepared for future challenges, have the capacity to continue learning throughout life, and can analyze, reason and communicate effectively.

PISA assesses 15-year-olds around the world to chart their abilities in reading, mathematics, and science—skills seen as critical for success. In 2012, PISA added a financial literacy component to the survey, noting that younger generations are likely to handle more complex financial products and services than their parents. They are also likely to face more financial risks in adulthood, especially when it comes to savings, retirement planning, and health care coverage. An understanding of financial matters is necessary for full participation in society!

PISA's financial literacy module includes questions measuring knowledge for students who live in countries with different economic environments. Its framework allows PISA to examine the relationship between financial literacy and non-cognitive skills as well as how financial knowledge is tied to mathematics, and students' experience. Comparing levels of financial literacy across countries will also make it possible to identify effective national strategies and best practices.

Students in 65 economies took the PISA test in 2012. Participants from 18 of them tackled questions directly related to financial literacy.[2] The financial literacy module will be repeated in PISA in 2015. These data will make it possible to assess

[2] Australia, Flemish Community of Belgium, Colombia, Croatia, Czech Republic, Estonia, France, Israel, Italy, Latvia, New Zealand, Poland, Russia, Shanghai-China, Slovak Republic, Slovenia, Spain, and United States.

who knows the most—across and within countries. And it will reveal how well-equipped young people are for dealing with future changes in the economy.[3]

Potential Consequences of Financial Literacy

Determining financial literacy levels within the population and its subgroups is important. But equally valuable is understanding whether financial literacy has implications for behavior. Research shows that *financial education can work* (Lusardi & Mitchell, 2014).

A strong correlation between financial literacy and day-to-day financial management skills has been uncovered by several studies. For example, people with poor knowledge of finance tend to save less and borrow more. Research in the United States and other countries has found a link between financial literacy and participation in financial markets; those who are more financially literate are more likely to invest in stocks. Advanced financial knowledge, such as an understanding of risk diversification, seems particularly important in predicting participation in the stock market, but numeracy and the capacity to do simple calculations also matters. Financially literate individuals tend to be more judicious about choosing mutual funds, including those with lower fees (Lusardi & Mitchell, 2014; Rooij, Lusardi, & Alessie, 2011; Yoong, 2011).

Financial literacy can also be linked to both short-term and long-term savings. One study using data from young respondents in the United States found that those who are financially literate are more likely to put aside monies to cover emergencies. There is also a strong link between financial literacy and retirement planning. That finding is important because individuals who plan for retirement find themselves entering that chapter of their life with *three times* the amount of wealth as those who do not plan (Lusardi & Mitchell, 2011a, b; Lusardi & Mitchell, 2014).

Financial literacy matters not only for investment and saving but also for borrowing. A burgeoning body of research has found that individuals with poor levels of financial literacy are more likely to have problems with debt. They also tend to have more costly mortgages and are less likely to refinance their mortgages when

[3] See the findings for the 2012 PISA financial literacy assessment at this link: http://www.oecd.org/pisa/keyfindings/pisa-2012-results-volume-vi.htm

interest rates go down.

Increasing financial literacy can have profound implications on the financial security, well-being, and prosperity of individuals and families. Financial literacy can enhance savings and investment decisions, help future planning, and make retirement more secure. Individuals' financial decisions, in turn, have important implications for the economic health of local and national economies. A population that is more financially knowledgeable opens the door to a larger and more efficient market for financial products, expanded participation in asset building, and greater financial stability.

The value of financial education cannot be overstated, and there are compelling reasons to require financial education in schools. Just as it has proven to be impossible to succeed in the modern world without the ability to read and write, so it will be impossible to succeed in the present-day financial system without the ABCs of economics and finance: financial literacy. Quite simply, the more access to learning opportunities children are given, the more financially secure future generations will be.

In a world of increased individual financial responsibility, where workers are in charge of their financial well-being and where financial markets offer new and complex financial products, we cannot afford to disregard financial literacy. Young people around the world and the APEC region are not currently learning enough about money and investment in school or at home. If this is not reversed, we remain vulnerable to serious economic challenges.

References

Lusardi, A. (2011). *Americans' financial capability*. (Working Paper No. 17103). Cambridge, MA: National Bureau of Economic Research.

Lusardi, A., & Mitchell, O. S. (2011a). The outlook for financial literacy. In O. S. Mitchell and A. Lusardi (Eds.), *Financial literacy: Implications for retirement security and the financial marketplace* (pp. 1–15). Oxford: Oxford University Press.

Lusardi, A., & Mitchell, O. S. (2011b). Financial literacy and planning: Implications for retirement wellbeing. In O. S. Mitchell and A. Lusardi (Eds.), *Financial literacy: Implications for retirement security and the financial marketplace* (pp. 17–39). Oxford: Oxford University Press.

Lusardi, A., & Mitchell, O. S. (2011c). Financial literacy around the world: An overview. *Journal of Pension Economics and Finance, 10*(4), 497–508.

Lusardi, A., & Mitchell, O. S. (2011d). Financial literacy and retirement planning in the United States. *Journal of Pension Economics and Finance, 10*(4), 509–525.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5-44.

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs, 44*(2), 358–380.

Lusardi, A., & Wallace, D. (2013). Financial literacy and quantitative reasoning in the high school and college classroom. *Numeracy*, Vol. 2, July.

Mandell, L. (2008). Financial education in high school. In A. Lusardi (Ed.), *Overcoming the saving slump: How to increase the effectiveness of financial education and saving programs* (pp. 257–279). Chicago: University of Chicago Press.

Maynard, N., Mehta, P., Parke, J., & Steinberg, J. (2012). *Videogames: A promising strategy for improving financial literacy*. (*Insight* No. 9), Santa Monica, CA: RAND Financial Literacy Center. Retrieved from http://www.rand.org/pubs/working_briefs/WB115.html

Tennyson, S. and Nguyen, C. (2001) State Curriculum Mandates and Student Knowledge of Personal Finance. *Journal of Consumer Affairs, 35*(2), 241-262.

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics, 101*(2), 449–472.

Walstad, W., Rebeck, K., & MacDonald, R. (2010). The effects of financial education on the financial knowledge of high school Students. *Journal of Consumer Affairs, 44*(2), 336–357.

Way, W., & Holden, K. (2009). Teachers' background and capacity to teach personal finance: Results of a national study. *Journal of Financial Counseling and Planning, 20*(2), 64–78.

Willis, L. (2008). *Against Financial Literacy Education*. Public Law and Legal Theory Research Paper Series Research Paper No. #08-10. Philadelphia, PA: University of Pennsylvania.

Yoong, J. (2011). Financial illiteracy and stock market participation: Evidence from the RAND American Life Panel. In O. S. Mitchell and A. Lusardi (Eds.), *Financial literacy: Implications for retirement security and the financial marketplace* (pp. 76–97). Oxford: Oxford University Press.

Chapter II Rationale for Financial and Economic Literacy Education[4]

Introduction

In today's world, individuals are faced with the daily challenge of navigating their lives in a complex financial landscape. The financial decisions that individuals make may not only affect their individual well-being for the time, but also for their lives over the long run. With our communities being more and more interdependent, their decisions would even influence the people around them in society at large.

The recent global financial crisis highlighted the fact that the increasing complexity of financial products and instruments has transferred the risks and responsibility of major financial decisions to individuals. As a result, it highlights the urgency of promoting social responsibility and developing skills in personal financial literacy for all persons. Important values and skills in managing financial resources at an early age can lessen social and financial vulnerability.

While financial education concerns all ages, the education of the younger generation on financial issues has become all the more important since they will be faced with increasingly complex and sophisticated financial products, and will likely bear more financial risks than their parents. Financial and economic literacy in Basic Education can provide support in helping young people not only prepare for their future, but also help making informed decisions on things that they have control over now. Nonetheless, it is currently not embedded in primary education curriculum of many APEC economies.

Urgency for Education on Financial and Economic Literacy

Children and youth are both current and future economic actors, whose decisions will influence their lives and the development of societies as a whole. Nonetheless, young adults in the APEC economies have demonstrated low levels of

---

[4] Alodia Santos, Aflatoun Child Savings International; WANG Yan, National Institute of Education Sciences, the Peoples Republic of China.

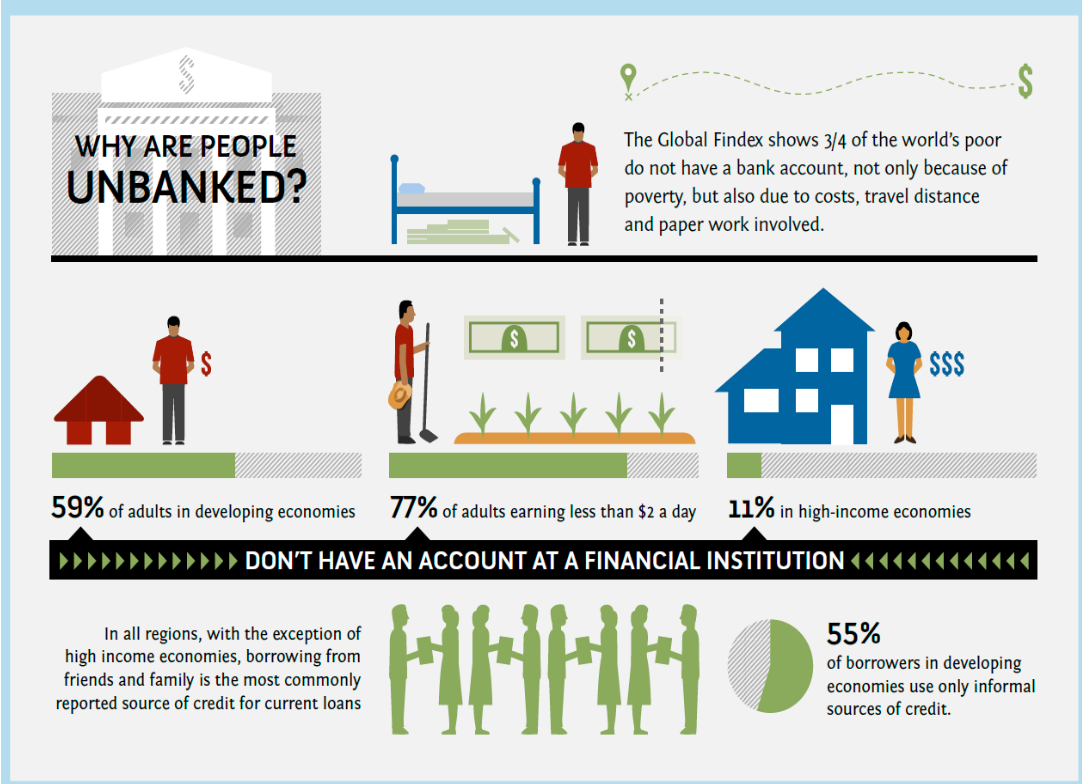
financial literacy. There is sufficient evidence to support the idea that young people need knowledge, skills and demonstrable behavior to make sound financial decisions ranging from the choice of financial products or the ability to calculate interest on a saving account. For example:

- Malaysia: 2% of young adults chose a financial product with the benefit of sound advice.
- USA: 27% of young adults know about inflation and risk diversification and can do simple interest calculations.
- Peru: 41% of young adults could add 2% interest to an initial savings balance of 100 PEN.
- Canada: 63% of young adults think it is very important to learn about personal finances at a young age. (OECD/INFE, 2012).

Evidence has also shown that financial capability and access to financial services is linked to overcoming poverty, reducing income disparities and increasing economic growth. The World Bank's Global Financial Inclusion (Global Findex) Database measured a set of indicators on how adults in 148 economies save, borrow, make payments, and manage risk. It shows that in developing economies, 59% of adults have no access to financial services compared to 11% in high income economies (World Bank Findex, n.d.). Where poverty is not as severe, there are often segments of the population that are socially excluded and marginalized from services.

In addition, the Findex data also found that only 37% of young adults (ages 15-24) have an account at a formal financial institution (in the past 12 months). They are also 33% less likely to have formal accounts and 40% less likely to be saving formally, establishing that younger adults in general enter into the job market with less capacity to access financial services.

Figure 1: Infographic of Summary findings from the World Bank Global Findex



Source: Demirguc-Kunt & Klapper, 2012

Potential Impact of Financial and Economic Literacy

The arguments to support financial and economic literacy, however, are widely agreed, and can be broken down on different situational levels:

Individual empowerment

✧ Financial and economic literacy education enables individuals to engage with and access financial services in more appropriate and effective ways.

✧ Given well-designed education on financial and economic literacy, all people can create their opportunities, identify and handle risks, and be productive in the labour market.

✧ When people are empowered and independent, it helps decrease social costs of society.

✧ Financial education can help children and youth learn to identify and use reputable and reliable sources. They will need to continue to learn throughout their lives – since much of what is learned in school will change over time – and knowing about such sources can be very helpful for lifelong learning.

Family well-being

- ✧ A financial and economic literate family is able to save and invest effectively to meet future needs, and those of dependent family members, be prepared for the unexpected, and work toward financial independence after retirement from work.
- ✧ Financial and economic literacy contributes in mitigating family stress by enabling the household to mitigate, cope and prepare for economic stress.
- ✧ It contributes to the welfare and social stability of families.

Community and Economy's economic growth

- ✧ Enhanced individual empowerment and family well-being contributes to macro-level developments of the community and economy.
- ✧ Through increased employment rates, investments or setup of enterprises or businesses, the increased economic well-being of individuals contributes to economic growth.
- ✧ Moreover, financial and economic literacy serves as a social equalizer as it contributes to "level the playing field" by helping those who are born to be economically-disadvantaged.

Box 1: Introduction of Financial Literacy in High Schools in Brazil

The Ministry of Education in Brazil has approved a continuation of the financial education program, which will now extend to 5,000 public high schools in the economy. Several other countries in the region have expressed interest in the Brazilian experience to learn and adapt the program to their respective environments and schools systems (Child and Youth Finance International, 2012).

Preliminary evidence shows that school-based financial and economic education programs work. The concluding remarks of the study theorize that increasing the saving and investment of an economy, increases the growth of the GDP. Moreover, the RCT shows increases in knowledge, attitudes and behavior through an integrated 18 month high school curriculum. The program increased student financial knowledge by a quarter of a standard deviation and led to a 1.4 percentage point increase in saving for purchases, better likelihood of financial planning, and greater participation in household financial decisions by students. "Trickle-up" impacts on parents were also significant, with improvements in parent financial knowledge, savings, and spending behavior. The study also finds evidence that the program affected students' inter-temporal preferences and attitudes. (Bruhn, Leão, Legovini, Marchetti, & Zia, 2013)

Defining Financial and Economic Literacy

What is financial and economic literacy? International Organizations have given definitions on similar concepts.

- Financial literacy is knowledge and understanding of financial concepts and risks, and the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life. (OECD)

- Financial Capability is the internal capacity to act in one's best financial interest, given socio-economic environmental condition. It encompasses knowledge, skills, attitudes and behavior. (World Bank)

- Social and Financial Education aims at socially and economically empowered citizens by equipping them with the skills and knowledge to become active agents capable of transforming their communities and societies. (UNICEF and Aflatoun)

- Economic citizenship is the culmination of an ecosystem that provides social, financial, and livelihoods education, in combination with financial inclusion to provide a stronger sense of empowerment and socio-financial capability (Child and Youth Finance International)

There is growing sense of agreement that financial and economic literacy must go beyond cognitive ability and the transfer of knowledge, towards improving capability of individuals. In general, the definition of the broader term "financial capability" conveys both an individual and a structural idea, combining a person's *ability* to act with their *opportunity* to act (Johnson & Sherraden, 2007), hence it is both the individual and the environment that has needs for development. The financial capability approach suggests that children and youth should learn about financial management and the financial world, while at the same time, they are provided beneficial tools to participate.

Drawing upon the above definitions, we herein define financial and economic literacy as the combination of knowledge, skills, attitudes and behaviors that people need to make sound and responsible personal financial and economic decisions, suited to their circumstances, in order to improve their individual and communal well-being.

At the APEC Workshop held in September 2013, representatives from the APEC Economies and financial literacy experts reached consensus on a basic framework outlining the common themes on financial and economic literacy.

Table 1: Learning Outcomes for Financial and Economic Literacy

Dimension	Learning Outcomes
Knowledge	• Saving and Spending – distinguishing needs from wants, knowing how savings can help in achieving an individual's goal, options for saving, barriers to saving and overcoming these barriers; practising the habit of saving is also covered • Planning and Budgeting – the skill of developing an action plan towards a goal or dream • Informed decision-making – involves knowing where to seek information and knowing the consequences of your actions
Skills	• Earning money – covers various topics around livelihood, employment and entrepreneurship • Managing money – ability to save and spend, practising the habit of planning and budgeting and acting upon those plans • Investing Money – exploring options of investing money • Understanding cost of borrowing – knowing options for credit and understanding the consequences
Attitude	• Attaining a long-term focus or view into the future – reflecting / considering actions and having sensitivity to risk • Considerate of well-being of others – reflecting on the impact on others; having a sense of responsibility towards others; sense of empathy and compassion • Developed sense of self-worth with an ongoing interest in continuous learning • Passion for the projects that one is involved in, as well as passion towards one's own self-development

Behavior	• Enacting habits of saving, budgeting and prioritizing • Exhibiting entrepreneurial behavior and work ethic – making responsible choices • Exercising focus on making an effort with an emphasis on "grit" • Demonstrating charitable, empathetic and compassionate behavior

Source: APEC Workshop on Financial and Economic Literacy in Basic Education, April 24-26, 2013, Beijing, China

The Need to Start from Basic Education

Since the financial crisis in 2007, many economies have begun appreciating the need for financial literacy programs. These interventions are often first targeted at adults as they are the primary users of current financial services. There is a need, however, to push for financial and economic literacy programs for the younger population.

Children are now engaging with monetary products and services at an earlier age. With what can be called as "milestone moments" (Child and Youth Finance International and Mastercard, 2014), children are already exposed and nudged towards interacting with financial services and products of different providers. Although generational characteristics vary across different economies, and socio-economic conditions, there are a number of marked characteristics in terms of what role money, savings, payments, and financial services play in their lives throughout this transition.

Table 2: Milestone moments of financial experience at various stages of life

Pre-School (3-5 years old)	Early Primary School (6-9 years old)	Early Teens (10-14 years old)
First savings box First savings account	First pocket money First mobile phone First school commute	First mobile top-up Paying for school books and supplies First odd job First social media account First payment card

		Enter vocational school First trips out with friends

Source: Child and Youth Finance International and Mastercard, 2014

More than ever, children need to understand the immediate benefits and risks that are involved with their different financial experiences. Early intervention logic states that introducing life skills, such as basic skills related to money management, should begin as early as possible. By establishing good habits and positive experiences earlier on in their lives, children will be able to engage with society with much more confidence and responsibility. Studies have shown that financial literacy programs are more effective when introduced at an earlier age when compared to those aimed at older population (Mandell, 2009).

School education provides the foundation for a long-term learning process. Including financial education in the primary school is one of the most efficient and fair ways to reach a whole generation on a broad scale. The education system is ideally designed to equalize the opportunities of children, regardless of whether they come from well-educated parents. This is especially critical since parents are unequally equipped to transmit to their children sound financial habits.

School education is also the most efficient intervention to achieve equality in financial literacy. As the school curriculum spans several years and can start as early as kindergarten, it serves as an effective platform to nurture a sound financial culture and behavior amongst members of society. Among other things, young people are potentially good disseminators of new habits to people around them.

A global review of 21 independent experimental studies (O'Prey & Shephard, 2014) showed that financial education programs have positive, moderate effect on financial behavior, though different programs have varying effects on changes in knowledge (cognitive domain) and attitude (affective domain), confirming that financial education can deliver tangible results. A longitudinal study reveals that individuals with one year of financial education are 7.6% more likely to report positive investment income. (Cole & Shastry, 2009)

Principles of Financial and Economic Literacy

Providing financial and economic literacy in primary education means the provision of educational instruction and/or materials designed to increase students' knowledge and skills and to change their attitudes and behavior relating to financial and economic context. The following principles[5] may be taken into consideration when introducing it in basic education, as suggested at the APEC workshop by the member economies:

- Age-appropriateness – The different topics are best introduced at teachable moments and linked to the real life experiences of students at different ages.
- Spiral progression – The concepts or themes should be developed in such a way that different topics can spiral and evolve in complexity as the students go through the different grade levels.
- Minimum Learning outcomes – Basic minimum learning outcomes should be developed based on the economy's context and reality.
- Focus on capability – FEL education in schools is about basic financial capability rather than training financial professionals.
- Link to literacy and numeracy – If there are no literacy and numeracy skills, financial and economic literacy will be difficult to achieve.
- Roots in values – Financial education should not only provide children with knowledge and skills related to finance, but also cultivate values, attitudes and behaviours.
- Relevance with practice – Education in schools tends to achieve better results if linked with practice and supported by students' family.
- Promoting inquisitiveness and love for learning – Knowing where to find useful information and seek support when needed is more important than cramming up on a textbook to pass a test.

The recommendations made by the representatives of APEC member economies resonate with trends that are observed in some financial education programs that have been evaluated across the world. Linking financial and economic literacy with real-life situations and rooting it in social values ensures that it would be much more than a transfer of knowledge, but rather an appeal to the student's

---

[5] Adapted from APEC Workshop notes and Qifen Zhang (ADB)

emotions regarding the need for savings, the consequences of excessive debt, etc. A holistic approach on Financial and Economic Literacy increases the chances of having an impact on behavior.

Link to the Global Agenda

Financial and Economic Literacy is now on the agenda of various international bodies. It emphasizes the need for it and the different activities undertaken to move it forward on a policy and program level. Listed below are some of the key bodies and their undertakings that could be drawn upon.

APEC:

- ✓ Adopted a policy statement on Financial Literacy and Education
- ✓ Development of a Guidebook on Financial and Economic Literacy in Basic Education

G20 Los Cabos (2012) and St Petersburg (2013) Summits:

- ✓ Endorsed OECD/INFE High Level Principles on National Strategies for Financial Education
- ✓ Supported the subgroup creation in GPFI for consumer protection and financial literacy
- ✓ Requested for further tools to promote financial education

OECD:

- ✓ Developed Guidelines on Financial Education at School and Guidance on Learning Framework and released the publication "Financial education for youth: the role of schools"
- ✓ Included financial literacy in the Programme for International Student Assessment (PISA)

UNICEF:

- ✓ Introduced Child Social and Financial Education (CSFE) in Child Friendly Schools

✓ Developed a companion manual in partnership with Aflatoun to introduce Social and Financial Education in various countries

CYFI (Child and Youth Finance International):

✓ Developed a learning framework for Economic Citizenship

✓ Convened practitioners and academics in the CYFI Education[6] and Academic Working Group

[6] OECD and UNICEF are co-chairs of the CYFI Education Working Group

References

APEC (2013). *Workshop on Financial and Economic Literacy*. Washington DC, September 25-27

Bruhn, M., Leão, L., Legovini, A., Marchetti, R., & Zia, B. (2013). *Financial education and behavior formation: Large-scale experimental evidence from Brazil.* Retrieved from *http://siteresources.worldbank.org/INTPOVRES/Resources/477227-1359402884744/BilalZia_Paper_20Feb13.pdf*

Child and Youth Finance International (2012). *Children and Youth as Economic Citizens: Review of Research on Financial Capability, Financial Inclusion, and Financial Education*. Research Working Group Report. Amsterdam: CYFI. Retrieved from http://childfinanceinternational.org/index.php?option=com_mtree&task=att_download&link_id=374&cf_id=200

Child and Youth Finance International and Mastercard (2014). *Banking a new Generation: Developing Responsible Retail Banking Products for Children and Youth*. Amsterdam: CYFI.

Cole, S., and & Shastry, G. K. (2009). *Smart Money: The Effect of Education, Cognitive Ability, and Financial Literacy on Financial Market Participation*., (Harvard Business School Working Paper 09-071). Retrieved from http://www.hbs.edu/research/pdf/09-071.pdf

Demirguc-Kunt, A., an&d Klapper, L. (2012). *Measuring Financial Inclusion: The Global Findex Database*. Washington, DC: The World Bank. Retrieved from https://openknowledge.worldbank.org/handle/10986/6042

Mandell, L. (2009). *Two cheers for School-Based Financial Education.* New York: The Aspen Institute. Retrieved from http://www.aspeninstitute.org/sites/default/files/content/docs/pubs/Two%20Cheers.pdf

O'Prey, L., and & Shephard, D. (2014). *Financial Education for Children and Youth: A Systematic Review and Meta-analysis*. Retrieved from http://www.bsp.gov.ph/publications/media.asp?id=2650

OECD/INFE (International Network on Financial Education) International Network on Financial Education (2012). *Financial Education in Schools*. Paris: OECD. Retrieved from http://www.oecd.org/daf/fin/financial-education/financialeducationinschools.htm

UNICEF (2012). *Child Social and Financial Education Module*. New York: UNICEF.

UNICEF Innocenti Innocent Research Centre (2007). *Child Poverty in Perspective: An overview of child well-being in rich countries*. Innocenti Report Card 7. Florence: UNICEF Innocenti Research centre. Retrieved from http://www.unicef.org/media/files/ChildPovertyReport.pdf

Van Rooij, M. van, Lusardi, A., Alessie, Rob J. M. (2007). *Financial literacy and stock market participation.* ECON STORE and Center for Financial Studies (CFS). Frankfurt: Goethe University.

Chapter III Curriculum Development[7]

Introduction

Curriculum stands at the core of financial and economic education, i.e. what teachers should teach and what students should learn. The curriculum can be a set of objectives; it can be presented as a textbook or as a program; or it can be the requirements of the educational authority in terms of student learning translated into the responsibility of schools to implement and deliver to students. In this chapter the curriculum is defined as the teaching and learning requirements of schools on financial and economic literacy as part of a broader educational curriculum for all students.

As noted in the foregoing chapter, financial education should start as early as possible and incorporating financial education as part of the school curriculum is a fair and efficient policy tool to impart financial and economic literacy. Developing financial capability is a long-term process. Building it into curricula from an early age allows children to acquire the knowledge and skills to develop responsible financial behavior throughout each stage of their education (OECD, 2005).

Curriculum Structure

A curriculum that incorporates financial and economic literacy education in a relevant and meaningful manner should:

- Present a clear and accepted understanding of what is meant by financial and economic literacy
- Include content that is age appropriate and delivered in a timely manner
- Meet the specific needs of an economy/state/school
- Provide the essential knowledge, understandings, skills and behaviors that students should develop

---

[7] Jennifer M Quick, Victorian Curriculum and Assessment Authority, Australia

- Be continuous and progressively developmental
- Engage stakeholders and have a broad base of support.

Essential Learning: Dimensions and Concepts

A vital question is what topics should be included in a curriculum on financial and economic literacy. In other words, 'What are the essential knowledge, understandings, skills and behaviors students should learn and develop in a specific economy/state/school?' Essential learning should be determined by the specific needs identified by each individual economy/state/school and expressed in a learning framework. The determination of essential learning can be assisted by an audit of what students already know, understand and demonstrate, informed by a benchmarking of world-class curricula and programs, and drawing upon international guidelines such as those produced by the international organizations, e.g. the OECD.

It is necessary to determine the appropriateness and relevance of particular knowledge, understandings, skills and behaviors for different ages/year levels. In terms of the most commonly included topics in learning frameworks on financial and economic literacy, representatives from APEC economies at a workshop convened in September 2013 agreed that the general components of a financial and economic literacy curriculum should include the following concepts, knowledge and skills: Saving; Spending; Investments; Budgeting; Credit establishment and management; Establishing and implementing financial goals; Entrepreneurship; Risk management (insurance); Consumer protection; Retirement planning;; Income taxes; More complex economic concepts, such as Supply and demand, Opportunity cost, Monetary policy, Fiscal policy, Economic cycles, Business cycles, and Wealth distribution can be included at appropriate levels.

The representatives also agreed that planning and managing finances are the most important areas to be covered and that financial and economic literacy topics should relate to both personal finance and business/entrepreneurship contexts.

The essential learnings (or concepts) are expressed as content in the curriculum; the knowledge areas that teachers must cover in the teaching and learning program. These concepts can be grouped together into dimensions or blocks to provide the broad base for a curriculum. According to the OECD, the most commonly included topics in financial education learning frameworks are:

- Money and transaction;
- Planning and managing finances (including saving and spending; credit and debt; financial decision making);
- Risk and rewards;
- Financial landscape (including consumer rights and responsibilities and understanding of the wider financial, economic and social system). (OECD, 2014).

Box 1: Essential Learnings on Financial and Economic Literacy

Australia: The Australian *National Consumer and Financial Literacy Framework* groups these essential learnings into the following dimensions: *Knowledge and understanding; Competence; Responsibility and enterprise* (National Consumer and Financial Literacy Framework, September 2011, page 10). These interrelated dimensions underpin financial and economic education in the Australian context. Typically, the Victorian curriculum identifies the essential learnings of financial and economic literacy as managing personal finances and strategies that assist this process; informed consumer decision-making and consumer behavior; the individual's role as a consumer in the economy and their rights and responsibilities; influences on spending; the role of banking, budgeting, saving and investment; and the effects of decisions on themselves, their families, the broader community and the environment. (Victorian Curriculum and Assessment Authority, December 2005)

New Zealand: the *New Zealand National Strategy for Financial Literacy* groups the essential learnings into: *Everyday; Occasional, and Specialist* (New Zealand National Strategy for Financial Literacy, March 2012, page 4). The Everyday content in the *New Zealand* curriculum includes: saving, spending, budgeting, debt management; goal setting; banking, e-banking, interest; net worth; credit cards taxation, insurance, inflation; and consumer rights. (New Zealand National Strategy for Financial Literacy, March 2012, page 4)

Mexico: Mexico provides a *Guide for Elementary School Teachers* which aims to give teachers a tool to teach the basic economic and financial concepts including:

Where do the things I have come from?; I have to choose; I give to get; How much can I spend?; Learn to buy; and I save to be safe. (Financial Education in Mexico, APEC Conference, Beijing, China, 2013)

Two Approaches: Embedded Curriculum *vs* Separate Curriculum?

Financial and economic literacy curricula can be designed as **stand-alone/separate** courses or can be **embedded** into existing courses, depending upon the requirements of an economy's education system. A strategic decision needs to be made as to whether the best approach is to develop a separate curriculum dealing only with 'financial and economic literacy education' or whether it is better to embed financial and economic literacy education in the existing curriculum. For example, financial and economic literacy could be embedded in a specific subject such as 'commerce' or parts could be embedded across appropriate subjects, that is, some in Mathematics, some in Economics, or some in Civics education. There are benefits and limitations with either approach. While the introduction of financial and economic literacy education as an independent subject would increase its visibility and make it more salient to the society overall, the existence of overloaded curricula and of several competing new subjects waiting to be introduced highlights the feasibility and effectiveness of a cross-curricular/integrated approach.

There are many benefits of integrating financial and economic literacy across subject areas as it is a capability needed for everyday life, therefore encouraging student learning across a range of curriculum areas in a range of contexts is highly effective. The challenge for systems is determining in which subjects financial and economic literacy topics should be introduced when a cross-curricular/integrated approach is adopted. APEC representatives at the workshop in September 2013 recommended introducing financial and economic literacy content in various subjects, including Mathematics, Social Sciences, Entrepreneurship etc., according to economies' circumstances and grade/progress of learning.

Curriculum developers should also consider the notion of the 'crowded curriculum'. Many school timetables are already crowded with mandated subjects, which can result in resistance when 'new' subjects are introduced. If financial and economic literacy education is to have a place on the timetable, it should be designed in a manner that best meets the needs of schools while allowing relevant and appropriate learning for students. Emphasizing quality of curriculum content over quantity of content will ensure that the focus of the learning is on retention of knowledge, and application of skills, rather than rote learning that can often evolve from a curriculum that is content-heavy.

Box 2: Separate Curriculum *vs* Embedded curriculum

The United States: According to the Jump$tart Coalition, only Missouri, Tennessee, and Utah require schools to provide students with a course devoted to personal finance. Another 18 states weave financial lessons into other courses, such as History or Civics. Math classes also provide opportunities for introducing and developing concepts related to finance and investment. The Center for Mathematics and Quantitative Education at Dartmouth College has developed a series of financial literacy curriculum modules for math teachers (Center for Mathematics and Quantitative Education at Dartmouth, n.d.; Lusardi and Wallace, 2013).

Victoria, Australia: The major education for financial and economic literacy is embedded in the existing curriculum for Years 5-10, with most of the content in *The Humanities - Economics* and some content also in *Mathematics*. The content in financial and economic literacy and Economics is highly inter-linked, so it was appropriate for financial and economic literacy to sit in this area and be integrated in the most efficient and effective manner. Financial and economic literacy is not taught in a 'stand-alone' manner, it is taught within the broader context of economics which includes concepts such as needs and wants, the nature of scarcity, opportunity cost and resource allocation and how these influence the Australian economy. Content is provided to teachers in the form of a Learning Focus statement, which provides the overall context for the subject and outlines the learning that students need to focus on if they are to progress and achieve the standards expected. The Standards define what students should know and be able to do at different stages. There are two Standards at each year level – one for Economic knowledge and understanding and one for Economic reasoning and interpretation. The Victorian curriculum can be accessed at: http://ausvels.vcaa.vic.edu.au/

Many non-governmental organizations (NGOs) have developed programs to improve the financial and economic literacy of students. These programs might consist of a series of resources that assist teachers' teaching in the classroom, or a presenter may come to the school and run sessions with the students. They are often offered to schools to run in addition to the mandated curriculum, or to add value to the teaching and learning programs. There is often no requirement for schools to include these programs, in other words, they are not linked to formal assessment of students' performance.

There are also cases in which the programs developed by the NGOs are adopted by education authorities or schools, and thus mainstreamed into mandatory curriculum. For example, in the United States, under an initiative of the Council for Economic Education (CEE), a group of academics, teachers, policymakers, and private sector experts has designed *National Standards for Financial Literacy (*Council for Economic Education, n.d.). This Kindergarten-through-grade-12 platform concentrates on six personal finance standards: earning income, buying goods and services, using credit, saving, financial investing, and protecting and insuring. The National Endowment for Financial Education also prepares high school financial planning programs available to schools and teachers (National Endowment for Financial Education, n.d.).

Two Levels: National Curriculum *vs* Local Curriculum

Financial and economic literacy could be introduced by a national or local government (education authority). In the former case, it should be built into the national curriculum, with both learning contents and learning standards mandated in the same way as other courses. For example, in Thailand, financial and economic literacy is provided via Economics as stipulated by the Basic Education Core Curriculum B.E 2551 (A.D. 2008) in the learning area of Social Studies, Religion and Culture. Concepts associated with financial and economic literacy are embedded in this curriculum, taught at all schools. (Economic Literacy in Basic Education in Thailand, APEC Conference, Beijing, China, 2013). Alternatively, it could start from one or several state/province in economies where educational autonomy rests with local administrative areas/regions, and extended nationwide at a later stage.

Specific policy or local requirements that could constrain what is developed should be taken into consideration. One of the difficulties in introducing financial and economic literacy into the curriculum nationwide, is restraint from local governments/authorities that have control over what is taught in schools as often happens in a federal system. There needs to be some agreement between national and local authorities on what should be included in the curriculum.

Box 3: Local Approach *vs* National Approach

Victoria, Australia: The states and territories of Australia have constitutional authority for the curriculum and assessment in their individual state or territory. Victoria's curriculum incorporates financial and economic literacy in the study of The Humanities - Economics in Years 5-10. While Other states and territories also do this, there is no consistency in approach.

Australia: Australia is currently developing a national curriculum (the Australian Curriculum), which the states and territories will use as the basis for their local curricula. The Australian Curriculum: Economics and Business study, written for Years 5-10 has 'consumer and financial literacy' as one of its key organizing ideas, thus embedding financial and economic literacy education into the broader Economics and Business curriculum and mandating financial and economic education for all Australian students in basic education. (ACARA, Australian Curriculum: Economics and Business, October 2013, page 4)

There are different approaches to designing relevant and meaningful programs on financial and economic literacy. Victoria, Australia uses a broader focus statement to provide context from which teachers will develop flexible teaching and learning activities to meet their students' needs. Thailand's approach is to provide a broader context for the curriculum as a whole, and then specifically lists the content to be included in the teaching and learning activities. Both these approaches are effective, and provide relevant learning for students.

Box 4: Basic Education Core Curriculum B.E. 2551, Thailand

In Thailand, the curriculum for financial and economic literacy is based around the benefits of this education to students as citizens, consumers and entrepreneurs, and also the benefits to the national economy. The curriculum prescribes goals and learning standards. It also provides a framework and orientation for enhancing quality of life of learners who would attain virtue, wisdom, as well as capacity to maintain Thailand's competitive position in the world community (Ministry of Education, 2001).

Financial and economic literacy education is placed in the learning area of Social studies, religion and culture. This learning area focuses on coexistence in societies that are interlinked while also having many differences, enabling learners to adjust to various environments. The main strands prescribed are Religion, Morality and Ethics; Civics, Culture and Living; Economics; History; and Geography. Within Economics the focus is on the production, distribution and consumption of goods and services; the management of available, limited resources; a balanced life style; and the application of the principles of Sufficiency Economy in daily life.

Indicators specify learners' goals for each level of compulsory education and outline the expected progression of learners across the grade levels. The indicators clearly define the knowledge learners must know and understand, and behaviors they should demonstrate, and cover both standards. Taken together, the Standards and Indicators provide the overall context for the subject and outline the learning that learners need to focus on if they are to progress and achieve the standard expected. The Basic Education core curriculum covers three educational levels: Primary (Grades 1-6), Lower Secondary (Grades 7-9) and Upper Secondary (Grades 10-12). The curriculum for Thailand can be accessed at www.act.ac.th/document/1741.pdf

Curriculum Development

Establishing a Clear Understanding of the Purpose

A clear understanding of the aim of the curriculum development process should be agreed to by all stakeholders in the process. An economy's cultural values and society's expectations should be considered when developing the content of the curriculum, along with the educational goals of providing students with depth of learning allowing them to develop knowledge skills and capabilities enabling them to be active participants in their society A clear understanding of the aim of the curriculum development process is vital to success.

It is also important to keep in mind the need to develop a "lifelong learner approach" in education on financial and economic literacy and capability as a fundamental goal. This is often talked about and is probably more relevant to this area of learning as so much will change over time. Students will have to adapt and learn throughout their lives to be able to make the decisions, and fulfill the responsibilities that they will encounter in life. Hence a financial and economic literacy curriculum should be progressive to reflect an individual's life stages from primary, secondary, and post-secondary education through one's work period to retirement.

Assessing Learning Needs

A needs analysis facilitates the process of identifying essential learning. A needs analysis is the process of collecting information about students' learning needs. It can also involve looking at the expectations and requirements of other stakeholders, such as the educational system, regulators, financial institutions, financial supporters, and other stakeholders who may be affected by the implementation of financial and economic literacy education, such as students' family members or employers.

The needs analysis process can either be very formal and extensive, and therefore quite time-consuming, or it can take a more informal approach depending on the specific context of curriculum development. Tools for the needs analysis include:

- ✓ surveys
- ✓ data from national/international testing
- ✓ interviews with stakeholders and/or
- ✓ anecdotal evidence.

Before the writing of the curriculum can begin, it is necessary to determine the age appropriateness and relevance of particular knowledge, understandings, skills and behaviours at different age/year levels. This can be assisted by:

- ✓ an audit of what students already know, understand and demonstrate
- ✓ the use of international guidelines
- ✓ being informed by a benchmarking of world-class curricula and programs.

Writing the Curriculum

Once the broad design and the essential learnings of the curriculum are determined the writing stage can begin. Generally a small group, with a lead writer, would be tasked with the writing of the curriculum. The group of writers should have expertise in the field of financial and economic literacy and in curriculum development, and importantly, represent the major stakeholders/interest groups. A larger, more diverse committee could oversee the writing and provide support and input for the writers to consider.

As mentioned previously, the way the curriculum is designed will depend upon the current requirements of the education system in a specific economy. The writing process usually involves the following steps:

- Start with the bigger concepts of financial and economic literacy
- Distill these concepts in specific content areas
- Determine what content specifically the students need to learn
- Determine the specific behaviors that students must demonstrate in relation to the particular content
- Describe the knowledge and behaviors in a manner that will enable teachers to clearly understand what is required to be taught, and enables them to develop teaching and learning activities for the classroom.
- Develop achievement standards that students can be assessed against. These would relate directly to the knowledge and behaviors that students are expected to understand and develop.

Setting Learning Standards

As with all curriculum programs, standards will need to be developed to assess students' progress. The form these standards take will depend on the requirements of the educational system. For example, is the aim to have curriculum (content) for financial and economic literacy embedded into the whole school curriculum so that all students are required to undertake learning in this area alongside other curriculum areas such as Mathematics, Economics and History? Or is the process aiming to develop a program, based on a financial and economic literacy curriculum, which can be delivered to students but is not a mandated part of their learning?

When a decision has been made on the curriculum structure, there are many options. Two options that are commonly used are:

- *To mandate financial and economic education.* In the United States, financial or economics education has been made compulsory in twenty-three states. In many of these states students must complete a course on financial and economic literacy education as a High School Graduation requirement.
- *To define learning standards for each learning area.* Standards have been developed for each learning area in Victoria, Australia. The standards define what students should know and be able to do at different year levels. There are two standards per learning area for each year level – for Economics there is one for the knowledge and understanding, and one for economic reasoning and interpretation.

Implementing the Curriculum

Schools and teachers will require support when implementing the curriculum, both professionally in terms of designing relevant, age appropriate teaching and learning activities, and also in terms of increasing teacher knowledge in the area of financial and economic literacy education. Resistance by teachers and schools to new curricula and programs is quite common. This can be overcome by demonstrating the benefits to both students and the economy of improving the students' financial and economic knowledge, skills and behaviors, and improving teachers' personal financial and economic knowledge and capabilities. This should give teachers greater confidence in their ability to teach students the content matter associated with financial and economic literacy.

A common challenge with implementation is lack of teacher training in this area which means teachers are not prepared to effectively teach students financial and economic concepts, principles, and theories. The OECD Guidelines on Financial Education at School recommends that 'Appropriate training should be made available to ensure that teachers and other relevant school staff (such as school leaders) are adequately equipped and feel confident and competent in building students' financial competencies.'(OECD/INFE, 2013: 17) As teachers acquire knowledge in these subject areas, an outcome-focused approach may be used where practical application and problem-solving exercises are employed with emphasis on critical thinking.

Principals and curriculum leaders in the school should also be included in the implementation process. If these leaders include financial and economic literacy education in the timetable, encourage teachers in their implementation in the classroom and support them through activities such as professional learning, there is a much greater chance of financial and economic literacy education becoming a permanent and highly respected part of the school curriculum.

Box 4: Curriculum Implementation

The Victorian implementation process consisted of two stages. Firstly, implementation workshops and professional learning activities were held for schools and teachers. These workshops explained to teachers the nature of AusVELS and in particular, the different learning areas and what was required of teachers. As consumer and financial literacy is an integral part of the Economics curriculum, professional learning was included here.

Secondly, and more recently, funding has been provided by the Australian Government to all states and territories, to provide resources and further training to teachers and schools to encourage the teaching of financial and economic literacy. This has enabled Victoria to fund a full time Project Manager to assist with the development of a range of resources which support the curriculum requirements, provide professional and personal learning to teachers, and assist teachers in implementing these resources into the classroom.

References

Center for Mathematics and Quantitative Education at Dartmouth (n.d.). *Money Matters: The Financial Literacy Initiative at Dartmouth College*. Retrieved from https://www.math.dartmouth.edu/~mqed/FinancialLiteracyProject/modules.php

Council for Economic Education (n.d.). *National Standards for Financial Literacy.* Retrieved from http://www.councilforeconed.org/resource/national-standards-for-financial-literacy/

Lusardi, A., &Wallace, D. (2013). Financial Literacy and Quantitative Reasoning in the High School and College Classroom. *Numeracy* 6(2), Article 1. Retrieved from http://scholarcommons.usf.edu/numeracy/vol6/iss2/art1

National Endowment for Financial Education (n.d.). NEFE High School Financial Planning Program. Retrieved from http://www.nefe.org/what-we-provide/programs-initiatives/nefe-high-school-financial-planning-program.aspx

OECD (2005, July). *Recommendation on Principles and Good Practices for Financial Education and Awareness*. Paris: OECD. Retrieved from http://www.oecd.org/finance/financial-education/35108560.pdf

OECD (2014). *Financial Education for Youth: The Role of Schools*. Paris: OECD Publishing. DOI: 10.1787/9789264174825-en

Chapter IV Resource Mobilization[8]

Introduction

This chapter focuses on how various resources can be mobilized to support the development and the implementation of initiatives/programs for financial and economic literacy for children and youth. While, generally speaking, resource mobilization implies securing direct funding, valuable in-kind resources are also essential to the implementation of activities related to financial and economic literacy. In fact, resource-mobilization theory places resources at the center of the development and the success of political, social or economic movements. In this sense, *resource* in this chapter is defined as "knowledge, money, media, labor, solidarity, legitimacy, and internal and external support" (Boundless, 2013). Therefore, in order for financial and economic education programs to be successfully integrated into primary and secondary schools, *a comprehensive strategy* must be in place to secure political, financial and in-kind support from relevant government authorities, international donors, private sector representatives and civil society organizations.

This chapter will examine some of the challenges and opportunities of mobilizing resources for the implementation of financial and economic education programs in primary and secondary schools. It will profile some exemplary practices in resource mobilization, with a particular focus on successful initiatives from APEC economies. The discussion of strategies and approaches takes into account the varied administrative structures of APEC economies, and, therefore, should be applicable to government agencies, non-governmental organizations and educational institutions at national, regional and local levels.

Mobilizing Resources from the Public Sector

Involving Relevant Government Branches/Agencies

Foremost, it is necessary to have an overview of the relevant government branches/agencies that are potentially in a good position to contribute political and financial support. Generally these are led by financial and education authorities such

[8] Jared Penner, Child and Youth Finance International

as:

- Central Banks
- Ministries of Finance
- Securities Exchange Commissions
- Ministries of Education
- Curriculum Development Agencies
- National Consumer Protection Agencies.

However, resources could be contributed by all stakeholders, including those that may not come from conventional government branches such as Ministries of Youth, Economic Planning or Human Resource Development. There is no set formula as to which branches of government should be engaged, but certainly those that show interest in the issue of financial and economic education programs, and, for instance, an energetic Minister or Governor, should be involved and given room to thrive.

Overcoming Potential Challenges

There are several potential challenges when engaging relevant government branches together, such as:

1. *Changing personnel*. Consideration should be given to the timing of key national/regional/local events such as elections, new regulations coming into force or other factors which could result in changes in personnel, as implementation of the action plan can last for a number of years. It is thus critical not only to have *consistent stakeholder participation* but also *stable engagement mechanisms* built into the system so that momentum is not lost due to changes within stakeholder organizations (Child and Youth Finance International, 2013: 13-14).
2. *Competing initiatives.* Different branches of government may be committed to certain aspects of financial or economic education programs, but their initiatives may be completely unrelated to each other or be in direct competition with each other over scarce resources and market share.

Cross-sector partnerships at the national/regional/local level will ensure that there is minimal overlap in political or financial commitments and maximize the utilization of resources.

3. *Different funding cycles.* Both government agencies and international donors oftentimes have varying funding cycles. It must be taken into account how to align proposed activities with the timeline of funding cycles of various agencies. Clear lines of communication with these various actors are an important component of a successful and sustainable action plan.

Mobilizing Resources from the Private Sector and Civil Society

One should also look to representatives from the private sector and civil society to provide technical input, financial investment and programming support. Not only will this ensure that the voices of these sectors are well represented when drafting the national/regional/institutional strategy, but also it will allow for the initiatives/programs to benefit from the financial resources and in-kind support from such professional institutions as banking associations, stock exchanges, financial service providers, non-governmental organizations, community centers and parental associations. Such a variety of organizations and individuals, which share the vision and objectives of the national/regional/institutional strategy, are conducive to filling the resource gaps identified in the baseline analysis.

Determining Private Sector and Civil Society Actors

The first step could be identifying which financial institutions or other corporations already have a reputation in the economy as being particularly child and youth friendly as they will likely be in the best position to provide financial and technical support for the implementation of financial and economic literacy programs in schools (Billimoria, 2012). It has to be taken into account that while financial institutions may be socially-motivated to ensure positive impact in the communities where they operate, financial service providers must consider their financial bottom line and the potential returns on their investment in financial and economic literacy programs.

Typical private sector actors include:

a) *Companies with large Corporate Social Responsibility budgets.* They are likely more inclined to make financial or in-kind contributions, such as staff volunteers for financial education initiatives in schools. As they already have budgets for social impact type of programming, a strong case can be made for these organizations to devote a portion of these funds to initiatives/programs that could enhance future citizens' financial capability.

b) *"Socially-minded" financial institutions*. They include cooperatives, credit unions, micro-finance institutions or other charitable organizations that have a social or community impact agenda. Many of these institutions have funds devoted to integrated financial and educational services with a mandate to serve vulnerable populations including children and youth.

c) *Insurance companies*. These institutions have a desire to see a financially literate population and should play a significant role in supporting efforts to enhance financial education at an early age.

d) *National Banking Associations*. These are significant actors in representing the voices of the financial sector, while providing a forum to disseminate messages that encourages financial institutions to support financial education initiatives. It may be better to have a representative from banking associations to participate in the stakeholder platform for financial education rather than individual banking members.

Typical civil society actors include:

a) *Leading Child and Youth Serving Non-Governmental Organizations.* These organizations are most experienced in working directly with youth programming and understand what works best in reaching children and youth with financial and economic education. They also have a number of curriculum resources and other learning materials that can be adapted for use in various initiatives. The NGOs also could direct the education programs to young people in the communities they serve.

b) *Leading Children's Organizations.* These organizations could help align the learning materials and promotional messages on financial and economic literacy with Child and Youth Friendly Banking and Education Regulations, the United Nations' Convention on the Rights of the Child and the United Nations' Children's Rights and Business Principles. Local representatives from a UNICEF country or regional offices can provide this valuable input.

c) *Research Institutions*. Local academics, universities or research institutions should be engaged to assist with baseline analysis of the current providers of financial education, the level of knowledge of financial issues among young people and the amount of resources being devoted to the implementation of financial education programs, etc. Research institutions and universities could also provide grants for various studies to enhance feasibility and effectiveness of the initiatives/programs.

Overcoming Potential Challenges

A number of challenges exist in mobilizing resources from the private sector and civil society. In the process of resource mobilization, one should be mindful of the following challenges to ensure that the resources received from the stakeholders remain objective, non-partisan, high quality, inclusive and sustainable.

These potential challenges include:

a) *Biased educational messages by marketing campaigns.* There is a risk that financial education information delivered by financial institutions is intended to steer students towards their products and services. While financial and technical resources can be drawn from the banking sector to support financial education programs in schools, the educational materials they invest in must remain neutral and separate from product marketing. Government educational authorities, therefore, have the responsibility to supervise that educational materials funded or developed by the private sector are objective, non-exploitative and adhere to the quality standards for educational resources used in public schools in a specific economy/region.

b) *Creating the right Unique Selling Points (USPs)*. It is extremely important for fundraisers to be fluent in their organizational core competencies and be clear about what they hope to achieve at each stage of the action plan. This will be of use with fund-raising campaigns and in developing proposals for potential donors. While the USPs should be clearly articulated, the fund-raising method will need to be tailored according to potential donors. It is important that fund-raising pipelines contain a wide range of potential donors from various sectors able to satisfy short, medium and long-term funding needs (Aflatoun, 2001).

c) *Maximizing outreach with limited budgets.* As financial and economic education for children and youth can be a new area of policy-making and programming for stakeholders, it will be safe to start with modest goals that can be achieved with limited budgetary resources. Once positive results can be demonstrated from initial pilots, projects can be scaled up based on the increased availability of resources.

Developing Effective Approaches and Strategies

The approaches and means for resource mobilization for education initiatives/programs vary by economy, region, agency, and program detail. However, common threads can be found across these various programming initiatives that provide guiding principles for resource mobilization. This section illustrates optional approaches and strategies on how to go about mobilizing important and needed resources for financial and economic literacy programming.

Establishing Clear Roadmaps

Following a clearly-articulated national/regional/local strategy, a well-designed roadmap, in light of political, social or budgetary conditions, will underline the mobilization of resources. It is critical to first map the current activities corresponding to each component of the roadmap. Such mapping exercises will identify the extent to which they are already being addressed, and align planned activities with ongoing initiatives/programs and estimate the resources needed to carry out new activities. This baseline analysis will also increase the credibility of funding proposals, demonstrating to potential donors that there are already stakeholders and resources committed to the development of financial and economic literacy within the economy (Greenall, 2012).

Building a Stakeholder Platform

Governments, schools, NGOs, parents and financial institutions alike desire a generation of economically active, entrepreneurial and financially capable young adults who will be able to secure their own livelihood and use financial services wisely in the future. To increase the potential scale and duration of financial education initiatives, key stakeholders should be brought together into the processes of mapping, planning, implementation and evaluation of action plans, preferably in the form of national/regional/local stakeholder platforms. Such coordinated efforts might help avoid the inefficient use of resources and the duplication/overlap of programming, while creating synergies among various sectors to maximize impact. In doing so, it is important to engage stakeholders representing key sectors that provide a range of perspectives while allowing for common challenges to be shared and benefits to be multiplied from positive outcomes.

Box 1: Building a National Stakeholder Platform

Singapore: The Financial Education Steering Committee (FESC) of Singapore is the strategic planning body for financial education at the national level and takes care of public funding on a case basis. The FESC is led by the Monetary Authority of Singapore and involves the Ministry of Education, Ministry of Health, Ministry of Manpower, Ministry of Social and Family Development, Central Provident Fund Board, National Library Board, and People's Association. Since 2003, the FESC has supported national financial education activities through the MoneySENSE program, emphasizing money management, financial planning and investment know-how for all citizens of Singapore, including children at the primary and secondary school level (MoneySENSE, 2013).

Japan: The integration of financial education in the Japanese school system has been led by the Central Council for Financial Services Information (CCFSI). The CCFSI is composed of Bank of Japan, Financial Services Agency, financial institutions, consumer associations, media companies and academics and is jointly funded by its members. The CCFSI worked together with the Ministry of Education, Culture, Sports, Science and Technology to launch the revised National Financial Education Curriculum for Primary and Secondary students in 2008. In addition, the CCFSI organizes financial education seminars aimed at supporting teachers to introduce financial education in the classroom. The CCFSI invites officials from the Ministry of Education, Culture, Sports, Science and Technology and other local education experts to participate in these seminars in order to develop the skills and the confidence of teachers in addressing financial education with their students. (OECD, 2014)

Creating Appropriate Incentives to Engage Stakeholders

Each stakeholder could be motivated by different incentives such as policy priorities, financial returns, a favorable public image, access to new information, recognition as a thought leader or pioneer in the field and making a profound difference in the lives of children and youth.

Engaging Government Agencies. In terms of seeking out interest and support from key government sources and agencies—especially, as possible, those with greater influence and authority within government—different government branches or agencies may play different roles. It is important to help them identify the roles they can play and how they can complement one another. One of the keys to successful engagement of government interest is to show applicability to policy goals and priorities. Keys to success in acquiring support from government departments and agencies include identifying key personnel who influence government priorities and decision-making and determining points of access to these individuals. A clear, concise proposal should be produced with tangible links to policy goals and priorities and an awareness of project timelines and funding cycles. At all times, sensitivity and awareness should be demonstrated towards political realities, events, and developments that may affect government decisions.

Engaging Financial Institutions. By supporting financial education in schools through the sponsorship of educational resources, training materials or promotional activities for children, financial institutions demonstrate to the public that they are committed to enhancing financial literacy and the economic empowerment of the next generation. They can also offer meeting spaces free of charge for financial education providers to use for student lessons.

Developing Partnerships between the Education Sector and Finance Sector

Financial service providers could bring banking services directly into schools and develop a relationship with clients at an early age by providing a practical application of the financial lessons that students are learning in their classes. The financial institutions can open students' horizons on how the economy and the banking sector operate while demonstrating to them the benefits of financial services in their own economic lives. In addition to providing valuable lessons to school students, the approach provides an inroad to a potential new client base for financial service providers.

Box 3: Partnerships between the Financial Sector and Education Sector

New Zealand: The Development of New Zealand's Financial Literacy Strategy, as well as its promotion and implementation in schools, has been a collaborative effort between the Ministry of Education (MOE) and the Commission for Financial Literacy and Retirement Income (CFLRI), with financial support from the Investment Savings and Insurance Association, the New Zealand Bankers' Association and Workplace Savings NZ (OECD, 2014; Commission for Financial Literacy and Retirement Income, n.d.). The MOE and CFLRI have invested in the development of financial education materials and teacher training resources to be used in the school system, unifying a number of the curriculum frameworks and qualification standards in New Zealand.

Malaysia: Both the promotion and provision of financial education in Malaysian schools is carried out through extensive partnerships between the financial sector and the field of education. Local financial institutions have provided significant financial and in-kind support for financial education initiatives throughout the economy since 1997, when the Malaysian Central Bank, in collaboration with the Ministry of Education (MOE), launched the Schools Adoption Programme (SAP). Under this program, ten thousand public schools have been adopted by local financial institutions, allowing bank staff to assist teachers in carrying out financial education lessons for students. Along with the educational instruction, children are given the opportunity to open a bank account within the confines of the school. The Central Bank assumes responsibility for coordinating and monitoring the SAP. The Bank allocates an annual budget and works closely with the MOE on the implementation of teacher workshops, the development and production of educational materials, along with the management and enhancement of a financial education website. While financial institutions may allocate funds to organize activities related to financial education in their adopted schools, and to produce financial education materials, the

Central Bank and the MOE monitor their content to ensure that they remain child-friendly under local quality standards (OECD, 2014).

Introducing Levies for Financial Education

Government authorities and consumer protection agencies can introduce levies on the after-tax profits of financial service providers to raise funds for financial education initiatives/programs, either voluntary or mandatory, depending on specific situation of the economy/region.

Box 4: Introducing Levies for Financial Education

South Africa: In 2004, the Financial Services Board (FSB) of South Africa established the Financial Services Consumer Education Foundation, governed by a Board of Trustees independent from the FSB, as an avenue for internal and external donors, particularly from the private sector, wishing to support financial education and regulation in the economy. In addition to the resources generated through the Foundation, South Africa introduced a voluntary Financial Sector Charter, committing financial institutions who were signatories to the Charter to designate 0.2% of their after tax profits to financial and consumer education (OECD, 2014).

Ireland: The Irish Banking Federation (IBF) mandates that its members, especially those that were recapitalized after the financial crisis began in 2008, contribute to national financial education initiatives through their Corporate Social Responsibility budgets, keeping them publically accountable through the publication of their activities. The IBF and its members have collaborated with the Department of Education, the National Council for Curriculum and Assessment, and the Irish National Teachers Organization on the funding and development of primary and secondary school financial and consumer education materials which are available for download on the IBF's website (Irish Banking Federation, 2010; International Banking Federation, 2010:15).

Mobilizing In-kind and Voluntary Contributions

Civil society can be a tremendous source of resources to advance financial education in schools. Youth serving organizations are usually experienced in open-source learning materials for children and youth related to personal finance, entrepreneurship, employability and life skills, which could be integrated into school curricula after adaptation. Volunteer mentors/instructors could assist in the instruction of financial education with their professional experience. Likewise, communities may provide safe spaces for extra-curricular courses.

Box 5: Mobilizing In-kind and Voluntary Contributions

Thailand: In cooperation with the Ministry of Education, the Stock Exchange of Thailand (SET) has developed the "Nguen Thong Kong Mee Ka" learning material series for courses in economics, finance, society, religion and culture. This cooperation instills values, perceptions of savings, personal finance and financial discipline into primary and secondary school children throughout the economy. The SET has trained more than 35,000 teachers from 25,000 schools nationwide since the launch of the "Nguen Thong Kong Mee Ka" campaign in 2002. In 2012, the learning management plan has been developed into e-book format and has been launched on an e-training platform. The SET has also partnered with the Romchatra Foundation through the Diamond Crown in Economics contest, providing grants to exemplary students who succeed in the competition (Stock Exchange of Thailand, n.d.).

The United States: The Jump$tart Coalition for Personal Financial Literacy was founded to advance the quality of financial literacy materials developed by educators for primary and secondary school-aged children in the United States. The Jump$tart Clearing House is an online database of financial and economic education resources with curriculum descriptions and information to either downloadable online material or material sold through the producer directly. The materials on the database have been reviewed by Jump$tart staff or a Curriculum Task Force appointed by the Jump$tart Board, although not all materials available receive full endorsement from the Jump$tart Coalition. The Clearing House provides a valuable online resource for education authorities, NGOs and private institutions, both inside and outside the US, looking to develop curriculum or expand programming related to financial and economic education (Jump$tart, n.d.).

Conclusions

This chapter emphasized the challenges and opportunities of mobilizing resources for financial and economic literacy education at the primary and secondary school level. One should understand what specific types of resources should be in place at the different stages of the initiatives/programs including planning, implementation, evaluation and scale up. It is of vital importance to create synergy among the government, private sector and actors in civil society to best address the resource gaps. Cross-sector collaboration allows each sector to make their share of political, financial and in-kind contributions for the purpose of efficiency and sustainability.

As many economies in the APEC region are facing similar challenges in providing education on financial and economic literacy in primary and secondary schools, it would be meaningful to develop innovative strategies for resource mobilization and the exchange of best practices across borders and territories. APEC is well positioned to provide a forum for knowledge exchange between government authorities in member economies, and also provide a platform for a regional coalition of donors, foundations, development banks and other technical assistance providers to coordinate their funding efforts and channel resources to places where financial and technical support is most needed. Such collaboration will hopefully expand the reach of quality financial and economic education and enhance financial capability and economic empowerment of young people throughout the APEC region in the long run.

References

Aflatoun (2001). *Aflatoun Resource Mobilization Manual*. Amsterdam: Aflatoun. Retrieved from http://www.aflatoun.org/docs/aflatoun-manual-english/resource-mobilisation-manual.pdf

Billimoria, J. (2012). *Child and Youth Friendly Banking Product Certificate: Guidebook*. Amsterdam: Child and Youth Finance International. Retrieved from http://childfinanceinternational.org/library/cyfi-publications/Child-and-Youth-Friendly-Banking-Product-Certificate-CYFI.pdf

Boundless (2013). Definition of Resource Mobilization Theory. Retrieved from https://www.boundless.com/sociology/definition/resource-mobilization-theory/

Child and Youth Finance International (2013). *National Implementation Plan: A Guide to Developing Youth Economic Citizenship through National Government and Stakeholder Initiatives*. Amsterdam: Child and Youth Finance International. Retrieved from http://childfinanceinternational.org/resources/publications/national-implementation-plan.pdf

Commission for Financial Literacy and Retirement Income (n.d.). Financial Literacy. Retrieved from http://www.cflri.org.nz/financial-literacy

Greenall, M. (2012). *Practical Guidelines for Supporting EDUCAIDS Implementation*. Paris: United Nations Educational, Scientific and Cultural Organization (UNESCO). pp. 108-110. Retrieved from http://unesdoc.unesco.org/images/0021/002152/215295e.pdf

Irish Banking Federation (2010, September). *Fourth report on Corporate Social Responsibility by the Irish Banking Federation on Behalf of Members Covered Under the Credit Institutions (Financial Support) Scheme*. Retrieved from http://www.bankofireland.com/fs/doc/wysiwyg/ibf_csr_report_sep_2010.pdf

Irish Banking Federation (n.d.). IBF Education Resources - Money Go Round. Retrieved from http://www.ibf.ie/gns/customer-information/Financial_education/IBF_MGR2.aspx

Jumpstart (n.d.). Jump$tart Coalition for Personal Financial Literacy. Retrieved from http://jumpstart.org/jump$tart-clearinghouse.html

MoneySENSE. A National Financial Education Programme for Singapore. (2013, June). Retrieved from http://www.moneysense.gov.sg/about-moneysense/moneysense-factsheet.aspx

OECD (2014). *Financial Education for Youth: The Role of Schools*. Paris: OECD Publishing. DOI: 10.1787/9789264174825-en

Stock Exchange of Thailand (n.d.). Retrieved from http://www.set.or.th/en/

Chapter V Successful Implementation[9]

Introduction

This chapter focuses on the effective implementation of economic and financial literacy programs in schools. Some economies have started working on the implementation of such programs and have made considerable progress. Other economies have yet to start. In some economies, successful implementation is more challenging than in other places. Regardless of the current development status of an economy and its economic situation, when it comes to the implementation of FEL programs, there are some common fundamental approaches to address these challenges.

The purpose of this chapter is to capture these areas of commonality and share them among APEC economies to facilitate development and success, and to avoid mistakes and problems. It will shed light on factors that contribute to success when implementing economic and financial literacy programs. Suggestions are based on a variety of sources and the experiences of a number of economies from the APEC region on how to start, continue, or improve the implementation of such programs in the school system. It is hoped that rather than offering ready-made solutions, the points and recommendations made hereinafter may serve as a catalyst to thought and the consideration of factors that might otherwise have been overlooked during planning and development work.

Leading the Way into Program Implementation

Identify and Establish Effective Leadership

Leadership will be the foremost key component of successful implementation. Change will be harder to achieve, may take longer, and is potentially not possible without leadership at the highest level and led by one or more "champions" for change. A champion for change may be a leader at a senior position in government, the private sector, or a prominent social agency or NGO. An alliance of leaders from

---

[9] Gary Rabbior, Canadian Foundation for Economic Education (CFEE)

each of these sectors would be ideal. A strong advocate and leader, or leaders, for inclusion of economic and financial education in the school system, combined with their personal commitment to improving economic and financial education, will be key to achieving success and can help expedite the process of change significantly.

Leaders in the implementation process could come from the financial sector, the field of education, or a newly established platform out of a cross-sector partnership. In many economies financial institutions, including central banks, can play a key or significant role in integrating and implementing economic and financial education into the school system. They can provide not only leadership, advocacy, and networking opportunities at high levels, but also knowledge, resources, and funding. Throughout the world, financial institutions have been integral to increasing and improving FEL programs, either as facilitators to help change occur, or as key players engaged in the process of change itself.

For example, in Malaysia, the *Bank Negara Malaysia* (the Central Bank of Malaysia) has been in the forefront in leading the national strategy to align public and private organizations to work on common goals to improve the financial skills, knowledge and behavior of the Malaysian consumer (Wahab, 2014). Other economies have also had similar leadership organizations such as the Financial Consumer Agency of Canada (FCAC) and the Canadian Foundation for Economic Education (CFEE), both in Canada.

While a variety of organizations may be able to provide leadership, effective leadership is of vital importance. If leadership is formed by representatives from different organizations/institutions, clarification of roles and responsibilities will be necessary. Successful implementation will benefit from strong national leadership, clear goals, clarity on roles and responsibilities, and commitment by key players and stakeholders to achieving the goals that are set.

Reach Consensus among Various Stakeholders

***Support at Various Levels*:** In addition to having effective leadership and/or a champion for change to help "lead the charge" for implementing economic and financial education, it is important to engage support at all levels of the education system and across society. A demonstrated commitment and collaborative effort of various stakeholders, i.e., government (executive and legislative bodies), private and non-profit sectors, educational institutions, and professional associations are key contributing factors to successful implementation.

Throughout the implementation process of FEL programs in the school system there will be individuals who may either inhibit or accelerate the process of change. The more the process of change encounters stakeholders who are not engaged and "on board" with the rationale and need for change, the slower the implementation process will be. It may even come to a halt, if, for various reasons, it is blocked by those who either do not believe in the proposed changes, or have a personal vested interest in obstructing the change and preventing it from occurring. It will be important to take the time to confer with and engage support from stakeholders at the various levels of the "education system" prior to proceeding with the implementation of an economic and financial literacy program.

***Shared Sense of Ownership*:** By taking the time to inform, consult, include, and engage stakeholders, it is possible, and desirable, to achieve a shared sense of ownership of the challenge to implement economic and financial literacy programs. A sense of sharing ownership will help establish key allies who can help the implementation process move forward at strategic moments in time. It also helps to support broader implementation when "scaling up" is demanded and a larger "team" is required to achieve overall success.

Shared Sense of Priority: As much as there may be widespread support for the importance of financial education, and its inclusion in the school system, without an assignment of high priority it will be difficult to overcome the various barriers that may stand in the way of success. Examples of such barriers are, for instance, arguments that the curriculum is over-crowded, misunderstanding of and prejudice against financial education, the concern about a lack of teacher readiness for instruction and lack of resources to train teachers effectively, etc. A variety of obstacles may stand in the way of financial education making headway into the school system. Success will require assignment of a high priority to the goal and a widespread understanding of the importance and rationale for including financial education in the school curriculum.

Nurture a Culture that Supports Change

There is an old saying that "no one likes change except a wet baby," the point being that there is often resistance to change accompanied by “push-back” from many who may have a vested interest in the status quo and who fear the possible consequences of change. It is important for those who seek change, i.e. the inclusion of FEL programs in the curriculum, to take the time to set the stage for change. This will involve helping to create a culture that is open to change, and appreciates the value of change. It must also be made clear how change will impact on stakeholders important to its success. Successful implementation will often be affected by the degree to which key stakeholders participate as agents of change and engage in the process, once they can see the clear benefits of including economic and financial education programs in schools, and how learning outcomes for students can be improved without jeopardizing other important areas of learning.

To engage key stakeholders in a successful change process may be time-consuming, but, in the end, it will be worth it. Trying to hurry the process may result in mistakes and problems, generating resistance that might not otherwise have been encountered. Ideas and suggestions for implementing economic and financial literacy education could just get “one kick at the can” before naysayers jump into the game and start proclaiming that it cannot be done successfully, claiming that the time and resources should be invested in other activities. Therefore, although it takes time, it is important to get it right from the outset, rather than to run the risk of generating the perception that it cannot be done successfully—and therefore should not be done. Although most creative exercises entail mistakes, when it comes to changes in education, mistakes can be fatal to the implementation process.

Developing a Framework and Guidelines

Strike a Balance between Education and Regulation

In the implementation process of FEL programs, one may encounter the debate whether the better solution lies in regulation or education. The case for regulation relates to assumptions about the difficulties to provide sufficient education to enable people to manage their financial affairs effectively and protect themselves (e.g. from fraud and scams) given the high pace and complexity of changes in the financial world. Hence, regulation may be seen by some stakeholders as a more powerful tool to establish parameters for fairness. While every economy will require some degree of regulation and consumer protection, it is difficult to make the case that “economic and financial ignorance” is an acceptable status quo. After all, regulation cannot replace efforts to educate. At the same time, as it will take time to achieve widespread success in financial and economic education, it will be important to combine education programs/initiatives with appropriate regulation, including regulations for consumer protection. Each economy, on the basis of its development and economic circumstances, will have to find its own balance between regulation and education.

Create a Framework and Guidelines for Implementation

Effective implementation of an economic and financial literacy program warrants clear guidelines for target areas of learning, or a “learning framework” to support curriculum development, resource mobilization, teacher training and classroom instruction. Often people have different ideas as to what financial and economic education should include. A “learning framework” outlining the key knowledge, skills and behavior domains can help stakeholders and key players to find “common ground” and working toward shared learning goals. Such a framework can serve as a guide to stakeholders who will be responsible for specific tasks within and outside the schools. It can also foster healthy discussion and debate about what is important to include in financial education.

Therefore, as there are often significantly different interpretations of what “economic and financial education” should encompass, it will be important to reach consensus, among key stakeholder groups, with regard to the most important areas of knowledge, skills, and behaviors—and to make sure that all those involved are working toward shared learning goals. Once consensus among stakeholder representatives is achieved, efforts should be made towards widely sharing ownership of the results.

Avoid “One-shot” Efforts

When it comes to implementing and improving economic and financial literacy programs, “one-shot efforts” have usually been shown to be ineffective. To teach something once, in one course, at one grade level, is unlikely to have a lasting impact. In terms of a learning strategy, the implementation of an effective economic and financial education program could refer to the following steps:

- Introduce topics and concepts at one level
- Build upon that base knowledge at another level to begin to develop skills
- Build upon it further at a later level of learning to begin application
- Encourage behaviors that are relevant to, and will be used, in real life situations.

Avoid "One-size-for-all" Solution

Implementation of an economic and financial education program will have to be sensitive to the needs and circumstances of the various learners. What will be entailed in such a program will differ from economy to economy, region to region, and even student to student. There have been some prescriptive efforts undertaken around the world to outline or define what should be covered in an economic and financial literacy program. General frameworks can be very helpful by setting the stage for discussion and debate, and they may even be useful in their existing format. However, in most cases, economies will need to examine their own economic and financial circumstances, identify the decisions and responsibilities that most citizens will face, and define the economic and financial education programs to be implemented based on the learner needs. On the other hand, even within an economy, learning needs will change over time. That is why it will be best to focus on fundamentals, while also nurturing students to be "lifelong learners"—students who value learning, know how to learn, and take on the responsibility of continuing to learn as economic and financial realities change over time.

Implementing the Programs in Classrooms

Create an Enabling Learning Environment

One of the keys to successful implementation is to encourage and promote innovation in education programs. As much as one can learn from the experiences of others, innovation and imagination can make a difference—and make things better. Innovation, imagination, and creativity are all often born from "play"—and so a sense of playfulness is also important to the learning environment (Thomas & Brown, 2011). In the meanwhile, it is important to seek a balance between the dimensions of "constraint" and of "freedom." Having too much of one or the other is not productive to effective learning (Thomas & Brown, 2011). To some degree, learners tend to welcome boundaries and limits. At the same time, to be creative, there needs to be a sense of freedom to explore and try new things. The right balance helps maximize the learning benefits to be derived from both dimensions, and not venture in to the negative possibilities when one dominates the other.

It would be wise for program developers, teachers and instructors to give some consideration to the following factors when designing the learning environment, programs, and strategies:

- ✧ Make the learner feel confident in their prospects to achieve success, which provides motivation for learning
- ✧ Value diversity in the learning environment
- ✧ Give the learner an opportunity to develop a positive relationship with the instructor
- ✧ Avoid instruction that is impersonal and without interaction (Russell & Slater, 2011)

Engage and Motivate the Learners

There is probably no more important factor for achieving success in an economic and financial literacy program than effectively engaging and motivating learners. Otherwise, learning is difficult to achieve, particularly when the teaching objective is to have a lasting, lifelong impact on behavior and capability. Economic and financial education often has an advantage over some other subjects because it is so relevant to real life situations and decisions for many students. However, the general interest of a student is only a starting point. It presents the potential for engagement. It is up to the teacher to tap that potential, engage students, and work with them to achieve the target learning goals.

There is a variety of factors that may affect student engagement. Learners tend to be more engaged when there is:

- a sense of safety in the learning environment
- an environment of trust and respect
- a sense that people really care

- a loss of anonymity and a sense of belonging
- a sense of comfort and willingness to be one's self
- a demonstration that people actually listen to what is said
- an active and determining role to be played
- assignment of responsibility and aspects of control are delegated within the group
- meaningful, constructive feedback

Furthermore, research findings (Edwards, 2013) show that engagement of students is better if learning is:

- Relevant
- Personalized
- Collaborative—which is now more feasible in a digital learning world
- Connected—to other people, places, information, and tools
- Dialogical (exploring a diversity of views) and dialectical (recognizing that what is true today may not be true tomorrow)

Apply Effective Teaching Strategies

Implementing an economic and financial literacy program without effective teaching strategies is not likely to achieve success. The students may sit in classrooms, listen to what teachers say, and write tests to give an indication of what has been learned, but the impact of such learning will likely be short-lived. If the goal is actually to change students' attitudes and behaviors, the best way will be to relate classroom learning to real life situations and matters that are relevant to students' lives. Hands-on, participatory learning (such as simulation games) has proved to be very effective in terms of engagement and retention.

It will likely be helpful to infuse real-life examples into the subject matter for each level of competency that students are to acquire. Selected real-life examples should be appropriate for the age of the learner and, as much as possible, relate to decisions they are facing in their personal lives. For example, it will be important to help students read and review documents related to transactions that they may make at different moments in their lives. For example, students may be required to read a club or team membership agreement, a cellphone contract, consumer loan agreements, apartment rental agreements, mortgage loan agreements, and other such documents. Linking learning to these kinds of situations will help make them aware of the existence of such documents and learn how to review and consider key components, make comparisons, and determine the most appropriate agreement while taking their financial circumstances and objectives into consideration.

The sky is the limit when it comes to creating and developing the means by which to provide effective instruction and get young people involved in learning about money and the economy. Based on experiences in a number of economies, and research, effective instruction:

- aims at realistic and manageable learning outcomes within the time available
- begins with an "inquiry approach" and key questions that will be explored rather than a "directive approach" with learning that will be transferred
- involves students in a variety of learning experiences—individual, small group, class discussion, etc.
- focuses on the quality of the learning experience rather than the quantity of learning objectives
- addresses, welcomes, and explores differences of opinion and perspective
- can be tailored to variations in national, regional, institutional circumstances, challenges and opportunities
- develops a sense of self-efficacy in students and their personal belief that they can accomplish tasks and achieve goals they aspire to achieve

Address Different Learning Styles in Students

Once the student is engaged and ready to learn, another issue to address is to recognize and address the different learning styles of students. Teachers encounter classes of students who could vary in terms of their personalities and learning styles. Students often have significant variations in literacy capabilities. Evaluation methods often lead to skewed results, as they focus on the outcomes of some students who best learn in a particular way, and misrepresent real capabilities of other students who learn in different ways.

Recognizing that students learn in different ways, the challenge then becomes how to address that. To be more effective, new programs in economic and financial literacy should be designed and implemented to address that challenge, and try to cater to different learning styles. There are a variety of issues to consider when preparing an effective learning environment for students with different learning styles such as structure of lessons as well as sociological, auditory, visual, tactile settings (Moore, 1992).

Although research shows that students learn better when teaching and learning styles match, the teacher cannot expect to be able to tailor-fit his/her teaching style according to all their students' preferences (Felder and Brent, 2005). If a teacher's style tends to meet the learning needs of some students, it is likely other students with different learning styles may not benefit equally from instruction. At the same time, students who are continuously taught in a manner consistent with their dominant learning styles can find it increasingly hard to learn through other teaching styles they may encounter. Thus, the best a teacher can likely do is to adopt a balanced teaching style, applying different techniques as possible, to enable more students to learn effectively and become more flexible in the way they learn. To this end, a learner-centered teacher must employ different teaching methods to address students' varied learning needs (Bacay, 2006).

Put in Place an Effective Teacher Training Program

When all is said and done, and the classroom door closes and the teacher is there to teach his/her students, it will be their ability to engage learners, and provide instruction that has impact and facilitates retention, that will largely determine to what extent students are prepared to undertake their future economic and financial decisions and actions with confidence and competence. Therefore, investing the time and resources in effective teacher training and readiness is a very important investment to make when it comes to implementing an effective economic and financial literacy program.

A common challenge in implementing successful change in schools relating to economic and financial education is ensuring that teachers are prepared to effectively teach students financial and economic concepts, principles, and theories. The

OECD/INFE Guidelines on Financial Education at School and Guidance on Learning Framework recommends that "Appropriate training should be made available to ensure that teachers and other relevant school staff (such as school leaders) are adequately equipped and feel confident and competent in building students' financial competencies" (OECD, 2014). As teachers acquire knowledge in these subject areas, an outcome-focused approach should be used where practical application and problem-solving exercises are employed with emphasis on critical thinking.

Conclusion

This chapter provides suggestions for consideration for those looking to create and implement a successful economic and financial literacy program. Economies differ greatly as to the economic and financial education needs of their citizens. Therefore, the suggestions provided here are subject to adaptation and application in a variety of situations—from economies that have sophisticated economic and financial systems requiring many, sometimes complex, financial decisions to those with more basic systems in place, in which financial decisions and actions are not so complex and numerous. Each economy will need to chart its own pathway to successful design and implementation of FEL programs.

It is known that educational change is never easy, but as economies, societies, and economies change, it is extremely important and worthwhile. As the world changes, as economies change, educational change should aim to keep pace. Successful implementation of economic and financial education programs, appropriate for the context of their economy, their community, and their own capability, can help equip youth with the knowledge and skills that will enable them to undertake their economic and financial actions and decisions with confidence and competence.

In closing, the following is a summary of some points taken, views held, and "lessons learned" from a number of economies which may be helpful for those looking for keys to success in implementing economic and financial literacy programs.

Box 1: Lessons of Successful Implementation

Australia: Consumer and financial literacy education is an entitlement for all students in Australia. It is defined as a core life skill and a key driver for participation and equal opportunity in society. A consolidated national approach has proved to be vital: the Australian Government and the states and territories have collaborated to provide appropriate support to each jurisdiction to meet their specific needs. There is now a strong network of individuals and organizations that have an invested interest and are committed to consumer and financial literacy education across Australia. This has been integral to ensure access and sustainability of programs. The network thrives on a strong strategic and operational policy which is then implemented through professional learning. To implement policies and programs in educational institutions across the economy takes time. It has taken 12-15 years for Australia to reach this stage, requiring commitment at the highest level in terms of importance and funding. There must be recognition of the need for consumer and financial literacy education in terms of future benefits for individuals and for the economy and the need for ongoing funding to support the policy and programs. Finally, evidence-based evaluation through an independent evaluator with experience in working in the financial and education sector is vital.

Indonesia: There is no single program that can succeed without the support of all parties. Entrepreneurship education and creative economics can be applied throughout the school. To minimize the obstacles in the processes of implementation, the following lessons have been distilled: a) It has been proved that coordination between the main unit in the Ministry of Education and Culture, the education district or city, and school and other ministries is important for entrepreneurship education and creative economics; b) Commitment of the whole school community responsible for implementing the program has proved to be essential; c) Training can change the way of thinking of principals and teachers so that they can serve as a model application of entrepreneurship education in schools and the creative economy; d) programs are designed in a way to fit the needs of schools and their short-term, mid-term and long-term targets to be achieved; e) Conduct periodic evaluation of the implementation and improvement of the next program; f) Keep in collaboration with other stakeholders, such as parents, society, government and industry.

References

Bacay, M. S. C. (2006, April). Teaching Students with Different Learning Styles. *CDTL Brief,* 9(1).

Edwards, M. A. (2013). *Every Child, Every Day: A Digital Conversion Model for Student Achievement*. Boston, MA: Pearson.

Felder, R. M., & Brent, R. (2005). Understanding student differences. *Journal of Engineering Education*, *94*(1): 57-72.

OECD (2014). *Financial Education for Youth: The Role of Schools*. Paris: OECD Publishing. DOI: 10.1787/9789264174825-en

Moore, C. (1992). *Learning Styles - Classroom Adaptation <based primarily on Carbo Learning Styles>*

Russell, B., & Slater, G. R. L. (2011). Factors that Encourage Student Engagement: Insights from a Case Study of 'First Time' Students in a New Zealand University. *Journal of University Teaching & Learning Practice*, *8*(1). Retrieved from http://ro.uow.edu.au/jutlp/vol8/iss1/7

Thomas, D., & Brown, J. S. (2011). *A New Culture of Learning: Cultivating the Imagination for a World of Constant Change*. Seattle, WA: CreateSpace Independent Publishing Platform.

Wahab, Noor Zaila Bt. (2013). *Case report on best practices of financial and economic literacy in basic education in Malaysia*. Report submitted to the APEC Project of Education on Financial and Economic Literacy.

Chapter VI Cultural Differences[10]

Introduction

Economies may face hardships in the implementation of financial and economic literacy programs due to cultural differences within their society. Cultural differences between people within an economy may occasionally be much greater than differences between ethnic groups. These differences are generated due to the education level, social standing, religion, traditions, values, family systems, prior experiences, languages, geographical location, and many other factors.

These cultural issues may influence the success or failure of financial and economical literacy strategies, especially since they may affect how financial decisions are made or how resources are used.

What Cultural Factors Impact upon Education on Financial and Economic Literacy

Culture usually refers to beliefs and values of a certain group or economy. In that sense, it varies from one group to another, from one economy to another. In an economy or region where various groups of people with different cultural backgrounds reside, cultural diversity could affect the implementation and outcome of financial and economic literacy (FEL) education and increase the difficulty in successful implementation of FEL education [11]. Typical factors that are shared by APEC economies include:

- Students may have different "first-languages"—often the case in economies or communities with diverse, multi-cultural populations
- Attitudes toward money vary depending on the cultural context.

---

[10] Theodore R. Daniels, Society for Financial Education and Professional Development, Inc.

[11] From group discussions that evaluated the impact of cultural differences in the implementation of financial and economic education at a workshop on the development of a guidebook for financial and economic education co-sponsored by the APEC and the Society for Financial Education and Professional Development.

- The role of family in taking financial decisions varies from culture to culture.
- The relationships of individuals within their community can also vary substantially from economy to economy.
- Different cultures and cultural groups can have different traditions/traditional values related to money, production, work, etc.
- Attitudes toward financial institutions, including levels of trust, can vary among economies and different cultural groups.
- Differences in religious beliefs may also affect students' views on money, financial matters, and financial decisions.

Such values and believes could either contribute or work against effective implementation of economic and financial literacy programs. They can impact on the roles that education and financial institutions are able to play in promoting or facilitating programs related to efforts to implement FEL education. For example, various types and forms of prejudices against certain cultural groups might affect their attitude and acceptance of FEL education programs; or mistrust toward financial institutions could be a potential barrier to a successful implementation of FEL programs.

How Culture Affects Economic and Financial Education

Culture can also have an impact on the behavior of consumption, saving, and investment decision-making of individuals and thus economic performance of an economy overall. For example, research shows that in the case of asset ownership of Asian immigrants in the United States, the variation in their preference for saving and consumption could help explain the differences in financial management and behavior of minorities (Kim, Chatterjee & Cho, 2012). The study found that new Asian immigrants in the United States differed in asset ownership compared to other new immigrants. With a higher average income and education compared to other immigrants, Asian sub-groups were likely to have higher levels of business, home ownership, and financial assets than other new immigrants.

In the same vein, research also found that Hindu culture affected the Indian immigrants' tolerance to risk. Participants demonstrated higher levels of risk tolerance, which would significantly affect their saving and investing decisions. According to the Hindu world view, Indians view wealth acquisition as necessary for the natural progression of an individual's life and take a long view of time when it comes to investment decisions. The study found that their primary purpose is to invest money in order to provide for their children's education. Their cultural roots allow them to take a long-term view and make them more risk tolerant. Based on these findings, it appears that their need for saving determines and limits their consumption, not the other way around as in some other cultures (Jain & Joy, 1997).

Approaches Used to Tackle Cultural Differences

There are a number of approaches to address cultural differences that may affect financial and economic literacy, such as the universal approach, the general information approach and the survival strategy.

- *Under the universal approach*, an economy could define what everyone needs to know about money and wealth without any consideration of cultural diversity. This approach would contain a core set of basic financial and economic topics which may be adopted by all groups.
- *The general information approach* would be specifically directed to people who lack financial knowledge and skills due to their diverse socio-economic status and cultural backgrounds.
- *The survival approach* provides strategies for persons in order to maintain or advance their financial and economic well-being regardless of cultural diversity.

An economy could address cultural differences by using the *"Recognize, Cope, Progress and Prosper"* (RCPP) approach:

- *Recognise*: Recognise and address universal factors that should be considered in terms of potential relevant cultural barriers that could affect the implementation and success of FEL programs.
- *Cope*: Cope with the barriers or challenges; help students cope with the specific cultural barriers or challenges in their own economy by trying and developing new approaches that can affect their well-being.

- *Progress*: Help students to move beyond coping to be able to progress through FEL education to achieve an improvement of overall level of well-being.
- *Prosper*: The ultimate result would be to achieve prosperity. In other words, help students to progress to a point where, within their specific economy, they can overcome challenges arising from cultural diversity to be able to enjoy a prosperous life in terms of personal well-being, the well-being of their family, and achieve a sense of happiness and success—however they may define it.

Regardless the approach used, the primary mission of a financial and economic literacy program is to enhance the financial well-being of individuals and households and to help each group meet their basic human needs. In that sense, financial and economic literacy programs should also take into consideration the effect of specific social policies and programs directed to specific risk populations.

Contextualized Solutions to Address Cultural Differences

Each economy has to recognize cultural differences and make adjustments to the financial and economic literacy program/curriculum to meet the needs of targeted audiences.

The economy's financial educators should have:

a) Knowledge of the culture (education level, social standing, religion, traditions, values, family systems, past experiences, any other factors) of the group for which financial and economic literacy training is being provided;
b) Knowledge of the language and communication methods of diverse cultural groups;
c) Knowledge of the resources (formal and informal networks, institutions, etc.) available and that a particular group can use to enhance their financial well-being;
d) Knowledge of each group's willingness to seek help to enhance their financial and economic financial well-being.

Those involved in the development and implementation of the programs have to be in tune with the particular culture that they will address. This would increase the effectiveness of the programs because those involved would know the patterns of each group, how they view problems and implement solutions to financial issues. Also financial educators must keep in mind situations when the values of a particular group may be in conflict with the dominant society and economic values.

Skill Requirements for Addressing Cultural Differences

It is recommended that each person who has to address cultural differences should have the following skills:

- Techniques for understanding different cultures.
- Ability to accurately communicate information on behalf of culturally diverse communities.
- Ability to openly discuss cultural differences.
- Ability to differentiate between symptoms of stress arising from transacting between different cultures.
- Interviewing techniques.
- Utilise concepts of empowerment.
- Ability to link communities.
- Ability to recognise stereotypes.
- Ability to evaluate new techniques and their applicability to culturally diverse populations.

Each economy should seek and review resources and studies on cultural differences and diversity to ensure effectiveness of its financial and economic literacy programs. Resources might include persons who have conducted research and written papers on general and specific cultural differences and diversity. It may also be necessary to seek specialized knowledge about the economy's social, cultural, and political systems, how they operate, and how they affect each ethnic group.

References

Jain, A. K., & Joy, A. (1997). Money matters: An exploratory study of the socio-cultural context of consumption, saving, and investment patterns. *Journal of Economic Psychology*, *18*(6): 649-675.

Kim, J., Chatterjee, S., & Cho, S. (2012). Asset Ownership of New Asian Immigrants in the United States. *Journal of Family and Economic Issues, 33*(2): 215-226.

NASW National Committee on Racial and Ethnic Diversity (2001). *NASW Standards for Cultural Competence in Social Work Practice.* Washington, DC: National Association of Social Workers. Retrieved from http://www.naswdc.org/practice/standards/NASWCulturalStandards.pdf

Chapter VII Assessment and Evaluation[12]

Introduction

Financial and economic literacy (FEL) can be taught in basic education as part of a national and continued effort (whether or not embedded in the school curriculum) or it can be taught through specific time-bound and/or geographically-limited programmes. Regardless of the form of implementation, assessment and evaluation instruments are key ingredients in ensuring the efficiency and quality of initiatives teaching financial and economic literacy within basic education. Assessing financial and economic literacy in basic education refers to measuring students' achievement in financial and economic literacy, while evaluation aims at attributing changes (in financial knowledge, behaviour, etc.) to a given financial education programme against a set of learning objectives or standards. Both strategies are important to ensure the effectiveness and efficiency of initiatives on financial and economic literacy in schools.

This chapter deals with assessment and evaluation of FEL within basic education, building on existing relevant experiences and expertise at the national and international level. Given that circumstances, needs and resources can be quite varied across APEC economies, the chapter provides general suggestions that can then be deepened and adapted for implementation within each specific economy/region.

Assessing Financial and Economic Literacy in Basic Education

Choice of Assessment Methods

Assessing financial and economic literacy in basic education refers to measuring students' current level of financial and economic literacy. Such assessment may investigate not only the knowledge and skills, but also attitudes and behaviours of students who have acquired financial and economic literacy in formal and non-formal educational settings. It could also identify the areas of financial knowledge and skills where students are struggling the most and result in

[12] Chiara Monticone, Organization for Economic Co-operation and Development (OECD); WANG Yan, National Institute of Education Sciences, the People's Republic of China

recommendations to changes in curricula, teaching and programmes accordingly. FEL assessment could be made through various approaches take different forms, as described below. These approaches are not mutually exclusive and can be used in combination.

What to assess: Curriculum-based formative assessment and Outcome-based assessment

Whenever financial and economic literacy is taught in schools, curriculum-based formative assessment can be used to gauge individual students' progress, by assessing students' performance in learning against particular standards/benchmarks. It may take place in the form of tests in the classroom or formal examinations. This type of assessment can be useful to track the learning progress of each student and be followed up with interventions to help those who lag behind to improve their performance, evaluate the effectiveness of the curriculum and adapting teaching practices. Given that financial education in schools is fairly recent and that not many economies offer courses on financial and economic literacy, curriculum-based assessment is not widespread to measure students' learning progress in financial and economic literacy in primary and lower secondary schools (OECD, 2014a; OECD, 2014b). Other reasons that make the implementation of curriculum-based assessment of financial and economic literacy potentially more difficult are that in the few countries and economies where financial and economic literacy is taught in schools, it is oftentimes not a stand-alone subject and it is mostly up to teachers to decide what contents are to be introduced in their lessons. Outcome-based assessment is an alternative assessment approach, as it can be used to compare knowledge and skills across different economies whether or not financial and economic literacy is taught in schools, is included in the formal curriculum in basic education, and regardless of the contents of the curriculum. The first example of assessment of financial and economic literacy that is not curriculum-based is the 2012 OECD PISA Financial Literacy Assessment (See Box 1 for more details).

Which students to assess: Census-based and Sample-based assessments

In designing an assessment it is possible to test all students who learnt a given subject (census survey) or alternatively only a sample of them (sample survey). Curriculum-based assessment frequently takes the form of a census survey, i.e. a test is administered to all students in a classroom, schools or grade. However, in principle both outcome-based assessment and curriculum-based formative assessment can be implemented in the form of either a census survey or a sample survey. Sample surveys can be useful to learn about the level of financial and economic literacy at an aggregate level.

Assessing financial and economic literacy through a sample survey allows researchers and policy makers to collect information on various background factors that can be relevant to students' competencies, constraining or facilitating individual financial capability. Such background factors may include (but are not necessarily limited to):

- Characteristics of the students and their families, such as student's level of education; level of education of the student's parents; parent's professional/vocational background; household socio-economic background; cultural, religious, ethnic background; immigration background; rural vs. urban residency; student's first language (if different from the national language in the economy). Characteristics of the teachers and school, such as public vs. private schools; schools' resources; teaching practices.
- Students' opportunities to experience and be exposed to financial problems and situations within and outside the schools and family contexts.
- Students' attitudes, preferences and psychological traits that can be relevant to economic and financial behavior, such as risk preferences, time preferences, motivation, confidence, perseverance, etc.

Sample surveys can also be longitudinal, that is repeatedly observing the same subjects over time. This approach may be used to determine changes in financial knowledge, attitudes and behaviour over time and allow researchers and policy makers to pin down in a more robust way causal links across these elements. However, carrying out an assessment over a longer period can be more costly and more challenging due to the difficulty in following students over time.

Box 1: PISA 2012 Financial Literacy Assessment

The OECD has developed a unique assessment tool within the framework of the PISA programme to measure the levels of financial literacy of 15-year-old students. The first round of data was collected in 2012 from tests administered to students in 18 countries and economies (viz. Australia, Belgium (Flemish Community), Colombia, Croatia, the Czech Republic, Estonia, France, Israel, Italy, Latvia, New Zealand, Poland, the Russian Federation, Shanghai (China), the Slovak Republic, Slovenia, Spain, and the US). A second round of PISA financial literacy is scheduled in 2015, with results to be published in 2016/17.

This first PISA financial literacy evaluation provides a unique global framework to understand what financial literacy means for 15 year olds beyond the scope of participating countries and economies (OECD, 2013). It offers a baseline of the financial literacy needs of students in participating countries and economies at a time when the provision of financial education in schools around the globe is still recent and quite uneven.

The study also reveals important gaps in students' competencies in most countries and room for improvement in all. It demonstrates that levels of financial literacy are only partially explained by levels of development within countries and some countries with lower levels of GDP per capita display a high level of financial literacy. Thus, there is room for effective policy action to improve financial literacy in countries and economies with various circumstances (OECD, 2014a). In particular, the PISA data highlight large differences in financial literacy, both within and between countries and economies that call for appropriate policy action.

Key Elements in Assessment Processes

Various considerations should be borne in mind when designing tools for FEL assessment in order to ensure that resources are used efficiently and that the programme is relevant to the needs and circumstances of the specific economy.

Defining learning outcomes and objectives: A first step in the introduction of financial and economic literacy in schools is the definition of learning outcomes and objectives. The objectives and learning outcomes should be developed in accordance with the content of financial education curricula and education stages. For examples of learning frameworks, please refer to Chapter III Curriculum Development.[13] In the assessment phase, these objectives could also serve as benchmarks. This will enable countries and economies to determine the effectiveness of their programmes as well as provide information that can be used to modify its existing interventions in order to meet student needs and learning objectives.

In case financial and economic literacy has not been introduced in the curriculum and/or learning outcomes have not been defined, financial and economic literacy assessment (particularly outcome-based assessment) should be based on a conceptual framework defining the domain being assessed and how to render the framework into shaping the assessment. This means defining, within the context of each economy, what are the financial knowledge and skills that a financially literate student should demonstrate and how they should be measured.

Setting short-term and medium long-term goals: Ideally, a test should be designed having in mind both short-term and medium long-term goals. While frequent short-term testing can be useful to assess students' progress with respect to teaching FEL in schools, long-term assessment can be useful since it is possible that improvements in financial knowledge may take a few years to become evident, or immediate improvements may fade away over time. Moreover, any impact on students' behavior may show only when students approach adulthood and are confronted with increasingly complex financial problems.

Adopting Appropriate Types of Assessment: Economies may introduce financial and economic literacy as a stand-alone subject or by embedding it either in one subject (e.g., numeracy, mathematics, social studies, etc.) or across several subjects. When policy makers choose to include FEL into one or several subjects, assessing the specific level through curriculum-based assessment may be more difficult than in a situation where financial and economic literacy is introduced as a stand-alone subject. Economies should therefore adopt an assessment methodology that is appropriate to the way in which FEL has been introduced in basic education and is taught.

---

[13] The OECD is working on the development of a framework for international financial literacy core competencies, which will provide a harmonized benchmark for countries and economies, enable them to set learning targets, and suggest appropriate ways of reaching them. A range of countries and economies at different stages of development are participating in this project.

Defining Grouping and Timing of the Assessment: Policy makers have various options in deciding whether to administer FEL assessment in the form of a separate test, or testing FEL knowledge, skills and behaviors in a test together with the learning domain of the other subject into which the FEL programme components were embedded. For instance, curriculum-based assessment can be administered separately or as part of existing tests/examinations. Moreover, assessment could be conducted yearly or—if too expensive—during key examinations at the end of primary school and of lower secondary school.

Complementing an assessment with qualitative data: In the process of the assessment, qualitative evaluation methods (for instance classroom observations) can also be employed alongside quantitative data to obtain more information about students' attitudes and behaviors in financial contexts as well as about their learning of financial and economic literacy. It can be a useful complement to get a clearer picture of why teaching FEL was or was not successful.

Monitoring and Evaluating Financial and Economic Literacy

In addition to assessing students' financial and economic literacy, monitoring and evaluation are also important. Monitoring (or process evaluation) refers to the regular tracking of inputs and outputs of the programme (e.g., how many students were reached by the programme), while programme evaluation (impact evaluation) has to do with identifying changes (in financial knowledge, behaviour, etc.) that can be attributed to the intervention itself. Monitoring and evaluating a specific programme is important to ensure that the intervention is effective and in line with the developments in the financial landscape, to identify areas for improvement, and to check that the initiative makes good use of resources.

Key Elements of Monitoring and Evaluation

Curriculum: All FEL curricula and associated programmes should be constantly monitored, reviewed and evaluated to ensure that students are taught on the basis of a curriculum that is relevant and appropriate to their needs. Given the changing nature of the financial landscape, student needs will also be constantly changing. Monitoring of programmes will provide the necessary information to allow the evaluation and review of curricula and programmes to take place and to develop relevant programmes in the future.

Teachers: It is imperative to plan continuous and regular monitoring and evaluation activities to ensure that teaching meets the initial objectives, that it is relevant, and that it remains relevant over time.

Other providers: it is also important to take into account that in some cases financial education is taught by other stakeholders, such as volunteers from financial institutions. In this case it is crucial to monitor their activities to make sure that no marketing and promotional activities are carried out during financial education sessions[14].

Designing an Appropriate Evaluation Scheme

The design of any evaluation strategy should follow at a minimum the following general suggestions:

- Evaluation should be planned and embedded as a fundamental part of a FEL intervention; adequate resources should be earmarked to ensure its success and the quality of its implementation.
- Evaluation should be sufficiently flexible to adapt to changing objectives and circumstances.
- Evaluation should be carried out according to a rigorous methodology. Ideally it would be appropriate to compare changes in outcomes between a group of students who were exposed to financial education programme and a randomly selected comparison group that was not exposed to the programme, as a way to identifying changes that can be causally attributed to the programme itself. The implementation of such an evaluation design may require a substantial amount of effort and resources but it provides the most robust results. A typical example is application of the evaluation in Brazil on a large scale (Bruhn, Leão, Legovini, Marchetti & Zia, 2013). More detailed elaboration about methodological aspects and challenges are also available (Yoong, Mihaly, Bauhoff, Rabinovich and Hung, 2013).

[14] The OECD/INFE has recently developed a set of Guidelines for private and not-for-profit stakeholders in financial education that were endorsed by the INFE and the OECD bodies responsible for financial education in 2014 (OECD/INFE 2014).

- As in the case of an assessment exercise, impact evaluation may be accompanied by qualitative data and observations (for instance qualitative interviews with students participating in an intervention) to learn why the programme was or was not successful.
- Evaluation should be carried out by external and qualified assessors, to improve the quality, credibility and independence of the exercise.
- Finally, evaluation results should be shared among the relevant stakeholders, reporting both negative and positive findings, to ensure that they can all benefit from the lessons learnt.

Drawing upon Existing Lessons

Various international organizations have developed principles and tools to provide guidance in relation to the evaluation of financial education programmes, even though these instruments do not have a specific focus on FEL in basic education. The OECD International Network on Financial Education (INFE) has developed a set of high-level principles for the evaluation of financial education programmes, that were endorsed by the INFE and the OECD bodies responsible for financial education in 2011 (OECD/INFE, 2013), as well as more practical guides to guide the development of evaluation exercises (OECD/INFE 2010a, 2010b). The World Bank has also developed a toolkit for the evaluation of financial capability programmes in low- and middle-income countries (Yoong et al., 2013).

Many economies have conducted impact evaluations of financial education programmes in schools, for instance in the United States (mostly on a local/ state basis - see (Carlin & Robinson, 2010); and (Miller, Reichelstein, Salas & Zia, 2014) for a review); Colombia (pilot project – see (García Bohórquez, 2012); Italy (pilot projects - see (Romagnoli and Trifilidis, 2013); (Becchetti and Pisani, 2011). Other economies such as Brazil and Spain have piloted financial education programmes on a national scale and have included a evaluation from the beginning. Among APEC members, Australia has recently released the results of an independent evaluation of its MoneySmart Teaching initiative (ASIC, 2014).

Concluding Remarks

Assessing students' financial literacy and evaluating the impact of financial education initiatives are crucial activities to ensure that efforts to improve students' financial and economic literacy are meeting their objectives and that they are making a good use of resources. The collection of accurate and regular data on students' level of financial and economic literacy can help policy makers gauge to what extent students are prepared to face financial problems and to measure student's learning. In light of findings from such assessment, teaching contents and methods can be adjusted and improved. Sample surveys collecting data on background factors on students and schools can help obtain a broader picture and identifying factors associated with better financial literacy performance. Alongside assessment, evaluation can provide additional evidence on which teaching practices and delivery methods are most effective, so that financial education initiatives in school can be refined and improved.

References

ACER (Australian Council for Educational Research) (2014, July). *Independent evaluation of ASIC's implementation of the Helping Our Kids Understand Finances initiative.* Report 399. Canberra: Australian Securities and Investments Commission (ASIC). Retrieved from http://www.financialliteracy.gov.au/media/540893/hokuf-evaluation-report.pdf

Becchetti, L., & Pisani, F. (2011). *Financial education on secondary school students: The randomized experiment revisited*. Working paper 34, December 2011. Rome: University of Rome Tor Vergata.

Bruhn, M., Leão, L., Legovini, A., Marchetti, R., & Zia, B. (2013). *The Impact of High School Financial Education Experimental Evidence from Brazil*. Policy Research Working Paper 6723. Washington, DC: The World Bank.

Carlin, B.I., & Robinson, D.T. (2010). *What Does Financial Literacy Training Teach Us?* Working Paper 16271 (August 2010). Cambridge, MA: National Bureau of Economic Research.

García Bohórquez, N. (2012). *El impacto de la Educación Económica y Financiera en los Jóvenes: el Caso de Finanzas para el Cambio*. [The Impact of Economic and Financial Education on Young People: the Case of Finanzas para el Cambio]. Borradores de Economía 687. Bogotá: Banco de la Republica Colombia. Retrieved from http://www.banrep.gov.co/docum/ftp/borra687.pdf

Miller, M., Reichelstein, J., Salas, C., & Zia, B. (2014). *Can You Help Someone Become Financially Capable? A Meta-Analysis of the Literature*. Policy Research Working Paper 6745. Washington, DC: The World Bank. Retrieved from http://elibrary.worldbank.org/doi/pdf/10.1596/1813-9450-6745

OECD (2013). Financial Literacy Framework, in *PISA 2012 Assessment and Analytical Framework: Mathematics, Reading, Science, Problem Solving and Financial Literacy.* Paris: OECD Publishing. Retrieved from http://dx.doi.org/10.1787/9789264190511-7-en

OECD (2014a). *PISA 2012 Results: Students and Money: Financial Literacy Skills for the 21st Century*. (Volume VI), PISA. Paris: OECD Publishing. Retrieved from http://dx.doi.org/10.1787/9789264208094-en

OECD (2014b). *Financial Education for Youth: The Role of Schools*. Paris: OECD Publishing. DOI: 10.1787/9789264174825-en

OECD/INFE (2010a). *Detailed Guide to Evaluating Financial Education Programmes*. Paris: OECD Publishing. Retrieved from http://www.oecd.org/daf/fin/financial-education/49994090.pdf

OECD/INFE (2010b). *Guide to Evaluating Financial Education Programmes*. Paris: OECD Publishing. Retrieved from http://www.oecd.org/daf/fin/financial-education/EvaluatingFinEdEN.pdf

OECD/INFE (2013). *Evaluating financial education programmes: OECD-INFE Survey, evidence, policy instruments and guidance*. Paris: OECD Publishing. Retrieved from http://www.oecd.org/daf/fin/financial-education/G20-Evaluating_Fin_Ed_Programmes_2013.pdf

OECD/INFE (2014). *Guidelines for private and not-for-profit stakeholders in financial education*. Paris: OECD Publishing. Retrieved from http://www.oecd.org/daf/fin/financial-education/guidelines-financial-education-private-not-for-profit.htm

Romagnoli, A., & Trifilidis, M. (2013, April). *Does financial education at school work? Evidence from Italy*. Occasional Papers (Questioni di Economia e Finanza), No. 155. Rome: The Bank of Italy.

Yoong, J., Mihaly, K., Bauhoff, S., Rabinovich, L., & Hung, A. (2013). *A toolkit for the evaluation of financial capability programs in low- and middle-income countries*. Washington, DC: The World Bank. Retrieved from http://www.finlitedu.org/team-downloads/evaluation/toolkit-for-the-evaluation-of-financial-capability-programs-in-low-and-middle-income-countries.pdf

Appendix: Case Reports

Australia: Policy and Practice in Financial and Economic Literacy

Preparing Australia's Young People for Their Financial Future[15]

I. Why was the financial and economic literacy program started in Australia?

1.1 The Assumptions Underpinning the Initiation of the Financial and Economic Literacy Program and the Considerations of the Policy Makers and Related Government Agencies

Australia's National Financial Literacy Strategy was drafted and implemented to enable all Australians to be informed participants in an increasingly complex and risky global financial landscape.

The Australian Securities and Investments Commission (ASIC) is taking a proactive role as both a regulator of the financial services industry and in the educational field working with States and Territories to ensure that all Australians have access to information on which to base their consumer and financial choices.

The impact of the Global Financial Crisis (GFC) is still being unpacked in relation to financial sectors across the world, including Australia. For example, the level of debt at the individual level is reducing while the level of Australians' savings is increasing. However, the previous high returns on investment no longer exist; yet investors are looking for bigger returns and therefore there is greater risk to consumers given the larger number of products on the market. If consumers (of all ages) are not able to make informed choices, they are at greater risk; individuals need to be aware of the implications of the choices they make for their security and

[15] Jennifer M. Quick, Business and Economics Curriculum Manager, Victorian Curriculum and Assessment Authority, Australia Prepared in consultation with Peter Cuzner, ACT Regional Commissioner, The Australian Securities and Investments Commission

well-being.

The GFC has been the impetus for greater support and understanding of the need for financial and economic literacy education programs.

1.2 The Relationship between Financial and Economic Literacy and Education Reform

The vision of educational reform relating to financial and economic literacy in Australian is to enhance the financial well-being of all Australians by improving financial literacy levels through formal education and training pathways

In 2002, the Consumer Affairs agencies across Australia expressed concern over the increasing level of youth debt. Through the Australian Ministerial Council of Youth Affairs, they pressed the Australian Government to look at the issues around youth debt and possible strategies to address these issues.

In 2004, the Australian Government set up the Financial Literacy Taskforce chaired by Paul Clitheroe. The Taskforce found that while there were in excess of one thousand programs and resources to assist in developing financial and economic literacy, there was no coordination of these programs, and therefore no quality assurance. One of the recommendations of the Taskforce was that financial literacy was an important policy issue; in 2005 the Financial Literacy Foundation was set up within the Australian Government Department of Treasury. Funding of $5 million per year was provided to coordinate and synthesize a national policy approach to financial literacy.

One of the prime pillars of this policy was education, particularly education in schools, with the aim of bringing about generational change with respect to financial literacy. The overarching objective was to build *the consumer and financial literacy capabilities* of Australian school students by developing their skills, attributes, knowledge and understanding to enable them to make confident, informed consumer choices and responsible financial decisions that would be essential to their future financial well-being.

A working group of the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) was called together in 2005 to embed a quality national approach. Australia’s constitutional structure dictates that the states and territories have responsibility for education. Therefore a commitment to this national approach was required by the states and territories if this objective was to be achieved.

1.3 The National Consumer and Financial Literacy Framework

The National Consumer and Financial Literacy Framework was written in 2005 to embed policy and provide a context for learning across all discipline areas. There was unified agreement about the essential learning that needed to take place with consumer and financial literacy across Foundation to Year 10 schooling[16]. In addition, a National Reference Group for Consumer and Financial Literacy in Schools was established to synthesize policy initiatives in each state and territory with Australian Government initiatives.

The Australian Consumer and Financial Literacy Framework highlights the importance of consumer (economic) and financial literacy for students. It is impossible to make choices and decisions in the financial area if you are not informed. The Framework states:

> *"… individuals who are consumer and financially literate have the ability to apply knowledge, understanding, skills and values in consumer and financial contexts to make informed and effective decisions that have a positive impact on themselves, their families, the broader community and the environment."*

This definition highlights that, despite strong connections with literacy and numeracy, consumer and financial literacy is more than just knowing about money and financial matters, and more than having the skills to work with this knowledge. It also involves developing the confidence and capacity to successfully apply the necessary skills across a range of contexts and for a range of purposes. This includes being able to identify and act on the associated responsibilities and risks.

As a result of the commitment to the Framework, the critical factor of professional learning (professional development) for teachers was identified. Building teacher capacity through professional learning is vital to the delivery of financial

---

[16] Foundation is the first year of schooling with students approximately 5 to 6 years of age, and Year 10 is the last year of compulsory schooling with students approximately 15-16 years of age.

literacy education in schools. Government funded professional learning was delivered to teachers through the Australian Government Quality Teacher Program (AGQTP - an existing network) and recognized by all states and territories, in 2006-2008.

Although there were Project Officers employed across every state and territory, it was still difficult to embed the concept of consumer and financial literacy as a core life skill for students. Possibly because of the global perception of prosperity at the time; however with the GFC the need for education in this area became self-evident and became an imperative for change.

In 2008, the ASIC assumed portfolio responsibility for financial literacy from the Australian Department of the Treasury and maintained the emphasis and responsibility for consumer and financial literacy education in schools and the formal education pathways.

Every 10 years, the MCEETYA meets to develop goals for schooling for the next decade. In 2009, the Melbourne Declaration, made by all Australian Education Ministers, stated that:

> *"… as a nation Australia values the central role of education in building a democratic, equitable and just society – a society that is prosperous, cohesive and culturally diverse, and that values Australia's Indigenous cultures as a key part of the nation's history, present and future."*

The Declaration was the impetus for the development of an Australia Curriculum, which would be implemented in all states and territories. Two of the goals of the Declaration have direct relevance to consumer and financial literacy education:

Goal 1: Australian schooling promotes equity and excellence.

Goal 2: All young Australians become successful learners; confident and creative individuals; and active and informed citizens.

From a policy perspective, the National Consumer and Financial Literacy Framework was revised in 2011 to make stronger links with the Australian Curriculum, and endeavor to mandate consumer and financial literacy education in schools.

1.3 The Relationship between Financial and Economic Literacy with Reform in the Economic and Financial Sector

The ASIC is the national regulator for the financial services industry. When the financial literacy component was added to the ASIC's responsibilities in 2008, its strategic direction was reshaped to:

1. Develop confident and informed investors and financial consumers through education;
2. Foster fair and efficient markets; and
3. Ensure efficient registration and licensing within the financial services industry.

II. How was the Financial and Economic Literacy Program Implemented?

2.1 Policy/Program Development Process

(a) National Financial Literacy Strategy in Australia (government strategy for all Australians)

(b) National Consumer and Financial Literacy Framework (educational policy)

(c) National Partnerships with states and territories:

(i) Helping Our Kids Understand Finance (HOKUF), nationally funded ended June 2013

(ii) MoneySmart Teaching (MST) nationally funded - 2013-2017

2.2 Key Players and Their Respective Roles

(a) The Australian Government

(i) ASIC

(ii) Department of Treasury

(b) State and Territory Governments

(i) Curriculum authorities, departments of education, education institutions (Catholic and Independent) and professional subject associations (teachers)

(c) National Reference Group: Consumer and Financial Literacy Education in Schools

(i) Representatives from all states and territories, all educational jurisdictions, departments of fair trading/consumer affairs: chaired by ASIC

(ii) Project Advisory Group: representatives from all states and territories, to ensure that resource development aligns with state and jurisdiction priorities.

(d) MoneySmart Teaching Project Officers

A project officer in each state and territory to support the implementation of the HOKUF initiative and MoneySmart Teaching – providing professional learning, supporting teachers and facilitators in trial schools and all other schools, and developing relationships with key stakeholders in all sectors.

2.3 Sources of Funds and How the Resources Were Used

Funding for consumer and financial literacy programs has come from the Australian Government. Funding has been administered through establishing National Partnerships with states and territories, and partnerships with educational jurisdictions in order to meet the particular and specific needs of all Australian students and align with the priorities of each jurisdiction. Australia has committed to participation in Program for International Student Assessment (PISA) testing; the Australian Government has provided the funding necessary for each state and territory to participate in the financial literacy section of PISA.

The HOKUF initiative 2010-2013 provided funding to trial Professional Learning Packages for teacher professional learning, resource development and implementation in schools. Further funding has been provided to continue the MoneySmart Teaching initiative post trial from 2013-2017.

MoneySmart Teaching aims to build teacher capacity, both professionally and personally, enabling them to better teach young people about money. But it is more than money. Through MoneySmart Teaching young people will be taught how to:

- understand the language of money and navigate the consumer and financial landscape;
- plan the management of their finances in order to spend, save, donate and invest wisely;
- understand risk and reward;
- develop a range of enterprising behaviours; and
- know and exercise consumer rights and responsibilities.

2.4 Curriculum Development

Curriculum development and implementation in Australia is the responsibility of the individual states and territories.

Currently, the Australian Government and the states and territories are collaborating to develop a national curriculum. This curriculum will be implemented across Australia by all states and territories, in ways which meet the needs, policy priorities and requirements of the particular states and territories.

Curriculum is developed based on world's best practice and global guidelines such as the Organization for Economic Cooperation and Development's (OECD) guidelines stating that financial education should start at school and as early as possible.

Victoria's curriculum, AusVELS (Australian Curriculum, Victorian Essential Learning Standards), consists of learning across disciplines, interdisciplinary knowledge, skills and behaviors and physical, personal and social learning. One of the disciplines is Economics, which provides learning for students from Year 5 to Year 10. Economics can then be studied in more detail in the senior secondary years through the Victorian Certificate of Education (VCE).

The mandated curriculum for Years 5-10 in Economics is based around the allocation of limited resources to satisfy needs and wants, the choices involved, and the effect of these choices on individuals, families, communities and broader society.

A major component is consumer and financial literacy education, with students considering the need to make informed decisions when participating in society, particularly when managing their finances.

It is vital that curriculum development in Australia takes into account not only the global situation, but also focuses on the specific needs and resources of students, schools and society.

To this end, the National Consumer and Financial Literacy Framework is used as a basis for incorporating consumer and financial literacy education into the curriculum.

2.5 Challenges Ahead

Developing resources and programs to implement in schools is an expensive process; they need to be constantly reviewed and updated in order to meet the needs of students, and to ensure relevance and the engagement of students and teachers.

The Australian Government has committed to a high cost investment in generational change. If this is not continually supported in an ongoing manner, it will become out of date with little chance of success. The GFC shows that rapid changes in the economy and consumer behavior are becoming more common. We therefore need a contemporary on-going strategy to respond to these changes.

At the same time as teaching young people for the future, the program also provides opportunities to involve parents in this process by encouraging them to become actively engaged in their children's learning and thus improving their financial capabilities and understanding. True generational behavioral change can only be achieved if there is active engagement and involvement by all Australians.

III. Output, Outcome and Impact

3.1 Output: Number of Participants Including Students, Trainees

The HOKUF initiative has so far provided face to face professional learning on consumer and financial literacy education to over 8,000 teachers across Australia, and a suite of interactive digital and on-line resources which are freely accessible for all teachers and students, including: 29 digital activities for students (supporting the Australian Curriculum subjects developed so far); 2 professional learning modules (aligned with the Australian National Standards for Teachers); and 32 videos. Over 90 schools across all jurisdictions have participated to trial the MoneySmart suite of resources.

Professional Learning Packages containing units of work aligned with the Australian Curriculum in English, Mathematics and Science, for both primary and secondary schools. All resources are available on the MoneySmart Teaching website.

Since the launch of the MoneySmart Teaching Primary and Secondary packages, there have been over 14,000 downloads of parts of the packages and over 8,000 hard copies of the packages distributed nationally to schools; over 28,000 views of MoneySmart Teaching videos since August 2012; and 7,500 views of the digital resources.

3.2 Outcome: Knowledge and Skills Developed through Financial and Economic Literacy

The HOKUF initiative was evaluated by an external party – the Australian Council for Educational Research (ACER) - to determine its effectiveness, appropriateness and efficiency. The evaluation also included a cost benefit analysis. The report released in November 2013 indicated that:

- The MoneySmart Teaching Packages are comprehensive and based on real life contexts.
- Strong links to the Australian Curriculum which enable teachers to seamlessly integrate units of work into their existing programs.
- The personal learning for teachers is an essential part of the program, builds capacity for teachers to improve their own Consumer and Financial Literacy and well-being at the same time as delivery of Consumer and Financial Literacy education to their students.
- The project assists schools to embed Consumer and Financial Literacy into a whole school approach to curriculum planning.
- The project enables schools to engage parents and the wider community in the Consumer and Financial Literacy learning journey.

The program is aligned to the National Professional Standards for Teachers as developed by the Australian Institute for Teaching and School Leadership (AITSL). This training contributes towards the requirements for teacher accreditation, registration and renewal in jurisdictions.

3.3 Impact: Contribution to Economic and Social Development

Like most education, consumer and financial literacy education is a long-term investment in the future. Research into poor social behavior shows that early intervention and investment in young people has significant economic advantages to society over the long run. As economic and financial literacy education is about building capability to deliver long-term behavioral change we are confident that this will likewise hold true.

The first year of the MoneySmart Teaching trial saw real improvements in students' behavior around planning, saving, spending and donating, particularly in primary schools (5-12 year olds). The community focus and social benefits of donating were a strength and were emphasized in these early years of schooling.

IV. Conclusions: Lessons and Potential for Replication

Key points:

- Consumer and financial literacy education is an entitlement for all students. It is a core life skill and a key driver for participation and equal opportunity in society.
- A consolidated national approach is vital – the Australian Government and the states and territories have collaborated to provide appropriate support to each jurisdiction to meet their specific needs.
- There is now an incredibly strong network of individuals and organizations that have an invested interest and are committed to consumer and financial literacy education across Australia – this is integral to ensure access and sustainability of programs.
- This network combines with strong strategic and operational policy which is then implemented through professional learning.
- To implement policies and programs in educational institutions takes time. It

has taken 12-15 years for Australia to reach this stage – it requires commitment at the highest level in terms of importance and funding. There must be recognition of the need for consumer and financial literacy education in terms of future benefits for individuals and for the economy and the need for ongoing funding to support the policy and programs.

- Evidence-based evaluation by an independent evaluator with experience in working in the finance sector and education sector is vital.

References

ASIC's MoneySmart Teaching website: http://teaching.moneysmart.gov.au/

National Consumer and Financial Literacy Framework 2011: http://www.mceecdya.edu.au/mceecdya/2011_financial_literacy_framework_homepage,34096.html

Victorian Curriculum and Assessment Authority: http://www.vcaa.vic.edu.au

Victorian curriculum: AusVELS: http://ausvels.vcaa.vic.edu.au/

Canada: A Case Study of the "City"

Learning for Life[17]

I. Introduction

In September 2008, the Financial Consumer Agency of Canada (FCAC) and the British Columbia Securities Commission (BCSC) launched an innovative financial literacy resource for youth aged 15 to 18, consisting of:

- a classroom resource for teachers, comprised of 11 learning modules and
- a parallel 10-part interactive website for self-paced learners, youth leaders in community organizations and teachers who choose to supplement their classroom teaching or use alternative on-line delivery.

The resource uses both traditional teaching and new technology adapted to Canada's 13 different educational jurisdictions and two official languages.

This case study outlines the challenges encountered by the FCAC in the development of a national financial education program and the strategies to overcome them.

II. Background

In 2001, the Government of Canada established the Financial Consumer Agency of Canada (FCAC) with the aim of empowering consumers of financial services. The Agency's mandate, formalized in legislation, set out two main responsibilities:

- **Consumer protection:** overseeing and reporting on compliance of federally regulated financial institutions with consumer provisions of legislation, as well as voluntary codes and other commitments.

[17] Jane Rooney, Director, Financial Literacy and Consumer Education, Financial Consumer Agency of Canada

- **Consumer education:** promoting consumer awareness of their rights and responsibilities, and fostering an understanding of financial services and related issues.

In its early years, the FCAC developed its website and publications as core resources for the general population, with significant focus on building awareness of consumer rights. At the same time, a focus on the need for enhancing financial education was growing both within Canada and internationally.

In 2003, the Organization for Economic Co-operation and Development (OECD) established its Financial Education Project in response to the heightened recognition of the importance of financial education among member countries. In its 2005 *Recommendations on Principles and Good Practices for Financial Education and Awareness*, adopted by the OECD Council, was the following statement: “Financial education should start at school. People should be educated about financial matters as early as possible in their lives.”

Concurrently, as the FCAC engaged with stakeholders in support of its consumer education mandate, the value of a forum for sharing knowledge and experience, considering international research and approaches, and discussing challenges and potential paths forward became evident. In this context, the FCAC collaborated with two stakeholder organizations to hold the first national Canadian conference on financial capability in June 2005. Among the objectives was to inform policy makers about other national approaches and policy frameworks that deal with financial capability and assess what might be required in Canada to move forward in this area.

From discussions among approximately 150 representatives of diverse organizations, a series of recommendations emerged, including roles for the public, private and voluntary sectors in advancing financial capability of Canadians. One of the recommendations emphasized the importance of “universal financial capability education in the public curriculum so all children learn the knowledge and develop the skills and confidence they will need to navigate their future financial lives.” In 2006, the FCAC commissioned a survey. The results confirmed significant gaps in consumers’ financial capability—41 percent of respondents indicated a personal need for more financial education.

The Government of Canada addressed the issue by recognizing financial literacy for young people and adults as a priority. In its 2007 budget, the government allocated CAD $3 million over two years to financial literacy, mandating the FCAC to strengthen youth's financial skills. The following year, the government provided additional ongoing funding of CAD $2 million per year to the FCAC to support initiatives to improve financial literacy in Canada.

As the initial funding was allocated to building financial capability of youth, and taking into account OECD recommendations and those resulting from its 2005 conference, the FCAC concluded that the best value would be in developing a national financial education program for use in secondary schools, with a target audience of 15 to 18-year-olds.

III. Challenges

Three significant challenges presented risks to successful implementation of the planned resource.

***Scope of the project**:* There was recognition that the financial education program would need to cover a broad range of topics to meet basic financial education needs of young Canadians. As a small organization, the FCAC had limited staff to assign to the project. To deliver the program in a reasonable timeframe, the Agency explored partnerships.

No federal role in education system: The education system in Canada is a matter of provincial and territorial responsibility, with each of the 13 jurisdictions setting its own curriculum requirements and guidelines for resources. Many of them had prescribed some level of financial education in their school systems, but in distinct ways, most often in a range of optional courses. The challenge was to develop a resource that would contribute to effective financial education across the diverse environments.

Cost and sustainability: The cost of providing traditional print resources on an ongoing basis would be prohibitive, given a potential target audience of several hundred thousand secondary school students annually. Even if only a small fraction of this student population participated in the program, the ongoing cost of print resources risked making the program a victim of its own success.

Therefore, the FCAC decided that an online resource offered better chances for long-term success. In addition to the cost savings opportunity, the benefits of having a web-based learning program are noteworthy, enabling the FCAC to reach the general public and a greater number of students and teachers with a common message. Furthermore, the Internet provides for a greater flexibility to update the program's content so it remains current and relevant.

However, recognizing the limitations in Internet availability in classrooms in parts of the economy, the FCAC still decided to offer a print version of *The City*'s Teacher Manual, free of charge, to teachers requesting it.

IV. Solution

The FCAC began by identifying existing programs for youth in Canada to assess their suitability as a base resource to be adapted for use in both official languages (English and French). Although the FCAC reviewed a variety of resources, few were found to be comprehensive and easy to use, and none was widely used across Canada.

The FCAC found that one program used in a mandatory Grade 10 course on personal finance in British Columbia offered good potential for adaptation. Developed by the British Columbia Securities Commission, it had been launched in 2004 to more than 1,400 teachers in all 60 school districts in B.C. The program had won multiple awards and had the advantage of being a proven resource already approved for use within the school system in one provincial jurisdiction.

The FCAC partnered with the B.C. Securities Commission to build upon this program and extend it across Canada. The FCAC and BCSC worked collaboratively to plan enhancements to both the content and format of the program. Among the most significant changes was moving the program from a print format to a Web platform and making it available in both Canada's official languages (English and French).

Program design and support

Given the target audience, namely youth in school, the partners recognized that relevance and engagement would be key factors in the program's success as they would increase the program's appeal and ultimately strengthen the learning outcomes. In this context, two of the main strategies identified were:

- creating a series of characters with individual storylines, thereby personalising the financial concepts, circumstances and issues to be addressed in the program and

- incorporating a high degree of interactivity into the learning activities on the Web platform.

As the primary learning environment targeted was the classroom, program managers sought to consult teachers during the development phase. A teacher review committee was established to ensure content would be appropriate and would meet prescribed learning outcomes in different provinces and territories, and that teachers would support the approach. By engaging teachers early in the process, the FCAC benefited from their “front-line” knowledge and expertise and increased the probability that individual teachers would use *The City* with their students.

However, beyond program development, teachers would be the primary delivery channel for the program and therefore vital to its success. Yet few teachers had any formal training in teaching financial literacy. To address this additional challenge, the FCAC determined that a focus on teacher training and support would be an important component of its implementation plan.

The FCAC opted to create a network of "teacher champions" tasked with helping to raise awareness and delivering the necessary support to teachers across Canada. The FCAC contracted one or two teachers per province and territory, and with their support, implemented a train-the-trainer model comprising three components: in-person workshop delivery, Web conferences, and an online self-directed training video.

The key to *The City*’s adoption in Canada’s school system is due in very large part to the success of this train-the-trainer model. The FCAC built the model on the teacher champions’ personal classroom experience with the program, which combined the use of "traditional/paper-based" teaching methods with newer technologies like classroom computers and "smart-boards." Through the aforementioned three-pronged approach, teacher champions shared their real-life experiences, tips and teaching strategies with their peers across Canada, enabling them to break down the barriers and resistance levels new programs usually encounter when being introduced. The favored small group and/or face-to-face training environment provided prospective teachers with the personalized attention they required to build the necessary knowledge and confidence to use *The City* in their classroom.

Approval process

FCAC also tasked its teacher champions with reaching out to their respective ministries of education and regional school officials to raise awareness of the need for students to receive financial literacy training; and to seek approval for the use of *The City* as a teaching resource in their province.

Thanks to *The City*'s two unique features, the FCAC's teacher champions were able to make tremendous headway both at the ministries of education and school board levels as well as with their peers. Teacher champions were able to emphasize:

- the program's Module 2—Lifestyle Reality Check, which provides up-to-date and province specific statistics that show students how their expectations for their future lifestyle (living expenses) match up against their projected income (salaries).
- the program's mapping of its modules with the prescribed learning outcomes for each province and territory's curriculum, for a wide range of courses such as mathematics, business education, family studies, and career and life management.

The FCAC's Commissioner also met with officials across Canada to raise awareness of the importance of financial literacy and highlight how *The City* could help youth acquire important financial knowledge and skills before they could make costly mistakes.

As a result, most provinces and territories have formally approved *The City* for use in mandatory or elective courses, and a significant number of students and teachers in all provinces and territories are using the program in their classroom.

Delivery to youth at risk

The FCAC's initial implementation plan also provided for testing *The City* with at-risk youth clientele. Most at-risk youth are ill-equipped for the transition to adulthood, are often faced with adult-like circumstances, may have already experienced financial hardships, and are also at an increased risk of making poor consumer decisions. The FCAC felt it was important to test its program with this very vulnerable segment of the population to better understand their needs and determine how they could be addressed.

Between 2009 and 2010, FCAC worked with various organizations to test *The City* with vulnerable youth, both in an alternate high school setting and outside the school system. Through these various initiatives, the FCAC learned that although facilitators appreciated the depth and quality of the content included in *The City* resource, the program's current format was not suitable to their setting and clientele's need. The following summarizes the key learnings reported by facilitators:

- The curriculum requires modifications to adapt *The City* to the context of low-cost, short-time horizon, community-based program delivery.
- Suggested key changes included: simplifying language, making components more interactive and less reading-intensive, and introducing content and characters relevant to the living conditions and financial situations faced by at-risk youth.

This important information prompted the FCAC to work with another not-for-profit organization. The objective was to see how the delivery of *The City* could be adapted to better support the needs of youth at risk and the facilitators who work with them. The result was a new program called *The Roadmap*.

The program is based primarily on the FCAC's educational resources, accompanied by existing federally-funded online resources, which facilitators working with at-risk youth can use and tailor to each individual's particular situation and needs.

V. Marketing

Since 2010, the FCAC has been running advertising campaigns to promote *The City* to increase awareness and its use within the teaching community. As part of these campaigns, the FCAC ran three national contests to give registered teachers a chance to win a SMART Board and students a chance to win one of three laptop computers, provided they correctly answered a quiz based on *The City*.

The FCAC's most recent advertising campaign ran from January to March

2012. The campaign reached out to teachers through print, online and mass email initiatives. The campaign was very successful, and a contributing factor in helping to increase the number of teachers registered to use *The City* by 6.5 percent over the previous year's advertising campaign.

In fall 2012, the FCAC conducted a direct mail campaign. We distributed a small promotional piece to heads of math, business and career, and life management departments in 2,700 high schools across Canada (excluding B.C. and Quebec). Each mailer included a branded USB key containing *The City*'*s* promotional video and related success stories videos.

In addition to these advertising and marketing initiatives, the FCAC worked with various provincial securities commissions and the private sector to promote *The City*. For example, the FCAC partnered with the Canadian Bankers Association (CBA) to develop the *Your Money* seminar initiative—a free,50-minute non-commercial seminar designed for students in grades 10 to 12 that complements *The City* curriculum. Volunteer bankers visit classrooms across Canada to talk with students about financial issues. Since it was launched in 2008, 1,715 *Your Money* seminars have been held with a total of 51,049 participants.

VI. Results

The FCAC's unique approach to implementing and promoting *The City* has proven to be very effective. Between September 2008 and March 2013, more than **2,500 teachers** received training.

From September 2008 to September 23, 2013, we recorded:

- 9,478 teacher registrations to the online version of *The City*
- 73,473 student registrations to the online version of *The City*.

We have also distributed close to 8,000 copies of *The City* resource manual to teachers throughout Canada, so we know that many students learn through the program's paper-based version.

Our most recent statistics show that the numbers of students registering to *The City* is increasing yearly, while the number of registered teachers increases less rapidly but remains stable, with the vast majority returning every year and delivering the program to new cohorts of students.

VII. Evaluation

The FCAC's approach has proved to be very successful and has earned its financial literacy team a Public Service Award of Excellence in 2010. The *Excellence in Citizen-Focused Service Delivery* award recognizes individuals and/or groups who provide improved access to government information and services by delivering efficient, effective and seamless service while maintaining a strong service ethic.

Findings from a recent formative evaluation conducted by the FCAC's Corporate Services Division highlights the program's strengths and weaknesses. Overall, the report indicates that the FCAC's approach is considered successful and very cost-effective. FCAC's implementation strategy for *The City* helped initiate the conversation among youth, educators, administrators and other relevant stakeholders and parents about the importance of financial education.

The City definitely fulfills a need when it comes to financial education material for youth and is well received by students. The topics it addresses are relevant to the most pressing financial literacy needs of Canadian youth. Those surveyed reported that the materials improved their understanding of basic financial concepts and enhanced their financial and personal money management skills. Teachers and facilitators reported that students have become more aware of the importance of financial management, make more informed decisions, and are more budget conscious.

Teachers and facilitators are generally very satisfied with *The City*, noting that the teaching materials are comprehensive, well-structured, useful and user-friendly. Teachers and facilitators also reported that, through the characters and scenarios in the materials, individuals from very different socio-economic backgrounds could openly discuss and explore financial practices and concepts without having to share their own experience or financial situation. In addition, the support and guidance the FCAC provides to assist teachers in delivering the material differentiates *The City* from other available resources, and is considered a major strength of the program.

VIII. Path forward

Even though *The City* has been successful over its five years, the FCAC must continue to assess its relevance because high school curricula are updated regularly and new teaching techniques and tools are being introduced into the classrooms. The objective is to ensure that *The City* remains easily accessible and continues to meet the needs of both teachers and students.

The Agency's recent formative evaluation shows that the FCAC is already on the right path, with key stakeholders indicating that the FCAC—with its relevant, unbiased, bilingual and free of charge financial learning resource—is playing a very important role in Canada's financial literacy landscape.

Stakeholders describe *The City* as unique because of its national focus and scope, comprehensive and detailed curriculum, user-friendly model, teacher support and guidance component, and the absence of vested commercial interest.

Over the coming year, the Financial Literacy Division will review the results of a recent online teacher survey it conducted, the aforementioned formative evaluation, and feedback from our teacher champions to propose recommendations to improve *The City*. The objective will be to build on the current strengths and address the areas of improvements identified by students and teachers.

China: Best Practices of Financial and Economic Education

Journey So Far and Way Forward[18]

I. The Rise of Financial and Economic Education in China

In the late 1970s, the Chinese government launched a large-scale economic reform aiming to transform a highly centralized planned economy to a socialist market economy. The market economy soon became a catchword which was disseminated through various channels (radio, TV, community events, brochure distribution, etc. (Wang Zitai, 1993). Particularly after the release of *The Central Committee of Chinese Communist Party's Decision on Several Issues Concerning the Establishment of a Socialist Market Economy System* in November 1993, the popularization of knowledge of the market economy among Chinese people was put onto the national agenda. Educational reformists went much further, as they thought such popularization work would only be successful if it was done through education. A plan to incorporate economic and financial literacy into secondary education was then drafted and became part of the new curriculum.

In the recent decade, as the populace became familiarized with the concept of the market economy, and the Chinese economy enjoyed steady growth, the call for strengthening financial and economic education has come instead from the tension between students' increasing amount of pocket money and their lack of financial management capabilities. Many local and national surveys have shown a substantial increase in self-managed money of both the children and the youth. According to a comparative study in China, Korea, Viet Nam and Japan, children in Chinese major cities receive the largest amount of pocket money[19]. Statistics show that the ratio of children and adolescents possessing more than 1,000 CNY in savings increased from

[18] Gao Zhenyu, Hangzhou Normal University, Zhejiang Province, China

[19] http://news.enorth.com.cn/system/2004/03/05/000744561.shtml

14.8% in 1999 to 49.8% by 2010 (Sun Hongyan, 2011).

However, even with the knowledge of finance and economics embedded in the existing curriculum, Chinese students have failed to develop abilities of managing pocket money appropriately, and cultivate proper attitudes towards money and related issues. A report entitled *The Financial Intelligence of Chinese Children in 2012* has shown that many Chinese children hold improper attitudes towards money. 27% of them believe that there is no big difference whether they have any money at their disposal or not, and 9% argue possessing money will turn them bad. It was also reported that these children are short of related managerial skills, such as planning before consumption, self-control, etc. Wu Jianming (2001) pointed out the phenomenon of extravagant consumption among young students and categorized it into four aspects: eating and drinking by following commercial advertisements, purchasing famous brands for daily use, investing in inter-personal relations at high costs, and beauty consumption following pop culture stars.

Certainly, students cannot be solely blamed for these deficiencies and inappropriate values on money-handling. Their parents should take more responsibility, as pocket money is given by parents, and teaching children how to use money is part of their upbringing. However, as shown, the teaching of finance and economics at home either lacks necessary knowledge in related fields or proves not effective for children to cultivate proper skills. Hong (2011) indicates that many Chinese parents still hold the traditional view that children should not be given any pocket money for their own good. According to a report from the China Youth & Children Research Center, the proportion of students that is not involved in any financial activity is approximately 14%, a figure that has remained stable over the past 10 years (Hong, 2011). To this group of children, the withdrawal of the power to manage money also means the deprivation of opportunities to become financially capable persons. The white paper *The Financial Intelligence of Chinese Children in 2012* discloses many other problems of family education. For example, Chinese parents generally know little about insurance, securities or investment, often mistrust the advice given by professional financial institutions and school teachers, and excessively rely on their own economic experience.

For cultivating a new generation with sufficient economic and financial knowledge and capabilities, and stimulating economic development in a more sustainable direction, many educators have increasingly realized that education of finance and economics is not and cannot be the responsibility of parents alone. It requires a whole community response with cross-sector support and cooperation. Besides, the attainment of financial and economic literacy is believed to be a cumulative and lifelong process, which should not be an event tied to a particular life phase (such as the upper secondary school or college). For any person to be financially literate, they should be educated from an early age, in the Chinese context, at the pre-primary or primary educational level. In this respect, schools have to play a much bigger role in the future than today.

II. The Implementation of Financial and Economic Literacy Programs

2.1 Policy/Program Development Process

In the People's Republic of China, financial and economic education has always had its place in the system of basic education. Within the framework of the national curriculum, the Ministry of Education (MOE) has not explicitly stipulated finance and economics to be a required subject for every student in Canada. However, according to the syllabi of curricula such as *Ethics and Society*, *History*, *Ideology and Politics*, and Mathematics, financial and economic education has to be taught, albeit only as part of the program, at primary and secondary schools. The development of these curricula follows a top-down principle which means a group of curriculum developers and experts from the economic and financial field are first consulted; then the MOE formulates a general syllabus for each curriculum, authorizing the National Textbook Authorization Council for Primary and Secondary Education to censor all editions of textbooks designed by different publishers in the market, and permit the publication of those consistent with the syllabus.

The financial and economic literacy program has been developed at the regional level as well, usually following a strategy of "Piloting first, then disseminating". The local government of Pudong New Area, in Shanghai presents an excellent example of this. First, a financial culture festival was held in the development zone Lujiazui, the financial center of Shanghai, involving a thematic activity that invited primary and secondary school teachers to organize class council meetings and teach demonstration classes around financial issues. At the same time, a set of textbooks entitled *Finance and Money Management* was released by the Shanghai Far East Publishers at the opening ceremony. Following the festival, the pilot program was extended to the whole district; according to a report, by the end of 2011, about 116 primary and secondary schools in the Pudong New Area have piloted this finance and economics program (Yang, 2011).

Several schools, concerned about the low level of their students' financial and economic literacy, have shown great and interests in designing school-based FEL programs. Lanxi Experimental Elementary School, in Zhejiang Province is one of the schools exerting great effort in such program development. At the preparatory stage, the school formed a team with a clear-cut division of labor, analyzed internal and external contexts to identify favorable conditions and potential challenges, provided "pre-teaching" training for teachers, and formulated a general, operational guideline. The process of developing an FEL program encompassed four progressive stages. First, an experimental syllabus for the school-based FEL course named "Finance and Life" was drawn up, and an elective course was designed. Then, the team collected relevant resources (texts, videos, audio materials, etc.) and developed learning contents. Next, three "official" textbooks respectively for low, middle and high grade students were published. Finally, teaching resources (usually some detailed cases) were packed together for each unit of the course. After completing all the above stages of development, the school started to implement the course in every class with varied forms of activities (Ye Sheng, 2009).

2.2 Key Players and Their Respective Roles

Without the establishment of an organization responsible for financial and economic education in China though, the MOE does realize the importance of increasing financial and economic literacy among students, monitoring the latest development of such programs at schools. It has made the learning of finance and economics mandatory for each primary and secondary student, through the respective national curricula. Furthermore, the MOE also took concrete action to improve FEL education. For example, in 2006, *A Guiding Suggestion of Enhancing the Insurance Education in Schools* (*guanyu jiaqiang xuexiaobaoxian jiaoyu youguan gongzuo de zhidao yijian*) was co-released by the MOE and the Insurance Regulatory

Commission, which stipulates the integration of insurance education into the existing national curriculum.

Meanwhile, local governments have devoted efforts to incorporate FEL programs into the school curriculum. Local governments have encouraged schools to teach FEL and to carry out the experiments from one school to another. The programs largely involve what learning objectives should be achieved, what types of teaching and learning activities should be used, and what resources should and can be offered, all constituting a general guideline. With their strong support, local publishers and financial institutions often collaborate r to meet specific needs of local schools, particularly in designing and publishing regional textbooks on FEL. Local governments also mobilized professional experts from other fields to evaluate current FEL programs and made further improvements when necessary.

In addition, some non-governmental non-profit organizations, foundations, charitable organizations and banks have also played a role in spreading the finance and economics curriculum at schools, by means of developing FEL programs, offering teaching materials and training workshops and/or providing funds. For example, the International Junior Achievement (IJA) has also helped schools (e.g. Dongchang Middle School affiliated to East China Normal University in Shanghai) to develop a school-based financial and economics curriculum. The Mercy Corps and Western Union Foundation collaboratively developed a financial course which was taught at the Dandelion School in Beijing in late 2009. As a result, 688 high school students and 60 parents reportedly benefited from this course. In early 2001, the China Construction Bank made efforts to teach financial knowledge to children and sponsored many activities, for instance, the “Thousands of Children Visit the Bank” program.

2.3 Curriculum Development

Since the latest national curriculum reform at the turn of the century, China has formulated a three-level curriculum structure which allows students to learn three types of courses: national, regional and school-based. The finance and economics program is either incorporated into the national curriculum or taught as a separate subject in the school-based curriculum.

2.3.1 Integrated Curriculum

Financial and economic education has long been embedded as a statutory part of the National Curriculum, mainly in subjects such as *Ethics and Society* (primary education), *Ideology and Ethics* (*sixiang pinde*)*, History and Society* (lower secondary education), and *Ideology and Politics or History* (upper secondary education). Within the curriculum framework, all these courses share such knowledge and skills as the ways of spending and skills of money-handling, reflecting concerns about today's phenomena of credit use and irrational consumption by young students.

In terms of other subjects, whether the finance and economics program is integrated in the curriculum, and to which degree is generally determined by individual schools and teachers, rather than mandated by the Ministry of Education. In practice, many teachers have consciously tried to teach finance and economics to their students in their own subject areas. Wei Youzhi (1998) provided four strategies for effectively integrating financial and economic education into Mathematics, adding economic knowledge to some lessons; transforming application questions with the use of economic and financial terms; and immersing economic thinking in mathematic investigation and statistics, thus increasing students' economic skills in social practice. Taking into account the flexibility of learning themes, "Comprehensive Practical Activity" (or inquiry-based curriculum in Shanghai) is often applied to engage students in economic and financial projects.

2.3.2 Separate Subject

Since 2001, schools may autonomously develop curricula tailored to their own context, including those related to financial and economic education. During the first decade of this century, financial and economic programs were first introduced into schools and widely accepted by more developed municipalities, for example Beijing and Shanghai, and provinces such as Guangdong, Zhejiang and Jiangsu. For instance, so far about 116 primary and secondary schools have established a regional curriculum called Finance and Money Management in the Pudong New Area, in Shanghai. In recent years, the western and central regions of China have started to implement similar programs as well.

Within the framework of the school-based curriculum, teachers have the discretion to develop the objectives and contents related to finance and economics, supplied with diversified resources and adequate teaching time. Another benefit of such a curriculum development model is that the school may accumulate social capital through the local community and external sources through the application of FEL, making the program more sustainable and systematic from which students benefit continuously. However, developing a finance and economics curriculum is undisputedly a time-consuming and resource-intensive project, involving the development of learning objectives, textbooks, teaching methods and learning assessment, all challenging to teachers with little or no experience of financial and economic education. Therefore, without strong support of external professional organizations and local education authorities, the finance and economics program is more likely to "miscarriage" as a result of resistance within the school. Fortunately, at present, most primary and secondary schools teaching financial and economics courses are supported and even funded by local educational bureaus, non-governmental organizations and/or financial institutions.

2.4 Scope of the Programs

No mandate on scope and objective of the FEL program has been given at the national level. However, according to the syllabi of integrated national curricula such as the Ethics and Society, History, Ideology and Politics, it can be summarized that curricula for FEL embedded in the national curriculum include:

• *Financial and Economic Concepts and Knowledge* (e.g. the operating model of the socialist market economy; the basic economic system of the primary stage of socialism, basic financial services, what money is and how it is exchanged, the way money flows, consumer's rights and responsibilities);

• *Financial and Economic Competencies and Skills* (e.g. budget appropriately to meet expenses, identify financial products or services that meet their needs, get independent financial advice);

• *Financial and Economic Awareness and Attitudes* (e.g. credibility and integrity, a spirit of fair competition, green consumption, the idea of scientific development, an awareness of the risks associated with financial products, appreciation of the relationship between risk and return).

In terms of the distribution of all these contents across various grades, the principle of an ascending approach is followed, i.e. to change the perspective, breadth, or depth of the understanding of similar concepts across various grades. For instance, in terms of the market economy, at the third year of lower secondary education, students begin to understand, only in brief, the compensatory relationship between two means of controls: market and government; while in the first year of upper secondary education, they have to inquire deeper into the laws of the market economy, and the multiple ways of resource allocation.

Students at different grades focus on varied aspects of finance and economics. The Experimental Primary School of Lanxi has divided the content into five modules: Concepts, Use, Value, Saving, and Creation of the money (*shicai, yongcai, xicai, xucai and chuangcai*) (Ye Sheng, 2009). At each grade, students learn something from these five modules, but the focus is different from grade to grade (Table 1).

Table 1: Lesson Modules of "Finance and Life"

Unit / Grade	Unit I Concepts	Unit II Use	Unit III Value	Unit IV Saving	Unit V Creation
Low Grades	Knowing RMB	Shopping	Where is the money from	Learning to save	Little helper
	Value RMB	Identifying Counterfeit goods	Let me help you	Beautiful money box	I'm on duty
	Study and household items	Pocket Money	Care stationery	My "pig" becomes fat	Making waste profitable
	Pocket money	Bargaining	Class managers	Little bank	
Middle Grades	Knowing foreign currencies	Making money-spending plans	More important than money	I have an savings book	Book collector
	I love my hometown	Keeping account	Household income and expenses	Little collector	Earning writing remuneration
	School in my heart	Borrowing and lending	I'm a member of	Small treasury	Work creates wealth

			the family		
	Knowing deposit book	We don't compare	Tears of the snack	Mum's financial skills	Selling newspapers
			Little school masters		
High Grades	Financial items	Blind comparison	In charge of the family	Nip in the bud	Volunteer of Public affairs
	Fixed assets	Knowing 12315	Lost and found	Tax and us	Investors
	Art treasure	Using deposit books	Am "I" useful	Saving	Part-time job
	Intellectual property rights	On-line shopping	Good citizen	Food	On-line shop
	Money isn't everything	Writing financial diaries			

Note: Adapted from Ye Sheng (2009).

2.5 Methods of Teaching and Learning

Lecturing is usually applied as basic method of imparting financial and economic knowledge. The textbooks designed by either external organizations or schools themselves, have mostly made lecturing in the classroom a dominant approach. In reality, this method has *de facto* been adopted as the main way of teaching student's financial and economic literacy. For example, in Chengdu, a team of Enactus (previously known as *Students in Free Enterprise* (SIFE)) from the Southwestern University of Finance and Economics delivers knowledge of finance and economics through lectures to local primary and secondary schools.

On other occasions, however, Chinese educators and teachers have never restricted themselves to merely lecturing; instead, they basically follow two principles: associating with students' daily lives and enabling students to learn from doing and experiencing. Thus various learning activities have been developed: group discussions, debates, games, performances, simulations, excursions, on-site investigations, to name just a few.

In the classroom, Chinese teachers prefer discussion, observation, debate and craft-making. He Xiaoying (2011), a teacher at the Primary School Affiliated to Northwestern Polytechnic University in Shaanxi Province recommends her students to read extracurricular books relevant to finance, requesting them to write a reading report and then lead them to discuss which ways of money management suits them best. In a class of *Comprehensive Practical Activity,* students collected all kinds of cards that have economic functions, observed their forms, and discussed what specific role each card plays in daily life, and how to reasonably control the cost of using these cards. Some teachers encouraged students to decorate the classroom walls by posting well-known financial sayings, such as “Better teaching a man how to fish than giving him fish”, the updated news of the world economy, brands of green foods, price lists of electricity and water, discount advertisements and students’ personal money-handling experiences, and how to create a savings account for the class fund (Wen Zhiwang, 2012). Other teachers organized games and/or debates in class. For example, the trainers in a non-governmental educational organization called *Be Better* often use games in their teaching of small-size classes.

Comparatively speaking, teaching finance and economics as an extracurricular activity is more universally accepted in Chinese schools and the teaching is often presented in varied forms. Some teachers have mobilized student groups such as the Young Pioneers, the Communist Youth League or the class council to participate in such activities as “tactics of shopping”, a speech contest on the topic “I can manage my money”, a thematic meeting of “I’m a business man/woman”, a flea market or a small bank. A primary school in Wenzhou, a city in Eastern China, built a “small commercial town” on campus, composed of clothes shops, a bookstore, grocery shops, restaurants, supermarkets, and a recycling center, run by students themselves. In some schools, teachers also organize students to visit financial and economic institutions. The syllabus of “Ethics and Society” (for Grades 3-6) suggests that students should “observe and investigate business places around the school or those of their relatives, track and compare the price changes of different products and services, and do some shopping at a mall”. The ongoing “Agent Penny” program of *Be Better* teaches the knowledge of saving and budgeting to children aged 10-12 in the form of drama performances. The organization holds an annual financial drama competition in 11 big cities in China with the sponsorship of Citibank.

In addition, there is more and more parent-school collaboration for teaching finance and economics. At a basic level, parents and their children discuss the financial matters at home. Furthermore, there is a popular activity in Chinese families named “Today I’m the Master of the family”, in which children or adolescents manage family expenditure for one day (usually at weekends), including buying articles of daily use and handling payment of electricity, water and natural gas. One primary school in Zhejiang Province uses the following six strategies to involve parents in financial and economic education: teach children how to keep accounts and make budgets; prepare a money box for them or open a savings account at a local bank; let children visit their parents’ working places; advise children to take part-time jobs; ask them to collect empty zip-top cans or mineral water bottles; involve children in domestic tasks, social welfare or family business activities (Chen Lingfen, 2011).

2.6 Funds and Resources

With the policy shift from “One syllabus, one textbook” to “One syllabus, multiple editions of textbooks”, publishers are empowered to write and publish textbooks on various subjects in line with the mandated curriculum guidelines and syllabi. It is estimated that more than 160 types of textbooks for primary and lower secondary education and 67 for upper secondary education have been approved by the National Textbook Authorization Council for Primary and Secondary Education. The most popular textbooks have been developed by the following influential publishers, notably the People’s Education Press (PEP), and Beijing Normal University Press (BNUP), etc. While general knowledge and skills of financial and economic education remain the same, the way of presentation varies from one publisher to another. Take the subject of *Ethics and Society* for example, in the book published by PEP, money-handling is placed in the first term of grade 4, covering such topics as the family account book, how to spend money, the shopping malls I know, and becoming a wise consumer. Similar content is presented slightly differently in the textbook published by BNUP, with focus on the matter of shopping, such as daily shopping of my family, diverse shopping places, and the knowledge of shopping, which students learn in the second term of grade 3. However, owing to the fierce competition in the textbook market, publishers strive to develop supportive resources, on-line or printed, to attract school administrators and teachers to choose their sets of textbooks. These resources often comprise of teachers’ manuals, PowerPoint courseware, video clips, exemplary teaching cases, exercises and tests databases, and other reference books or websites.

Other publishers and NGOs have also developed textbooks on financial and economic education. The series of picture books *Stupid Papa* is regarded as the first of its kind in the Chinese book market, comprising “Stupid Papa goes to the bank”, “Stupid Papa speculates on the stock market”, “Stupid Papa buys insurance products”, “Stupid Papa does business”, etc. With a child-type language, cartoon images and humour, the books intend to impart basic economic knowledge to school children. In June 2012, China Financial Publishing House published another series of economics books in collaboration with the Weifang Branch of the People’s Bank of China and the Weifang Finance Society, which has been used in many schools at least in the city of Weifang, in Shandong Province. Citibank also edited a book named “The Good Ways of Managing Your Money” for students in Shanghai and Beijing. It merits mentioning that all these textbooks are more appealing to teachers, and more widely adopted than textbooks developed by schools.

The sources of funds to develop and implement the FEL programs are rather diverse. All national integrated FEL programs are designed and implemented with the support of the MOE. Local governments provide most of the funds to experiment and extend regional FEL programs, oftentimes in cooperation with publishers, NGOs, communities and financial institutions, who might offer a small grant to promote their products. Sometimes schools offer self-funded courses on FEL or engage in research projects with grants from external research institutes.

2.7 Challenges Ahead

Teacher is key to the quality of financial and economic education. According to my own research, for a teacher to teach like a professional in their own subject area, they must possess at least five types of knowledge: subject-matter knowledge, pedagogical knowledge (general pedagogical knowledge and pedagogical content knowledge), knowledge of the learner, curricular knowledge, and the educational knowledge (Hargreaves & Fullan, 2012; Gao Zhenyu, 2013). However, Chinese teachers today largely do not possess such a knowledge structure for either integrated subjects or school-based curriculum teaching. Facing the shortage of competent teachers with a background in finance and economics, some schools (such as the

Business School for Children in Chengdu) have to recruit part-time faculty from developed countries such as the U.K. and USA as an alternative solution.

Ever since the beginning of the implementation of finance and economic education in China, the tension between the popularization of finance and economics programs and the shortage of qualified teachers has been an issue to be resolved. Only limited training opportunities are offered by local educational bureaus; some NGOs, financial institutions and publishers are willing to provide such training for interested teachers and school leaders, but the scale of such training tends to be small, due to the limited resources. Extension of courses on financial and economic literacy nationwide warrants teacher training on a much larger scale. Thus, unless more regional and/or school-based training programs are offered by local educational departments, the quality of financial and economic education can hardly be guaranteed.

III. Outputs, Outcomes and Impacts

The program of financial and economic education has surely involved a large number of stakeholders. In terms of the national curriculum that incorporates financial and economic knowledge, every student at primary and secondary level and each teacher from related subjects are part of the program. But the school-based finance and economics curriculum has not yet widely spread. Most of such curricula are available in the major cities, such as Shanghai, Beijing, and eastern coastal provinces such as Guangdong, Zhejiang, Shandong and Jiangsu. The Pudong New Area in Shanghai is exemplary in that it has almost completely transformed the finance and economics curriculum into a regional curriculum. Very recently the western and central regions in China have started to introduce or develop such curricula in their own regions. Looking at the process of developing finance and economics programs, it is fair to say that local government agencies always play a leading role, by building a cooperative network composed of external financial institutions, economists, publishing houses and schools, and /or of encouraging the extension of such curricula in classrooms.

The contribution of various FEL programs to the economic and social development is yet to be evaluated. However, experts in the field seem confident that the implementation of all these programs will lead to an improvement of students' FEL, and to a more capable and competitive generation which can help sustain the economic boom, facilitate market economy reform and accelerate social progress (Huang, Fang & Xi, 1998; Zhou, 2005). It is such confidence that motivates educators and officials to keep experimenting FEL programs in various forms.

IV. Conclusions: Lessons and Potential for Replication

The program of financial and economic literacy has been incorporated into the basic educational system of China for almost three decades. During this period, China has accumulated many experiences, especially In the form of the school-based FEL curriculum. The renewed curriculum structure in China enables schools and teachers to plan, design and implement the courses that fit their students' interests and abilities, aligned with campus culture, and teachers' professional development in the form of school-based training.

Furthermore, it is hard for a school to develop FEL programs alone. It is essential to establish a network that consists of local economic and financial institutions, university experts, publishing houses, educational bureaus and other schools. In the case of China, several big cities (such as Shanghai and Chongqing) have successfully built such a supportive and influential networks that play a critical role in the quality of financial and economic education, and thus achieve the intended goal of financial and economic literacy programs.

References

Chen Lingfen (2011).The status quo, problem and solution of finance education in China. *Journal of Hebei Normal University (Educational Science), 13*(2).

CITIC Prudential Life Insurance. (2012). *2012 Zhongguo shaoer caishang diaoyan* [*The financial Intelligence of Chinese children in 2012* (white paper)].

Gao Zhenyu (2013). Teacher's knowledge structure of philosophy for children program and implications for future teacher training. In *Proceedings of "The Second International Conference of Curriculum Reform and Teacher Development"*. Hangzhou Normal University, March 22-24, Hangzhou, China.

Hargreaves, A., & Fullan, M. (2012). *Professional capital: Transforming teaching in every school*. New York: Teachers College Press.

He Xiaoying (2011). Implement finance curriculum in elementary school class. *New Curriculum*, pp: 148-149.

Hong, M. (2011). A few misunderstandings in current financial education for children. *Education Exploration, 5:*24.

Huang, Y. , Fang, Y. and Xi, M. (1998). China has entered into a critical time that people's economic literacy must be improved. *Learning Theory,* 7: 28-29.

Sun Hongyan (2011). *Zhongguo shaonian ertong shinian fazhan zhuangkuang yanjiu baogao* (1999-2010) [*Chinese children and youth in past ten years from 1999-2010*]. Beijing: People's Daily.

Wang Zitai (1993). Popularizing the economic knowledge and increasing citizens' economic literacy. *Educating and Vocation*, 6: 4-5.

Wei Youzhi (1998). Integrating commodity economy education in Mathematics class. *Journal of Lianyungang Educational College*, 1998 (2).

Wen Zhiwang (2012, January 15).The practice of finance education for elementary school children. *Teaching and Administration*, pp: 14.

Wu Jianming (2001). Money-management Education and Consumption Guidance for Students. *Journal of Guangxi Youth Leaders College, 11*(3): 53-54.

Ye Sheng (2009). The development and implementation of a school-based curriculum "Finance and Life" in an elementary school. *Modern Elementary and Secondary Education*, 5: 13-16.

Yang, Y. (2011). Financial education entered into elementary and secondary schools. Retrieved from http://www.jfdaily.com/a/2438042.htm

Zhou, L. (2005). Economic education: One way of improving economic literacy in the whole society. *Pioneering with Science and Technology Monthly*, 1: 159.

Indonesia: Entrepreneurship and Creative Economics in Basic Education: An Integrated Strategy[20]

I. Introduction

Indonesia's population is 237.6 million (National Census 2010), growing at a rate of 1.49% per year between 2000 and 2010. If the growth rate remains constant, there will be an estimated 248.4 million people in the economy by 2013. Ironically, according to statistic data, the largest contribution to GDP is consumption expenditure amounting to 55.64% of household expenditure. This indicates that a large number of people are consumers, not producers. It needs continuous efforts to change consumers' behavior to become productive.

All human actions are likely to have implications for the economy. For example, young people, who prefer play to study, will sacrifice their time to play at the expense of long-term investment to acquire knowledge that would likely increase their future income. And *vice versa*, if young people prefer learning to playing, then they will sacrifice their chance to interact with their peers and improve their social skills. From this viewpoint, it is clear that all actions have consequences, and these consequences may ultimately have implications for the economy.

Thus, as all individuals' actions are related to the economy, by implication it is very important to study economics. Economics is about making choices. By studying economics, people are expected to make the right choices. People tend to associate economics with money. This is because most economic activity is measured in terms of the value of money. People sometimes forget that economic activities require knowledge, attitudes and skills that can be acquired through education in school, the

[20] Apriyanti Wulandari, Center for Curriculum and Textbooks, National Office of Education Research and Development, Ministry of National Education and Culture of the Republic of Indonesia

family and the community. Consumerism can be changed to productive behavior through education. It is not always easy in Indonesia, since many parents think that education of their children will help them to get good jobs instead of creating new jobs.

In order to address this issue, Curriculum 2006, through its Content Standards, included Economics in social studies for elementary school, and junior high school students. However, competencies which are expected to be acquired by students tend to emphasize knowledge characterized by such terms as understanding, recognizing, describing and identifying. Other competencies such as attitudes and skills are not stated explicitly and merely exist in the form of the hidden curriculum. Competencies in those two domains are sometimes neglected by the teachers in the students' learning process. As a result, learning economics only makes students understand economic concepts, yet does not contribute to the improvement of skills that can be applied in real life.

Educationalists agree that education is the key to respond to global demands, and education needs to be flexible and adaptive to meet the demands of the workforce and improve the ability of workers. All educational institutions have to work harder and smarter in order to compete in the global era. Education should also contribute to economic growth (*Manuscript of Creative Economics Education Policy for Elementary and Secondary Education*, 2011:1). Recognizing the potential contribution of education to economic growth, the Government of Indonesia acknowledges the importance of economics as stipulated in Presidential Degree No. 6/2009 on *Creative Economics Education*. With respect to curriculum policy, Presidential Decree No. 5/2010 on *National Medium-Term Development Plan 2010-2014* suggests several action plans. One of the plans is the development of national, district and school-based curricula to contribute to the quality improvement of human resources development, by incorporating entrepreneurship education (such as by developing a model of link and match) in student learning processes, among other things.

According to Presidential Decree No. 6/2009 and the *National Medium-Term Development Plan 2010-2014*, the Center for Curriculum and Textbooks developed a *Guide to Entrepreneurship Education in 2010* and an *Education Policy Brief on the*

Education of Creative Economics in 2011. In 2013 the government launched *Curriculum 2013*. The new curriculum aims to foster students who are productive, creative and innovative. One way is by integrating three main abilities namely attitudes, skills and knowledge in both the curriculum and learning processes. These abilities are organized into four core competencies, namely Core Competencies (KI)-1 on spiritual attitudes, KI-2 on social attitudes, KI-3 on knowledge and KI-4 on skills. The main learning approach in *Curriculum 2013* consists of the following activities: observing, asking, trying, associating and communicating.

II. How was the Economic Literacy Program Implemented?

This part will discuss how entrepreneurship and creative economics were integrated in the curriculum, which stakeholders were involved, how it was implemented, where the funding came from, and the challenges faced by schools. These observations are based on the data collected from 300 pilot schools[21]. The schools were selected and assigned by the local district governments, working together with the Center for Curriculum and Textbooks to implement new initiatives in curriculum policy.

2.1 How to integrate entrepreneurship and creative economics into the curriculum

In the Ministerial Decree on *Content Standards* established in 2006, competencies associated with economic prowess seemed to focus on knowledge. To help students develop their skills and attitudes needed for economic prowess, there is a need to integrate entrepreneurship and creative economics into the school curriculum and extracurricular activities. To do this, the Center for Curriculum and Textbooks has developed two teacher guides, one on *Entrepreneurship Education Development Guide* and the other, namely the *Manuscript Creative Economics Education Policy*.

The *Entrepreneurship Education Development Guide* defines entrepreneurship as qualities that form the character and behavior of learners including essential characteristics such as being creative, hard-working, and unpretentious. Other values

[21] The number of pilot schools in 2010 was 125 schools and since 2011 this number has increased to 300 schools consisting of preschools, primary, junior secondary, general and vocational schools as well as community learning centers and schools for special education.

include: (1) self-confidence; (2) task-oriented and results-oriented; (3) risk-taking; (4) leadership; (5) future-oriented; and (6) originality (Meredith in Suprojo Pusposutardjo in *Entrepreneurship Education Development Guide*, 2010:17).

For effective integration of entrepreneurship and creative economics, schools need to ensure: integrating the values of entrepreneurship and creative economics in the curriculum design; involving students in the decision making process to encourage their participation and build their self-confidence; developing teachers' capacity for more effective learning processes; and involving community members, the government, and the private sector to engage in school programs.

2.2 Key Players and Their Respective Roles

The key players in the development of entrepreneurship and creative economics are school principals. School principals play their role as a leader who shapes a school vision for students' success, creates a school climate conducive to students' learning and teachers' teaching, manages people and the support system in the school. Other players include teachers, district education officers, and the school superintendent. In addition, parents and local businesses also play a very important role to support the success of entrepreneurship and creative economics.

2.3 Sources of funds and how the resources were used

During the implementation of the entrepreneurship and creative economics pilot program, most schools mainly used their own regular funding allocated by government at the central and/or district levels. There was no additional funding allocated only for entrepreneurship and creative economics. Some schools received additional funding from the central government and/or private businesses. Many schools received some contribution from parents, mostly on monthly basis.

2.4 Scope of the Program

The program is intended for a variety of types of education, at different levels, such as kindergarten, elementary school, junior high school, senior high school and vocational schools, but this paper focuses on basic education, which consists of *Sekolah Dasar* (SD, primary schools) and *Sekolah Menengah Pertama* (SMP, junior high schools).

2.5 Curriculum development

Government Regulation No. 19/2005 on *National Education Standards* and

Ministerial Decree No. 22/2006 on *Content Standards* delegated autonomy to schools to develop their curricula, including developing their syllabi. The central government sets the standards and it is up to schools to reach the standards through the curriculum and syllabus which they developed, and the teaching processes they carried out. The aim is for all schools to develop their own curricula and syllabi to match local conditions and their particular students' needs.

The entrepreneurship and creative economics program was implemented in one of the following forms:

a) Integration into all subjects, including learning materials based on the local situation (depending on local culture, resources);

b) Extra-curricular activities;

c) Integration into daily or occasional activities to develop a school culture conducive to entrepreneurship and creativity;

d) Developing entrepreneurship and creative economics materials to supplement students' textbooks.

In 2013, Government Regulation No. 32 on the *Revision of Government Regulation No.19/2005 concerning National Education Standards* was issued. One of the main changes with respect to curriculum policy is that there is an explicit statement of the need to integrate knowledge, skills and attitudes in curriculum documents, textbooks and learning processes. The new policy also emphasizes the integration of many contents related to global issues, such as entrepreneurship and creativity as basic competencies. With respect to school-based curriculum policy, schools are no longer required to write syllabi, due to the fact that it is so demanding and difficult that schools tend to copy and paste the available syllabus from other schools.

2.6 Challenges ahead

During the pilot stage in 300 schools conducted by the Center for Curriculum and Textbooks, there were many issues that needed to be addressed. Examples of such issues were the following:

1. Many teachers in pilot schools suggested that technical assistance from the

Center for Curriculum and Textbooks was not sufficiently accompanied by support from the relevant supporting agencies both within the Ministry of Education and the local education authority.

2. Integrating entrepreneurship and creative economics into the curriculum and teaching processes is a long process. It is crucial to have continuous commitment from the school community, supporting agency and the community. Unfortunately, this commitment was not demonstrated by many schools and their stakeholders.

3. The plan for pilot schools to share their understanding and experience in entrepreneurship and creative economic education with neighboring schools did not work effectively. The pilot program was initially planned for four years. However, due to priority change, the program was suspended in 2013, a year or two before the completion the study.

In addition to the challenges of implementing entrepreneurship and creative economics, in general, schools in Indonesia face several problems, for instance:

1. Most schools, especially those in difficult areas, cannot meet one or more of the eight national standards (competency, content, process, teachers and education staff, facilities and infrastructure, management, financial standards, and assessment standards).

2. There is an insufficient number of teachers in many schools in rural areas, especially in remote areas.

III. Output of the Program

At the initial stage of the pilot program, which involved 125 schools in 2010 and 300 schools by 2011, a set of instruments was developed to measure the effectiveness of entrepreneurship education. The schools which were selected by 44 district (*kabupaten/kota)* education authorities were intended to implement a number of initiatives developed by the Center for Curriculum and Textbooks, which were mainly reorganised character education, entrepreneurship and creative economics, and anti-corruption education.

During the piloting process, technical assistance was provided by the Center for Curriculum and Textbooks. Visits were made four times in a year. The first visit aimed to assist teachers to integrate entrepreneurship and creative economic in curriculum design. The following two visits were to supervise and assist the implementation of the previously designed curriculum. The last visit was to evaluate the program. In the evaluation process, instruments developed at the initial stage of the program (See Table 1 and Table 2) were used to measure outputs.

The outputs of entrepreneurship and creative economics appear in one of the following forms (cf. *Manuscript of Creative Economics Education Policy for Elementary and Secondary Education*, 2011:22-24):

a) Changes in students' intrinsic motivation and attitudes such as self-confidence, willingness to try new things, ability to take risks, creativity in communication and problem-solving, being a fast learner, enthusiasm for great ideas, being highly motivated to achieve, having divergent and critical thinking.

b) Changes in students' behavior, characterized by, among other things, asking many creative questions, acceptance of differences, working professionally and ability to adjust and adapt.

c) With respect to the work/tangible products, students are expected to demonstrate the results of original and appropriate work, and ability to develop new ideas.

IV. Conclusions: Lessons and Potential for Replication

Economics education exists in response to the fact that all individuals are always doing activities related to the economy and economic activities require knowledge, attitudes and skills that can be acquired in schools, families, communities, etc.

Basic competencies related to economic prowess have been found in the national curriculum (contents), but has not been properly implemented because teachers tend to emphasise knowledge acquisition during the student learning process. Therefore, there is a need to integrate entrepreneurship and creative economics in the school curriculum. This can be done by integration into all subjects, extracurricular activities, personal development, local content, textbooks/instructional materials, and school culture.

A program cannot succeed without the support of all stakeholders of school community. Entrepreneurship and creative economics can be applied throughout the school. To minimize the obstacles that could be encountered, the following factors should be taken into account.

1. Coordination between the main unit in the Ministry of Education and Culture, the local education authority, and the school management. There is a need to synthesize schools', local education authorities' and the Ministry's programs. Oftentimes coordination also needs to involve other ministries and local businesses to ensure the success of entrepreneurship and creative economics.

2. Commitment of the whole school community is crucial for implementation and the sustainability of the program.

3. There is a need for training that can change the way of thinking of principals and teachers so that they can serve as models for application of entrepreneurship and creative economics in schools.

4. Programs should be designed to fit in with the needs of schools and their goals to be achieved (both short-term, mid-term and long-term), thus to contextualise curricula and meet the needs of students.

5. Conducting periodic evaluation of the implementation is important for the success of the future programs.

6. Collaboration with other stakeholders, such as parents, society, government, and industry has to be maintained.

Table 1: Indicators of Achievement of Entrepreneurship Values in Elementary School

Entrepreneurship Values	Indicators of Achievement		
	Individual	**Classroom**	**School**
1.Independence	▪ Able to perform tasks without help from others. ▪ Ability to find their own learning resources.	▪ Creating a classroom atmosphere which enables students to work independently.	▪ Create situations that develop self-reliance of students.
2. Creativity	▪ Creating a literary/art works from the available materials. ▪ Creating various new sentences with their own words. ▪ Propose new activities in classroom.	▪ Creating learning situations that encourage creativity. ▪ Providing either authentic or modified challenging tasks.	▪ Creating a situation that fosters creativity.
3. Risk-taking	▪ Accepting consequences of his/her own actions. ▪ Enjoy challenges.	▪ Provide a challenging task to students.	▪ Provide an opportunity for students to develop their business potential.
4. Action-oriented	▪ Developing practical ideas.	▪ Provide opportunities for learners to apply ideas.	▪ Provide excellent service to develop ideas.
5. Leadership	▪ Ability to coordinate a group of friends. ▪ Ability to accept criticism from friends. ▪ Ability to take advice from friends.	▪ Building class discussion atmosphere. ▪ Establish rotating head of the class.	▪ Creating a democratic school.
6. Working hard	▪ Seeking information from sources outside the textbooks. ▪ Using most time in and outside the classroom	▪ Creating classroom situations for learners to find the source of information. ▪ Giving tasks to students	▪ Facilitating conducting a study. ▪ Providing facilities and infrastructure that support learners

Entrepreneurship Values	**Indicators of Achievement**		
	Individual	**Classroom**	**School**
	to learn.	to explore reading materials.	to find reading materials.

Source: *Training Materials on Learning Methodology Based on Cultural Values for Competitiveness and Character Shaping of the Nation: Entrepreneurship Education Development*, *2010:48*

Table 2: Indicators of Achievement of Entrepreneurship Values in Junior High School

<table>
<tr><th rowspan="2">Entrepreneurship Values</th><th colspan="3">Indicators of Achievement</th></tr>
<tr><th>Individual</th><th>Classroom</th><th>Individual</th></tr>
<tr><td>1. Independence</td><td>▪ Being independent of others.
▪ Ability to search their own learning resources.
▪ Ability to perform their own tasks.</td><td>▪ Creating a classroom atmosphere which enables students to work independently.</td><td>▪ Create situations that develop self-reliance of students.</td></tr>
<tr><td>2. Creativity</td><td>▪ Asking others' opinions when completing tasks.
▪ Presenting new ideas.
▪ Describing concept in their own words.</td><td>▪ Creating learning situations that encourage creative power of thought and action.
▪ Providing either authentic or modified challenging tasks.</td><td>▪ Creating a situation that fosters the power to think and act creatively.</td></tr>
<tr><td>3. Risk-taking</td><td>▪ Enjoy having challenging tasks.
▪ Accepting the consequences of his/her own actions.</td><td>▪ Providing challenging tasks to students.</td><td>▪ Providing an opportunity for students to develop their business potential.</td></tr>
<tr><td>4. Action-oriented</td><td>▪ Creating ideas and put them into action.</td><td>▪ Providing opportunities for learners to apply their ideas.</td><td>▪ Providing excellent service to develop ideas.</td></tr>
<tr><td>5. Leadership</td><td>▪ Open-minded to suggestions and criticisms.
▪ Acting as a leader in a group.
▪ Dividing tasks within a group.
▪ Being a role model.</td><td>▪ Creating situations for students to develop their leadership.</td><td>▪ Creating a democratic school.</td></tr>
</table>

Entrepreneurship Values	**Indicators of Achievement**		
	Individual	**Classroom**	**Individual**
6. Working hard	▪ Working on tasks at a specified time. ▪ Being tough when facing difficulties in learning. ▪ Being focused on work or study.	▪ Creating situations for the learners to find the sources of information.	▪ Facilitating schools to provide conducive learning.
7. Concept	▪ Understanding the basic concepts of entrepreneurship.	▪ Creating a conducive learning environment that allows students to understand the concepts of entrepreneurship.	▪ Facilitating schools to encourage students to understand the concepts of entrepreneurship.
8. Skills	▪ Ability to identify business opportunities. ▪ Ability to make simple analysis of opportunities as well as the risks. ▪ Ability to conceptualise and design (simple) business. ▪ Ability to initiate new activities in groups.	▪ Creating a classroom atmosphere that provides activities leading to the achievement of certain skills.	▪ Encouraging schools to organise entrepreneurial activities.

Source: *Training Materials on Learning Methodology Based on Cultural Values for Competitiveness and Character Shaping of the Nation: Entrepreneurship Education Development*, *2010:50-51*

References

Badan Pusat Statistik (2012). *Katalog 1101001 BPS*. [Statistics Indonesia. 2012. Catalog 1101001 BPS]

Indonesia (2003). Undang-Undang No 20 tahun 2003 tentang Sistem Pendidikan Nasional. Jakarta. ([Indonesia. 2003. Law No. 20 of 2003 on the National Education System). Jakarta)

Indonesia (2009). *Instruksi Presiden No 6 tahun 2009 tentang Pengembangan Ekonomi Kreatif*. Jakarta. (Indonesia. 2009. [Presidential Decree No. 6 of 2009 on the Development of Creative Economics). Jakarta]

Indonesia (2013). *Peraturan Pemerintah Republik Indonesia Nomor 32 Tahun 2013 tentang Perubahan Atas Peraturan Pemerintah Nomor 19 Tahun 2005 tentang Standar Nasional Pendidikan*. Jakarta. [(Indonesia. 2013. [Government Regulation No. 32 of 2013 on the Amendment of Government Regulation No. 19 of 2005 concerning the National Education Standards]. Jakarta)

Pusat Kurikulum (2010). *Bahan Pelatihan Penguatan Metodologi Pembelajaran Berdasarkan Nilai-nilai Budaya untuk Membentuk Daya Saing dan Karakter Bangsa: Pengembangan Pendidikan Kewirausahaan.* Jakarta. (Center for Curriculum and Textbooks. [2010. Training Materials on Learning Methodology Based on Cultural Values for Competitiveness and Character Shaping of the Nation: Entrepreneurship Education Development Guide]. Jakarta)

Pusat Kurikulum (2010). *Desain Satuan Pendidikan rintisan pelaksana Pendidikan Karakter, Kewirausahaan dan Ekonomi Kreatif melalui Pendekatan Belajar Aktif*. Jakarta. (Center for Curriculum and Textbooks. [2010. Design of Pilot Implementation on Character Education, Entrepreneurship, and the Creative Economics through Active Learning Approach]. Jakarta)

Pusat Kurikulum dan Perbukuan (2011). *Naskah Kebijakan Pendidikan Ekonomi Kreatif untuk Pendidikan Dasar dan Menengah*. Jakarta. (Center for Curriculum and Textbooks. [2011. Manuscript of Creative Economics Education Policy for Elementary and Secondary Education]. Jakarta)

Mexico: Financial and Economic Literacy

Antecedents, Implementation and Impact[22]

I. Why was Financial and Economic Literacy Program Started in Mexico?

As a result of the economic crisis of 1995, the Mexican Government initiated its first efforts to create an organism that could promote long-term support mechanisms for the financial system users. Four years later, in April of 1999, the National Commission (Condusef) was founded, under the Protection and Defense of Financial Products and Services Users Act.

Condusef is a public, decentralized organism of the Mexican Public Administration, under the Secretary of the Treasury. Its main task is to provide guidance, to educate, protect, and defend the rights and interests of users of financial products or services. It currently has presence in every state of the economy through 36 local delegations and one virtual office. Condusef strives to achieve equity between financial institutions and users. For the past 14 years, it has assisted more than 7.5 million users, through two main functions:

1) Preventive actions: those of a technical nature, aimed to promote Financial Education and Transparency.

2) Corrective actions: those of a legal nature, aimed to solve controversies or complaints against financial institutions.

Five years later, Condusef gained new attributions through the Law of Transparency that was passed in 2004; the Commission gained the ability to emit official recommendations in order to encourage competition and increase transparency of information, particularly in contracts, bank statements, publicity and

[22] Sara Gutiérrez López Portillo, Chief Executive Officer, National Commission for the Protection and Defense of Users of Financial Services (CONDUSEF)

operation receipts. When the bill was amended in 2009, Condusef became responsible for financial transparency regulation and supervision; this year was also crucial for financial education, as the law dictated the Commission's obligation to develop programs in this matter for the first time. It must be said that this reform was aligned with the 2007-2012 Federal Administration's development plan, in which financial inclusion and education were established as government priorities for the first time. It was also at the beginning of that administration that the General Directorate of Financial Education (GDFE) was created within Condusef. Although there was not an intention at that point to build curricula for schools or specific education programs for niche groups, the GDFE developed the foundations, tools and action plans that would serve as pilots for current and future practices.

In May 2011, Condusef joined its sector peers (the Secretary of the Treasury and 13 other public organisms) in the creation of the National Financial Education Council. Its main task would be to coordinate public and private efforts in the development of Financial Education programs, as recommended by the OECD.

Two main diagnosis tools were also developed: on one side, the National Financial Inclusion Survey (ENIF), which measured the use and practices of formal and informal financial means (primarily savings, credit, insurance and retirement products) within the population; on the other, the Financial Capabilities Survey, developed and implemented by the World Bank.

Both studies suggest that, although there has been significant progress in inclusion and the use of financial products within the population, there is still a broad percentage of Mexicans who are reticent to approach formal financial institutions; when they do, many of them are misinformed or do not necessarily have the financial capabilities to choose the product that is best for them. This translates many times into inefficient practices and the lack of understanding of products that they are acquiring. Low levels of financial education are translated into bad planning and budgeting habits, low percentages in personal savings, and a diminished capacity of the population to demand lower prices and high quality products and services from financial institutions. Taking the above into consideration, the National Development Plan (NDP) under the current administration (2013-2018) establishes that a broader financial education will contribute to consolidate the financial system in Mexico.

Understanding the need to broaden financial inclusion, the Federal Government established strategy 4.2.2 within the sexennial plan “to strengthen the incorporation of financial education in elementary and junior high school programs.” It is important to say that the education reform that was recently passed by Congress will augment school hours, therefore increasing the demand for quality contents.

The NDP also specifies that a gender perspective is needed and will be implemented in order to provide an adequate integration of women into the Mexican financial system.

Lastly, a Financial Reform bill has been sent to Congress by the current administration and is set to be discussed mid August. If the bill is approved, financial institutions will have to collaborate with Condusef in the elaboration of financial education programs. This could significantly strengthen the position of the National Commission as the main policy designer, as it would coordinate stakeholders in the development, distribution and implementation of financial education materials in Mexico.

II. How was Financial and Economic Literacy Program Implemented?

The General Directorate of Financial Education currently has 9 lines of action: the National Financial Education Week, the Ongoing Exhibition, the Services and Products Catalogues and Simulators, Financial Education Guides, Financial Education for Businesses, Online Comparative Charts, Pocket Change Tips Newsletter, the Protect Your Money Magazine and Social Media Financial Tips and Tools.

The following are programs that include, or are directly focused on children within elementary school ages:

<u>The Traveling Exhibition “Finance and Welfare: the cycle of life.”</u>

Although the exhibition is not directly focused on children, it does include certain programs and activities for them. Interactive digital games are used to teach financial literacy, as well as to give facts and tips to promote healthy finances in different stages of life.

The exhibition travels through Mexico, bringing the tools and materials close to the population that it is meant to encompass. It has now visited 8 states, with a reach of over 55,000 people.

The National Financial Education Week

Held every year in October, in different venues of Mexico, this is one of the most relevant events that the Commission hosts. It gathers efforts from both private and public institutions and reaches students from elementary to University level. Up to 5,824 activities have been held in one year, including conferences, plays and contests, among others. Main focus areas include family budget, savings and investment, insurance, pensions and credit.

Guides for Elementary School Teachers

Understanding that well prepared teachers that can transmit both knowledge and capacities, while shifting attitudes and habits, are essential in a financial education program, Condusef developed the guides for elementary school teachers.

These guides are tools to teach basic economic and financial concepts to students. To this date, with the support of the Ministry of Public Education, Condusef has distributed almost 1.7 million copies in more than 99,000 elementary schools (both public and private). The guides have now reached over 14 million children.

Financial Education Family Guides

According to the Financial Capabilities survey developed by the World Bank, most of those who receive an education in personal finances in Mexico do so through a family member, most commonly their parents.

Aware of the previously stated, Condusef developed Financial Education Guides for families, meant to be shared between parents and their children as they learn budgeting, home expenses, basic financial literacy (credit, products, services) and better ways to use them at home. Development of habits such as how to save money and retirement fees are also taught.

As of 2012, 240,000 copies had been distributed through government offices, banks, associations, unions and private companies. In 2013, the need to develop an integral Financial Education Strategy was established; in order to incorporate the diagnostic results from the ENIF and Financial Capabilities Survey, as well as tools that will allow Condusef to measure impact, changes in habits, attitudes and usage of products and services. The general objective of this program reads as follows: "The Mexican Population has healthy personal finances, that allow them to improve their overall quality of life." Four main pillars sustain this objective: access, financial capabilities, information and responsible use of products and services.

In order to accomplish a higher impact and reach, the population of seven subgroups are currently being considered:

1. Children and teenagers: the main goal is to achieve basic financial literacy, as well as to develop positive habits and attitudes towards financial institutions.
2. Youth: population that has a first approach to financial institutions, products and services (opens first savings account; obtains first credit card; first loan; etc.)
3. Financially excluded population: those who do not have access or voluntarily do not use financial products and services.
4. Users with limited information: people who are currently using financial products and/or services, but do not have sufficient/correct information to make efficient decisions.
5. Entrepreneurs.
6. Population near or in the age of retirement.
7. Heads of households (with a gender perspective).

The program would be developed and implemented by the General Directorate of Financial Education, along with other Government agencies (primarily the Secretary of the Treasury, the National Bank Commission (CNBV), the National Pensions Commission (CONSAR) and the Central Bank of Mexico), and financial institutions. The collaboration of citizens and civil society is also meant to be encouraged.

It must be said that this project is still being revised.

III. Output, Outcome and Impact

The actions and programs that have been implemented by the General

Directorate of Financial Education have had a significant growth in the past few years. However, Condusef understands that the next step is to measure real impact and the significance of changes in attitudes, habits and usage of financial and product services that may result in positive alterations of the quality of life of Mexicans.

It is because of this that the development of the National Financial Inclusion Survey (ENIF) was a crucial breakthrough in this matter. Even when the World Bank Survey was a one-time exercise, some of the questions in terms of capabilities and habits will be incorporated into ENIF so that it may serve as a standardized tool too measure real change within the population.

It must be said that other indicators, control groups and short-term mechanisms must be designed within the Financial Education Strategy, in order to acquire more data and allow for modifications in the design and implementation of education programs and public policy.

The United States: Increasing Financial and Economic Literacy in American Households[23]

I. Context of Education on Financial and Economic Literacy in the United States

1.1 The assumptions underpinning the initiation of financial and economic literacy programs

There has been a plethora of studies on varied aspects of financial and economic literacy conducted by various organizations in the United States. For instance, the "Financial Capability in the United States" study commissioned by the Financial Industry Regulatory Agency (FINRA) Foundation show that many individuals in the United States are uninformed and not properly prepared to make informed and sound decisions regarding saving, credit, budgeting, risk management, business transactions, and the use of financial products and services. Based on these studies, policymakers, financial educators, including the Financial Literacy and Education Commission (FLEC), the President's Advisory Council on Financial Literacy, and the President's Advisory Council on Financial Capability, and other government agencies found that financial knowledge of individuals in American households, especially low and moderate income households, was limited and not to the level where many individuals could make informed and sound financial decisions. Additional studies focusing on the U.S. and other countries revealed:

- ✧ Financial literacy is very low in many parts of the world.
- ✧ Changes in markets have apparently not brought enhancements in financial

[23] Theodore Daniels, President and Founder, Society for Financial Education and Professional Development, The United States; Laura Levine contributed to the report and she is President and CEO, Jump$tart Coalition for Personal Financial Literacy.

knowledge, suggesting that people's knowledge might be limited to what they learn from their own financial experiences.

- ✧ There are important gender and age differences in financial knowledge that are common across countries.
- ✧ There are low levels of financial knowledge in older populations.
- ✧ Most workers, including older ones, have not planned or even thought much about retirement.

1.2 Relationship of Financial and Economic Literacy and Education Reform

Financial and economic literacy go hand-in-hand with education reform. In fact, one of the themes recommended by the President's Advisory Council on Financial Literacy is that *financial education should take its rightful place in American schools*. The components of a financial and economic literacy curriculum are either taught independently or integrated into existing courses such as mathematics, reading, social studies, etc. Meanwhile, 19 States require a course in personal finance, 24 States require a high school course in economics, and 23 states out of 50 in the U.S. require financial or economic education for secondary schools.

II. Implementation Processes of Financial and Economic Literacy Programs

2.1 Policy/Program Development Process

The development of the financial and economic literacy programs in the U.S. is based, in large measure, on studies and surveys of the economy's population. Typically, the "Financial Literacy Index By State" developed by the Financial Literacy Center— a joint center of the Rand Corporation, Dartmouth College, and The Wharton School—reflects the financial literacy of each State's population. Such information enabled the U.S. government along with other entities to direct appropriate resources to meet the needs of the general population or targeted population. Some efforts have been initiated on the Federal level, such as:

- ✧ In 2003, under the Fair and Accurate Credit Transactions Act of 2003, the Congress established *the Financial Literacy and Education Commission* (FLEC) that is made up of the heads of 20 Federal agencies. The Commission developed a national strategy for financial literacy.

- The Department of the Treasury, in conjunction with the FLEC's *Core Financial Competencies Subcommittee*, identified five core concept areas: (1) Earning, (2) Spending, (3) Saving, (4) Borrowing, and (5) Protecting against risk.
- *The President's Advisory Council on Financial Literacy* was created by Executive Order and signed by President George W. Bush on January 22, 2008. The responsibility of the Council to provide recommendations on how to improve financial literacy among all Americans. The Council launched the first-ever *National Financial Literacy Challenge*.
- *The President's Advisory Council on Financial Capability* was established by Executive Order 13530 and signed by President Barack Obama on January 29, 2010, to assist the American people in understanding financial matters and making informed financial decisions. The Council launched moneyasyougrow.org, a tool designed to help parents have age appropriate money discussions with their children and moneyasyoulearn.org, as tool to help educators incorporate money lessons into the Common Core State Standards of math and English Language Arts.

2.2 Key Players and Their Respective Roles

Financial and economic literacy programs and initiatives involve:

- The Federal Government
- The State, County, and City Governments
- Financial Institutions
- Non-Profit Sector
- Private Sector
- Colleges and Universities
- High and middle schools

Financial institutions, largely through their foundations, have provided financial and in-kind support to non-profit organizations to develop and implement financial education programs. State, County and City Governments have developed financial programs and initiatives for their populations. The Federal government departments and agencies have created financial education and consumer protection publications for distribution to the general population. A few colleges and universities have established financial education programs for their student bodies. Lastly, some State legislative bodies have passed laws to strengthen the State's financial and economic education requirements to include minimum courses in personal finance and/or economics.

2.3 Sources of Funds and Approaches to Use the Resources

Financial and economic literacy programs and initiatives, as well as the resources that make these programs possible, exist on many levels:

✧ There are State financial and economic literacy programs and initiatives developed and managed by State Treasurer Offices in many States of the U.S.

✧ On the local level, a good example is the Conference of Mayors, which provides *Dollarwise* grants to cities to support financial literacy programs. Some of the programs are developed for the general public, specific minority groups, and youth.

✧ Major, regional and small banks have financial literacy programs and support financial literacy programs that are developed and implemented by non-profit organizations. The member banks of the American Bankers Association (ABA) provide financial education programs in their local communities.

✧ There are a number of public and private foundations that provide grants to non-profit organizations to develop and implement financial and economic literacy programs. Some address the needs of a specific demographic or socio-economic level.

2.4 Scope of the Program

Financial education programs are presented to students from kindergarten through high school across the U.S.; to all students in States that require such training and to a varying number of students in the States that have no requirement. As such, the exact number of students involved is not readily available for this report. In the U.S., the purpose of the financial and economic literacy programs and initiatives is essentially to increase the financial knowledge and skills of the population. It is assumed that the accomplishment of this goal will enhance the well-being or financial sustainability of individuals and families, thus leading to a more efficient and stable economy.

At the elementary school level, basic concepts about how money works and why it's important to save are introduced through stories, videos, songs, games, and activities. Financial education resources are readily available for students beginning at preschool age. For middle grades (beginning around third or fourth grade, up through the start of high school), financial education becomes more complex, introducing real-world concepts such as budgeting, income, entrepreneurship, and investing. Middle grade programs are engaging and interactive, such as Junior Achievement's Finance Park, a physical simulation where students can apply what they've learned in a model community, following 20 hours of classroom instruction. High school courses are designed to prepare students for their lives as adult consumers. High school programs are the most comprehensive and the most varied. Personal finance may be offered as a standalone course or may be integrated into other subjects, such as economics, consumer science, math, social studies, or business.

2.5 Curriculum Development

In the U.S., education requirements—for all education, not just financial education—are generally set at the state, county or school district level. There are very few requirements set at the federal level and the requirements and standards vary, sometimes significantly, from one area to the next. Therefore, no universal or national financial education curriculum has been established.

The National Standards in K-12 Personal Finance Education, published by the Jump$tart Coalition and distributed through the Federal Citizen Information Center at publications.usa.gov are voluntary standards. Many states, especially those that have adopted financial education requirements, used these standards as the basis for creating their own state standards or curriculum.

Many schools in the U.S. have utilized the plethora of financial education curricula, programs and tools developed by non-profit organizations, government agencies, and corporate entities; many of which are provided to schools at no cost. Some states, such as Texas, have established a list of approved resources from private sector providers. One reason for the variety of curricula is that personal finance is a stand-alone course in some U.S. high schools, but is incorporated into other subjects at other schools.

2.6 Challenges Ahead

Among the major barriers to implement financial and economic literacy programs are the availability of financial resources and passage of State and local laws to create new and innovative programs that effectively provides financial literacy programs to the general population. Considering the growth in computer-based financial education, schools must find and devote resources to technology support and infrastructure in order to fully utilize the programs that are available to them. Additionally, research conducted by the University of Wisconsin showed that many teachers do not feel adequately competent or confident in teaching personal finance topics; underscoring the need for increased and improved teacher training and support.

III. Output, Outcome and Impact

3.1 Output

Based on the statistics from various organizations and agencies involved, millions of people have been reached through the literacy and economic programs provided.

3.2 Outcome

According to Financial Industry Regulatory Authority (FINRA)'s latest State-by-State Financial Capability Survey, many Americans continue to struggle to make ends meet, plan ahead and make sound financial decisions—and, unfortunately, financial literacy levels remain low, especially among youngest workers. However, the level of financial and economic literacy is slightly higher than it was in 2009 based on last Survey on Financial Literacy Capability done by the FINRA Foundation. The survey, which had more than 25,000 respondents, was developed in consultation with the U.S. Department of the Treasury, other federal agencies and the President's Advisory Council on Financial Capability. The five measures of financial capability used to rank the states measure how well Americans are managing their day-to-day finances and saving for the future. The national averages among survey respondents for these key measures are below.

- ✧ Fewer than half (41 percent) of Americans surveyed reported spending less than their income.
- ✧ Over a quarter (26 percent) of Americans reported having unpaid medical bills.
- ✧ More than half of Americans (56 percent) do not have rainy-day savings to cover three months of unanticipated financial emergencies.
- ✧ Over a third of Americans (34 percent) reported paying only the minimum credit card payment during the past year.
- ✧ On a test of five basic financial literacy questions, the national average was 2.88 correct answers.

3.3 Impact

Over time, it is anticipated that financial and economic programs and initiatives will enable individuals and households to make informed and sound financial decisions at all socio-economic levels.

IV. Conclusions: Lessons and Potential for Replication

The goal of financial and economic literacy programs should be clearly defined. After the goal has been established, financial and economic literacy programs and initiatives should include a demonstrated commitment and collaborative effort at all levels of the society, such as government (executive and legislative bodies), private and non-profit sectors, educational institutions, and professional associations. The commitment and efforts made by each entity would ensure achievement of the goal and enable individuals and families to maintain financial sustainability or financial well-being.

The development of a financial and economic literacy program should be supported by research, which includes studies and surveys of the population. This will enable the government along with other entities to direct appropriate resources to meet the needs of the general population or targeted population.

About the Contributors

Wang Yan is senior specialist and coordinator of international programs at the National Institute of Education Sciences of China. Her research areas cover education policy, education reform, social studies of education, international studies, comparative education and research methodology. In cooperation with international organization, government agencies and research institutions, she has designed and implemented more than 30 qualitative and quantitative research projects on various education topics, among others. She has authored, co-authored and edited numerous articles, reports, journal and books, including 12 journal articles, and she is editor of the book *Education Policy Reform Trends in G20 Members*. In her prior role, she was consultant at the World Bank and curriculum specialist and coordinator of international programs at Beijing Education Research Institute. She holds a Ph.D. in Education Policy, Administration and Social Studies from the University of Hong Kong.

Annamaria Lusardi is the Denit Trust Distinguished Scholar and Professor of Economics and Accountancy at the George Washington University School of Business. Previously, she was the Joel Z. and Susan Hyatt Professor of Economics at Dartmouth College, where she taught for twenty years. Dr. Lusardi has also taught at Princeton University, the University of Chicago Harris School of Public Policy, the University of Chicago Booth School of Business, and Columbia Business School. From January to June 2008, she was a visiting scholar at Harvard Business School. Moreover, she is the Academic Director of the GW Global Financial Literacy Excellence Center, and the Director of the Financial Literacy Center, a joint Center with Dartmouth College, the Rand Corporation, and the Wharton School. Dr. Lusardi has won numerous research awards. Among them is a research fellowship from the University of Chicago Harris School of Public Policy, a faculty fellowship from the John M. Olin Foundation, a junior and senior faculty fellowship from Dartmouth College, the William E. Odom Visionary Leadership Award from the Jump$tart Coalition, and the National Numeracy Network's inaugural 2012 Steen Award. She was also the recipient of the Fidelity Pyramid Prize, an award to authors of published applied research that best helps address the goal of improving lifelong financial well-being for Americans.

Alodia Santos is an advocate of education. Currently, she is the Head of Programmes at Aflatoun, Child Savings International, an INGO that promotes social and financial education for children and youth through a network of partner organizations in over 100 countries. Ms. Santos has 15 years of experience in development programme management and leadership related to socio-economic development, specifically in the fields of life skills, financial education, gender, children and youth, sexual and reproductive health, and health micro-insurance. She has co-authored the UNICEF Companion Module on Child Social and Financial Education for the Child Friendly Schools project, and is leading its pilot projects in four different countries. She has also spearheaded the development of various curricula on social and financial education for early childhood, basic education and youth, and conducted the relevant master trainings for its implementation. Through partnerships, she has engaged with various players in the field of financial education, namely Child and Youth Finance, the OECD, UNICEF, BRAC, World Vision, Plan International, Child fund, Mercy Corps, Mastercard Foundation, Microfinance opportunities, and various government stakeholders and NGOs. She holds a BA in Journalism from the University of the Philippines and an MA in Development Studies (Population, Poverty and Social Development) from the Institute of Social Studies in the Hague, the Netherlands.

Jennifer M. Quick is currently the Curriculum Manager for Business and Economics at the Victorian Curriculum and Assessment Authority (VCAA). Prior to this she worked as a senior curriculum consultant for the Victorian Department of Education and Early Childhood Development in regional Victoria, Australia, supporting primary and secondary schools and was a secondary school teacher for 19 years. Jennifer has a background in business and economics education with extensive experience in developing and implementing consumer and financial literacy education across Victoria and Australia. She led the development of the Victorian curriculum for a range of business studies subjects across Years 5-12 and was a lead writer in the development and writing of the Australian Curriculum: Economics and Business. Ms. Quick is a founding member of the Australian National Reference Group: Consumer and Financial Literacy and was a member of the Working Party to develop, and review, the Australian National Consumer and Financial Literacy Framework. She was a major contributor to the development of the education priority of the Australian National Financial Literacy Strategy and is currently managing the implementation of the Australian Securities and Investments Commission (ASIC) MoneySmart Teaching Project in Victoria.

Jared Penner has been involved in youth financial services, educational programming and workforce development for the past eight years, directly managing projects in Mozambique, Zambia, Egypt and Afghanistan. He has worked with USAID, CIDA and European Commission projects and has managed international working groups on integrated financial and educational services. He currently works at Child and Youth Finance International where he heads the Education Division, promoting quality standards in financial, social and livelihoods education throughout the global network of education authorities and youth serving organizations. He has coordinated numerous stakeholder meetings, workshops and conference sessions on curriculum development, teacher training and educational standard setting for both formal and non-formal learning environments. Mr. Penner has worked with the European Commission on integrating financial and entrepreneurship education into the European Qualifications and Skills Framework and has consulted on the importance of financial education in 21st Century functional literacy skills under the UNESCO Education for All Framework. He has authored the *CYFI Guide to Economic Citizenship Education* and coordinated the publication of CYFI's annual publication on the state of the Child and Youth Finance Movement. Jared has consulted on national financial education strategies for children and youth in Zambia, Malawi, Nigeria, Papua New Guinea and Colombia. He holds a BA in Global Political Economy from the University of Manitoba and an MA in Political Science and Development Studies from Carleton University in Ottawa.

Gary Rabbior has served as president of Canadian Foundation for Economic Education (CFEE) since 1981. In that capacity he has been working to improve economic and financial capability so that Canadian citizens are better equipped to undertake their economic decisions and actions with confidence and competence. Mr. Rabbior's contributions have included developing a consensus guideline for economic and financial capability as well as a national survey of economic and financial capability. Gary has developed school curricula, developed a wide variety of learning resources, and pursued opportunities to advocate on behalf of the need to improve economic and financial capability in Canada. His current projects include a variety of efforts, in collaboration with ministries and departments of education, to improve economics and financial education in Canadian schools. Gary has authored numerous publications including *Money and Youth* with over 360,000 copies in circulation. He has served as a Director, Adviser, or Consultant to the Canadian Chamber of Commerce, the Canadian Bankers Association, the federal Department of Human Resources and Skills Development, the Toronto Association of Business Economists, and Child and Youth Finance International. Mr. Rabbior was awarded the "Consumer Educator of the Year Award" by the Ontario Ministry of Consumer and Commercial Relations. He was also awarded the Outstanding Teacher Award by the University of Waterloo. Mr. Rabbior was recently appointed by Canada's federal government to the 15 member National Steering Committee to help develop a strategy for improving financial literacy in Canada.

Theodore R. Daniels is the founder and president of the Society for Financial Education and Professional Development, Inc. (SFEPD). Under his leadership the SFEPD has become one of the leading financial literacy and professional development organizations in the United States. On 3 December 2009, the Federal Deposit Insurance Corporation awarded the SFEPD the Chairman's Award for Excellence and Innovation in Financial Education. The U.S. Department of the Treasury's Office of Financial Education has recognized SFEPD seminars for meeting their criteria for effective financial education programs. Recently, Mr. Daniels delivered a keynote address on the United States financial and economic literacy programs and initiatives at the Asia-Pacific Economic Cooperation's (APEC) Forum in Beijing, China. In April 2014, he received the coveted William E. Odom Visionary

Leadership Award for his outstanding leadership in advancing the financial literacy of students in the United States. In 2008, Mr. Daniels was appointed by President George W. Bush to serve on the President's Advisory Council on Financial Literacy. He continued to serve in this role under President Barack Obama through January 2010. Mr. Daniels has served as a member of the Board of Directors of the Certified Financial Planners Board of Standards. The impact of his advocacy of financial literacy was extended to include adolescents in 60 countries when he was selected by the U.S. Department of Education to participate in an unprecedented effort to incorporate financial literacy into the Program for International Student Assessment (PISA). Mr. Daniels has a Bachelor of Science degree in Business Administration with a concentration in Economics and Accounting from Fort Valley State University and a Bachelor of Laws degree from John Marshall Law School.

Chiara Monticone is a Policy Analyst in the OECD Financial Education unit. She works on various aspects of the of work undertaken by the OECD International Network on Financial Education, including gender issues in financial education and measuring the financial literacy of adults and young people (such as the PISA financial literacy assessment of students). Previously, Ms. Monticone was a researcher at the Center for Research on Pensions and Welfare Policies (CeRP) at Collegio Carlo Alberto, Italy. She has conducted empirical research on social security, household finances and financial literacy. Ms. Monticone holds a PhD in Economics from the University of Torino with a thesis on financial literacy.

Gao Zhenyu is a senior lecturer in Curriculum and Pedagogy at the Hangzhou Normal University School of Education. He received his Master and Doctoral degree in Curriculum and Pedagogy respectively from the University of Macau and East China Normal University, and visited the University of Alberta School of Education from 2010 to 2012. His research has been in the areas of Curriculum Studies, Teacher Education and Professional Development, School Improvement, Philosophy with Children, and the History of Children and Childhood. He is the coauthor of the book *Philosophy with Children: Theory into Practice*, the book chapter *Curriculum Studies in China: Retrospect and Prospect* in the *International Handbook of Curriculum*

Research (Second Edition), and more than 20 peer-reviewed journal articles both in English and Chinese. He has also translated several books and articles on school leadership and educational change such as *Learning from Lincoln: Leadership practices for school success,* and *Professional capital : Transforming teaching in every school*. Dr. Gao is now a member of the International Association for the Advancement of Curriculum Studies (IAACS) and works with international scholars Professor William F. Pinar and Professor Hua Zhang to promote the globalization of curriculum studies. Collaborating with major NGOs in the field of financial education, such as Junior Achievement China, the Shanghai Better Education Development Center and Aflatoun Educational Center, Dr. Gao has recently been involved in curriculum development, volunteer training and program evaluation for the improvement of financial literacy among Chinese children and youth.

Apriyanti Wulandari is a curriculum researcher of the Center for Curriculum and Textbooks, National Office of Education Research and Development, Ministry of Education and Culture of the Republic of Indonesia. Her background in Accounting helps her in developing curriculum models integrating economics content. Ms. Wulandari conducts research, and teacher training, develops curricula models and learning materials, and contributes to the economics curriculum for Senior High School. She has been a contributor to the development of curriculum models for special services education with the low socio-economic (2007), curriculum models for women's empowerment-based entrepreneurship in rural areas (2010), non-formal education curriculum research (2012), and the development module of “Noken Papua” for local content (2013). In 2010, she was a project leader of implementing character education, entrepreneurship education, and creative economics through active learning. The project implementation was extended till 2013. Since 2012, Ms. Wulandari has been working in the capacity as a district coordinator of Pontianak City, in West Kalimantan Province. Currently, she is involved in developing policy papers for non-formal education, developing literacy curriculum models for economic empowerment, and making progress completing her thesis on Research and Evaluation of Education at *Universitas Negeri Jakarta* (UNJ).

Sara Gutiérrez López Portillo, Bachelor in Industrial Relations, specialized in Organizational Development, has been working in the financial sector in different positions at numerous institutions. She has acted as a Senior Consultant for financial projects and since 1999, she has been actively participating in the Mexican governmental organization Condusef (The National Commission for the Protection and Defense of Users of Financial Services), which ventures to promote financial education, encouraging the creation of tools to improve personal and family assets. Ms. Gutiérrez López Portillo has been active designing systems that provide all kinds of information about financial institutions, and has been responsible for statistics and research, as well as, the implementation of the Mexico's ISO quality standards for financial products and services. She is, Condusef's international representative at meetings and events of the G20, APEC, World Bank, OECD, CGAP (The Consultative Group to Assist the Poor) and ASBA (The Association of Supervisors of Banks of the Americas). In 2010 she was promoted to be the Financial Development, Statistics and Operations Chief Executive Officer, in which position she has been acknowledged by the Secretariat of Finance and Public Credit, the Mexican Ministry of Finance, and *InformationWeek M*exico weekly magazine.

APEC Project: HRD 06 2012A

Produced by

Project Overseer
LUO Ping
APEC Project of Education on Financial and Economic Literacy
Director
Division of International Organization
Department of International Cooperation and Exchange
Ministry of Education of the People's Republic of China

Edited by
WANG Yan
National Institute of Education Sciences of China
Tel: +86 10 62003844
Fax: +86 10 62003844
Email: wangy@nies.net.cn; ywang08@live.com

For
Asia-Pacific Economic Cooperation Secretariat
35 Heng Mui Keng Terrace
Singapore 119616
Tel: (65) 68919 600
Fax: (65) 68919 690
Email: info@apec.org
Website: www.apec.org

APEC#214-HR-03.1
ISBN number: 978-981-09-2617-5