

Skills for Kids

Prathima Rodrigues

Badamjav Batsukh

Sunil Mathew

Sapruddin Perwira

May 2009



Acknowledgements

The team is indebted to the Tokyo Foundation and the Joint Initiatives Program (JIP) for continued support of Skills for Kids.

Team

Skills for Kids is a youth initiative founded by Prathima Rodrigues, a Sasakawa Young Leaders Fellow and her team - Badamjav Batsukh (Sasakawa Young Leaders Fellow), Sunil Mathew and Saprudin Perwira (Sasakawa Young Leaders Fellow). The team comes from a diverse set of backgrounds with a common objective of collaboratively applying their talents to create meaningful and substantial impact in the field of skills building and youth development.

Prathima Rodrigues

Ms. Prathima Rodrigues works with the World Bank, Europe and Central Asia region. Ms. Rodrigues has a number of years of experience working with children and youth. She is particularly interested in the field of youth skills building through the use of media, technology, mentorship and the arts. She has worked for several multilateral organizations and international NGO's on youth, education and technology issues. Ms. Rodrigues completed her graduate studies in public policy at Columbia University in 2006. At Columbia University, she was awarded the Sasakawa Young Leaders Fellowship by the Tokyo Foundation and it was at this time that she initiated the Skills for Kids program. Ms. Rodrigues is from the southern city of Mangalore in India and is based out of Washington D.C.

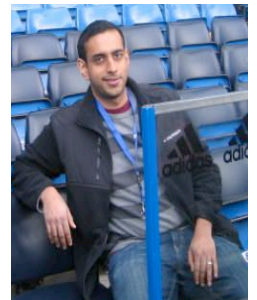


Badamjav Batsukh

Ms. Badamjav Batsukh serves as an Officer in the Department of Primary and Secondary Education at the Ministry of Education, Culture and Science, Mongolia. She holds a B.A. degree from the Pedagogical College, Ulaanbaatar. She graduated from Institute of Administration, Management Development in 1998 with an educational manager diploma. Her previous experience includes working with the Mongolian Youth Federation where she has played key roles in implementing projects at both the international and the national level. Ms. Badamjav Batsukh also holds a MPA from Academy of Management of Mongolia and a Master Degree (in Educational Administration) from Osaka University, Japan. Ms. Batsukh is a native of Mongolia.

Sunil Mathew

Mr. Sunil Mathew is a Senior Software Engineer at Opnet Technologies, Maryland, USA. In this capacity, he works on providing solutions for managing networks and network applications. Mr. Mathew has seven years of international management and technical experience in the networking field. He is interested in combining his technology expertise with entrepreneurship education to create a sustainable business model for entrepreneurship in emerging economies. He holds a Masters degree in computer science from North Carolina State University and a Bachelors degree in computer engineering from the Regional Engineering College, Surathkal, India. Mr. Mathew is from the city of Cochin in India.



Saprudin Perwira

Mr. Saprudin Perwira is a Deputy Program Director for Nagan Raya Maternal and Child Health program, a post tsunami response program in Aceh Province, Indonesia being implemented by Project HOPE. Previously, Mr. Saprudin was a researcher with the Demographic Institute, University of Indonesia, Jakarta where he was involved with various aspects of demographic research. His interests are in the areas of labor, education and reproductive health. He holds a Master degree in population science from the University of Indonesia and a B.A. from Bogor Agricultural Institute in social and economics science. Mr. Perwira is a native of Indonesia.

Table of Contents

Abstract	4
Introduction	5
The Project	7
Identification of target group	7
Methodology and Pedagogy	7
Skills Building Pyramid.....	8
Content of the Curriculum	8
Curriculum Development.....	9
Results	10
Analysis	12
Monitoring and Evaluation Framework	12
<i>Main Outputs and Output Indicators</i>	12
<i>Main Outcomes</i>	12
<i>Measurement Instruments</i>	13
Conclusion and Next Steps	14
Bibliography	15

Abstract

Education is one of the most critical instruments necessary to create sustainable growth in developing countries. A properly educated population has the potential to grow into a highly productive adult labour force that possesses the capability and impetus to contribute to a robust economy. Many developing countries rightly foster programs that promote basic education in schools, but often, the importance of practical life skills and entrepreneurial concepts is ignored. Significant anecdotal and empirical evidence shows that curricula that combine these practical skills with theoretical knowledge allow for a substantial increase in the employability of a young population. Furthermore, employers are increasingly cognizant of the importance of life skills in a globalized environment and employees who possess these skills often possess an edge over the job competition. The principle objective of the Joint Social Action Project was to address these issues by creating a versatile and easy-to-implement curriculum that taught practical life skills, based on concepts of entrepreneurship, to middle school children. The team found that children within this age group were ideal beneficiaries - they were old enough to assimilate these concepts with minimal supervision and young enough to carry this learning through high school and as young adults.

After a year of research and surveys of existing curriculum that addressed similar issues, the team created Skills for Kids - a nine-lesson curriculum that taught life skills, such as healthy eating and effective communication, as well as entrepreneurial concepts, such as opportunity recognition, supply and demand. The pedagogical tools used in the curriculum are essentially interactive and experiential, and combine various teaching methods and artefacts. The curriculum consists of approximately 20 hours of instruction and is versatile enough to be broken down and taught over a semester or taught over a period of 2 days (using a workshop style format). The curriculum can also be easily tailored to younger or older children; in its present form it targets 13-15 year olds.

To validate and strengthen the curriculum it was piloted in two target countries - Mongolia and India. Feedback from advisory boards (advisory boards were formed in both countries) consisting of education experts, development specialists and students strongly established the demand, necessity and applicability of the curriculum. The curriculum is currently being implemented in the Philippines. The team plans to continue to work on the modules and create a strong indicator framework to evaluate subsequent pilots.

Introduction

Education is central to development and can lay a foundation for sustained economic growth in a developing country. In recent years, the promotion of entrepreneurship education as a possible source of job creation, empowerment and economic dynamism in a rapidly globalizing world has attracted immense attention.

Though the concept of youth entrepreneurship is not alien to the developed world, there is not much evidence of this in developing economies. In the developing world, society tends to perpetuate the notion that entrepreneurship is risky and impractical. However, evidence exists to support the view that students coming out of such a system are not only more productive and self-sufficient but also contribute to their community's social and economic development. If introduced at an early age or a pre-entrepreneur stage, a targeted curriculum, pedagogy and faculty can catalyze the development of an entrepreneurial mindset in children and school curricula should, therefore, be supplemented with lessons that foster entrepreneurial skills.

The current quality of education in developing economies leaves much to be desired. The focus is primarily on theoretical lessons that use rote-learning¹ methodologies and do not actively encourage students to think on their own and apply complex concepts. Therefore the significance of education as a tool for personal development is severely hampered. Moreover, in most developing economies, there are issues of large-scale dropouts among school children, especially at the secondary level; reasons being the heavy opportunity cost of attending school and the lack of understanding of the long-term benefits of education both of which ultimately result in the creation of a large unproductive labour force. If children were encouraged to stay in school through incentives in education itself supplemented with financial and other incentives, parents and children would be more willing to bear the opportunity cost of enrolment.

Entrepreneurship and life skills education is able to address some of the deficiencies in the existing education system. Firstly, the development of these skills increases the supply of future entrepreneurs in the country. A venture support system based on entrepreneurship education designed to stimulate and facilitate entrepreneurial activities, could result

in a lower unemployment rate (McMullan & Long, 1987), increased establishment of new companies, and fewer failures of existing businesses (Hatten & Ruhland, 1995; Ronstadt, 1985; Hansemark, 1998).

Given the rising unemployment levels in most countries, the development of knowledge and skills in venture creation could prepare students for life out of school. Furthermore, the application of entrepreneurial competencies to daily life empowers students and enhances their social and life skills.



Figure 1: Pilot Workshop in Bangalore, India. Students discussing budget allocations for their business

¹ Rote Learning is a learning technique that avoids understanding of a subject and instead focuses on memorization. It is widely used in the mastery of foundational knowledge (such as multiplication tables) but is considered an ineffective tool in mastering any complex subjects or subjects that require application



The JIP team's perception of the problem was based on the following points:

- a) Though there have been numerous entrepreneurship initiatives in developing countries ranging from vocational education to micro-enterprise, not all of these have been successful. The tendency has been to introduce concepts of youth enterprise to a highly unprepared clientele.
- b) Teaching and learning in developing economies is based on a system of rote learning and memorization. This does not actively encourage students to apply learning independently and take on responsibility; traits that form the core of developing an entrepreneurial mindset.
- c) Families incur significant direct and opportunity costs when it comes to education and therefore desire a quick return on this investment. This translates into a need for specialized job skills.

The project's objectives were achieved in several phases. In the first phase, the curriculum was created, refined and publicized. The curriculum was developed with extensive research on innovative teaching methods and curricula as well as discussions with educational experts and development specialists. The second phase of the project involved pilot implementations of the curriculum in target countries - Ulaanbaatar, Mongolia and Bangalore, India. Before each workshop, an advisory panel of education experts and other stakeholders was convened locally and the curriculum was presented and discussed. Based on this feedback, appropriate modifications were made to the curriculum.

The Project

The aim of the project was to devise an interactive, ready-to-use, customizable curriculum. In so doing the team faced three critical challenges: (i) identification of the target group, (ii) identification of an appropriate teaching methodology or a combination of methodologies and (iii) content of the curriculum. To address these challenges, the



Figure 2: Learning about healthy eating. Pilot Workshop, Mongolia

team's first step was to conduct extensive literature research, interview experts and study the mechanisms involved in providing entrepreneurship education. This feedback was used to understand these challenges and find solutions to address them as explained in the following paragraphs.

Identification of target group

It was crucial for the research team to identify the ideal age group that this curriculum should target. Literature suggested childhood and adolescence as being the ideal stage to acquire basic knowledge about entrepreneurship and to foster a positive attitude towards entrepreneurship (Filion 1994; Gasse 1985). Studies also recommended that entrepreneurial potential should be identified and evaluated at the secondary school level, when the possibility of self-employment as a career option is still open. Based on these findings, the team decided to implement the curriculum with middle school students.

Methodology and Pedagogy

It has been argued quite consistently that formal education in general does not encourage entrepreneurship. It prepares students for the corporate domain (Timmons 1994), promotes a 'take-a-job' mentality (Kourilsky 1995) and suppresses creativity. To promote entrepreneurship, specialized courses are becoming increasingly popular in tertiary institutions (Solomon & Fernald, 1991) and enterprise education is being used to foster entrepreneurial behaviour. Most of this is being done at the tertiary or upper secondary (and higher) levels and there still remains the need to encourage teamwork, lateral thinking, and reflective learning in lower grades.

Researchers indicate that using learning style preferences that include active experimentation, balanced with concrete experience and abstract conceptualization can enhance entrepreneurial propensity. The use of behavioural simulations has also been effective in teaching entrepreneurship. Entrepreneurship education should include skill-building components such as negotiation, leadership and creative thinking, exposure to technological innovation and new product development. Entrepreneurship programs should also teach skills in detecting and exploiting business opportunities, as well as incorporate detailed and long-term business planning.

In order to bring these concepts to children between the ages of 13 and 15, the team looked into interactive and self-enabling methods of instruction. Experiential Learning Cycles (ELCs) proved to be versatile enough to include all the elements that the team was looking to incorporate into the curriculum. Specifically, they are distinct from other models of learning, such as behavioural models or social learning models, in two notable ways:



Figure :
Kids log
Mongoli
Skills for Kids
Хүүхэд - Ур Чадв
बच्चों के लिए जीवन कौ
www.entrepreneurshipforkids

1. Experiential Learning Cycles treat the learner's subjective experience to be of critical importance in the learning process.
2. Experiential Learning Cycles propose an iterative series of processes that interlace learning and application.

Experiential Learning Cycles are commonly used to help structure experience-based training and education programs, which is one of the reasons why we found them particularly useful. Each lesson in our curriculum has been constructed using concepts from this model and involves activities of short durations to reinforce learning objectives.

Skills Building Pyramid

The curriculum modules are designed, based on a unique Skills Building Pyramid model (see Figure 4), to simultaneously develop tangible economic skills and useful behavioural traits. This bi-channel approach ensures that learning happens on two levels and equips children with both entrepreneurial skills and life skills. Traits and skills learned can apply to various scenarios both inside and outside the classroom. The child improves his/her economic literacy and learns to look at problems as opportunities.

Figure 4 is a graphical representation of the two main streams of teaching upon which the design of the curriculum modules is based. The stream on the left focuses on cognitive skills (mental skills that are used in the process of acquiring knowledge; these skills include reasoning, perception, and intuition) and the stream on the right

focuses on non-cognitive behaviours and traits (non-cognitive skills encompass a wide array of individual traits which are mainly behavioural in nature and do not directly reflect technical knowledge) - both streams being essential, especially for first time job seekers. The curriculum is sufficiently versatile, so that it can be adapted or modified by teachers teaching any grade or by vocational education institutes and can be effective in any geographical region.



Figure 4: Skills Building Pyramid

Content of the Curriculum

The activities in the curriculum can be broadly categorized as developing a) Life Skills b) Entrepreneurial skills.

a) **Life Skills:** The World Health Organization defines life skills as abilities for adaptive and positive behaviour that enable individuals to deal effectively with the demands and challenges of everyday life. There is no definitive list of these skills and the choice of skills that you want to teach would depend on the local environment and scope of the topic. For example, decision-making may feature strongly in HIV/AIDS prevention whereas conflict management may be more prominent in a peace education program. UNICEF, UNESCO and WHO list the ten core life skill strategies and techniques as: problem solving, critical thinking, effective communication skills, decision-making, creative thinking, interpersonal relationship skills, self-awareness building skills, empathy, and coping with stress and emotions. Many of these skills are covered within the Skills for Kids curriculum; Communication and Healthy Eating are examples of lessons in the curriculum that teach life skills.

b) **Entrepreneurial Skills:** The traditional definition of entrepreneurial skills defines this category as skills related to identifying business opportunities and receiving a sustainable income from these opportunities. Entrepreneurship encompasses a large group of related traits and abilities, which, some experts argue, cannot be taught in classrooms. Although there is much debate on whether entrepreneurship can be taught and how this could be done, there is general consensus on the fact that curricula that teaches entrepreneurial traits such as prioritization, decision-making, time management, risk taking etc give students the ability to apply what they have learnt to real life problems.

Furthermore, a large number of these skills can be nurtured through proper education and coaching. The following lessons in the curriculum cover entrepreneurial skills: a) Opportunity recognition b) Supply and demand c) Market Analysis d) Running my Business e) Production and sale

As these concepts in their completeness are too complex for middle school children to comprehend, the team spent a year constructing activities that would allow these multi-faceted subjects to be broken down into simple and intuitive lessons that could be understood by these children. Furthermore, the team ensured that the examples and activities in the lessons referred to phenomena that children could relate to. (In India for example, we used examples from cricket and Hindi cinema).

The curriculum, in its current form, is targeted at 13-15 years old children. It can be simplified or enhanced for varying age groups. The scope of the curriculum can also be extended - new modules focused on other life skills and entrepreneurial skills could be developed. The team also encourages facilitators to use their own teaching styles and teaching artefacts.

Curriculum Development

The development of the curriculum involved a review of existing literature on the benefits of entrepreneurial education and a study of existing entrepreneurship curricula. Numerous development specialists at the World Bank and other organizations and education experts were consulted throughout the development process in an attempt to create a feedback mechanism to continuously improve the curriculum and perfect the flow of the lessons.

Pilot implementations of the curriculum were conducted in Mongolia and India. An integral part of both pilots was the extensive involvement of local development specialists and education experts - advisory boards were formed in both cities prior to the workshops and the team met for one day with the advisory board. These advisory boards helped the team to:

a) Receive critical feedback to improve the curriculum and customize it to the local context

b) Increase the credibility of the curriculum

c) Form relationships with non-profit organizations and schools to allow for the project to be scaled-up or incorporated by teachers in their classes



Figure 5: January 2009: Advisory Board Meeting, Bangalore, India

Results

Under the Joint Initiatives Program (JIP), the Skills for Kids team achieved the following results/products:

1. Teacher or Facilitator Manual
2. Brochure: In addition to the theoretical research and formulation of the curriculum, a brochure was also designed as a method to inform parents of the children about the curriculum and its intent (Figure 6)
3. Twenty illustrated student charts: A graphics designer was employed to design both the brochure as well as the visual aids that were required for the various modules of the curriculum. The curriculum was developed and refined in continuous consultation with education specialists.
4. Facilitator Kit (Includes facilitator manual, markets, simulation charts, scissors, tape etc)
5. Student Kit: Skills for Kids tote bags with sketch pens, pencils, notepad etc
6. Completion of the first pilot in Ulaanbaatar, Mongolia

Workshop: The first pilot workshop was held in Mongolia on August 9, 2008. The Mongolian Orphan Care Centre camp at Handgait (40km outside of Ulaanbaatar) was selected as the site for the pilot. Twenty-five girls and boys between the ages of 13 and 15 were chosen at random to attend the workshop. A facilitator conducted the workshop in Mongolian. The children were informally interviewed before and after the workshop to assess their expectations and how they were met. In addition, teachers and caretakers from the care centre were invited to the workshop. Teachers received the manual and other visual aids to continue teaching the curriculum. The team also received press coverage - the Mongolian Daily Express newspaper published an article on the workshop and the power of youth initiatives.

Advisory Board: In order to collect feedback from local experts on the curriculum, an advisory panel was convened two days before the pilot. Experts from the following organizations attended the meeting that was conducted at Hotel Ulaanbaatar in Ulaanbaatar: The World Bank, Save the Children, Mercy Corps, Mongolian Education Alliance, World Vision.

7. Completion of the second pilot in Bangalore, India

Workshop: The second pilot was conducted in Bangalore, India. Several changes were made to the curriculum after the Mongolia pilot and these changes were integrated into the teacher manual. The pilot was held on



Figure 6: Skills for Kids Brochure (Sent to parents and teachers)

The Mongolian Daily Express newspaper published an article on the workshop and the power of youth initiatives.

January 10th 2009 at St. Francis Middle School in Bangalore, India. Twenty-five children from the eighth grade participated in workshop. The workshop was conducted in close consultation with teachers at St. Francis School. Surveys and interviews, similar to those undertaken in Mongolia, were conducted at the school and feedback was recorded. The local press in Bangalore covered the workshop with positive reviews.

Advisory Board: An advisory panel was formed in Bangalore that met three days before the pilot. The advisory board meeting was held at Hotel Atria in Bangalore. As was done in Mongolia, the concept of the workshop was presented to the panel members and select modules of the curriculum were detailed. Feedback and comments from the panel was recorded and incorporated into the curriculum before the actual pilot. Members of the advisory panel were from the private sector, academia and from the following organizations: Teachers Foundation, IPrajna, Mallya Aditi International School, St. Francis School



Figure 8: Student chart that explains supply and demand

Figure 7: One of the student charts showing different ways to advertise a business

Analysis

The team received very positive feedback from students, teachers, parents and the advisory board after the pilots in Mongolia and India. The following specific points were brought to light with regard to the relevance, practical implications and importance of the curriculum:

1. Feedback from students:
 - a. The students were extremely enthusiastic during the workshop. Students commented that it was not only a tremendous learning experience for them but also an opportunity to work in teams with classmates they had never interacted with before
 - b. The students commented on how much fun the day was, particularly the business simulations
2. Feedback from the advisory board:
 - a. The advisory board was particularly impressed with the ease and the intuitiveness of the facilitator manual
 - b. Advisory board members expressed interest in using the curriculum in their own organizations
3. Further dissemination:
 - a. The curriculum is now being implemented in Manila, Philippines by a schoolteacher who found the curriculum on the project website. The team was contacted by this teacher and through several virtual meetings, the team helped the school to start implementing Skills for Kids
 - b. The team has applied for funding through the World Bank for a third pilot program in Kosovo

Monitoring and Evaluation Framework

Though the team was not able to monitor the pilot in great detail during the past year, a basic results framework was developed to track project outputs and outcomes. This framework will be applied in subsequent pilots.

Main Outputs and Output Indicators

Specific Outputs	Specific Output Indicators
Curriculum Development	Number of changes to the curriculum as a percentage of the number of experts giving feedback
	Number of local education stakeholders involved in planning
Implementation	Number of students enrolled in the class/workshop
	Number of classes/workshops conducted
Deliverables	Number of complete teacher, student manual and toolkits delivered
Implementation	Number of students enrolled in the class/workshop
	Number of classes/workshops conducted

Main Outcomes

- a. Increase of pupils' knowledge of entrepreneurship, teamwork, employability, and interpersonal skills as a result of participating in Skills for Kids.

- b. Increase in teachers' knowledge of experiential learning and its applicability.

Measurement Instruments

In order to evaluate these outcomes, the team is currently working on several measurement instruments. These will be simple to implement and serve as low-cost techniques for monitoring the pilot:

1. Pre-test: Simple test given to students before they attend the workshop.
2. Post-test: Simple test given to students after they attend the workshop.
3. Evaluation Questionnaire: A questionnaire is currently being developed by the team to evaluate the project at the implementation level in the perspective of both facilitators and students. The following is a subset of questions that will be included:

For program level:

- Was the curriculum being implemented as intended? Was the intended audience reached? Was the program offered in all intended settings?
- Did students' knowledge, attitudes and skills change as intended?
- Did stakeholders participate in design, delivery and evaluation of program?



Figure 9: The Mongolia Orphanage Care Centre (Venue of the first pilot)

For facilitators/teachers:

- Did the curriculum feature an enhanced teaching methodology? If so, how?
- Did teachers' knowledge, attitudes and skills change as intended?

For students:

- What did you learn from this program?
- Do you think you will recommend this to your friends?
- Did you have fun? Would you like to have such activities at your school?
- How is this different from what you learn in school?



Conclusion and Next Steps

The pilot and advisory board meetings established the fact that Skills for Kids was relevant and useful particularly considering the state of the global economy today. The workshops were further evidence of the effectiveness of the curriculum. The children were extremely active participants and enjoyed learning through the group activities and games used in the experiential learner-centric modules. They also explored and understood the importance of a number of life skills such as teamwork, creativity and communication during these activities. Evidence of this learning was gathered through informal interviews with the children before, after and during the workshop. Teachers present during the workshop confirmed the effectiveness and relevance of the workshop and expressed intent to incorporate it into their lesson structures.

At present, steps are being taken to build upon relationships formed during the advisory panels and to set up partnerships with local organizations that run schools and could implement the curriculum with their students. In addition, the team is currently in discussions with the Kosovo Education Center (KEC) in Kosovo to conduct a third pilot. This effort is particularly promising, as the Government of Kosovo has recognized the need to revamp the education system and has embarked on an ambitious national curriculum reform program. The curriculum is available for free download from the website (<http://www.entrepreneurshipforkids.com>).

Bibliography

1. Sandberg, W. R. (1992). Strategic management's potential contributions to a theory of entrepreneurship. *Entrepreneurship Theory and Practice*, 16(3), 73-90.
2. Schumpeter, J.A. (1947). The Creative Response in Economic History. *Journal of Economic History*, 6:149-59.
3. World Development Report (2007): Development and the Next Generation, World Bank Publications
4. World Bank. (2008). Youth Advisory Groups: New Allies in the World Bank's Work.
5. World Bank. (2007). Youth and Development. Development Outreach. World Bank.
6. World Bank. (2009). Youth and Employment in Africa: The Potential, the Problem, the Promise. *Africa Development Indicators 2008/9*.
7. McGraw, T. K. (1991). Schumpeter ascending (re-emerging intellectual interest in entrepreneurship, innovation, and economic development). *The American Scholar*, 60, 371-392.
8. McMullan, W.E., Long, W.A., & Graham, J.B. (1986). Entrepreneurship education in the nineties. *Journal of Business Venturing*, 2(3), 261-275
9. Peters, S. (2004), *Inclusive Education: An EFA Strategy for all Children*", World Bank Publication
10. Porter, M.E. (1990). *The Competitive Advantage of Nations*. New York (NY): Free Press.
11. Robinson, P.B., Sexton, E.A. (1994). The Effect of Education and Experience on Self Employment Success. *Journal of Business Venturing*, 9, 141-156.
12. Sandberg, W. R. (1992). Strategic management's potential contributions to a theory of entrepreneurship. *Entrepreneurship Theory and Practice*, 16(3), 73-90.
13. World Bank. (2008). *Youth: An Undervalued Asset: Towards a New Agenda in the Middle East and North Africa*.
14. Yordy, R. (2008). Enhancing 'Learning Through Work': Strengthening Educational Opportunities for Children Working in Micro-Enterprises in Egypt.
15. Audretsch, D.B., Keilbach, M., Lehmann, E. (2006). *Entrepreneurship and Economic Growth*, Oxford University Press.
16. Barreto, H. (1983). *The Entrepreneur in Microeconomic Theory: Disappearance and Explanation*.
17. McDowell, C. (2007). *Youth as Assets for Development*. Development Outreach. World Bank.
18. Meyer, J., Zimmerman, J., Boshara, R. (2008). *Child Savings Accounts: Global Trends in Design and Practice*.