

Financial Literacy Programs Targeted on Pre-School Children: Development and Evaluation

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Executive Summary

This report is one phase of a project that attempts to understand financial literacy education for young children, that is, the ability of pre-school age children to grasp financial literacy concepts that may increase their and their parents' financial knowledge and improve financial decisions in later years. During this phase we searched and compiled information on financial literacy programs targeted to young (pre-school and K-3rd grade) children and reviewed the state of knowledge about the cognitive development and capabilities of children at these ages to understand basic financial concepts. We have specifically asked whether financial literacy programs have been structured taking into account what is known about cognitive development and capabilities of the children they target and whether there have been rigorous evaluations of their teaching effectiveness. The goal of subsequent phases of this project is to develop and rigorously evaluate a financial literacy program for this age group that is consistent with children's cognitive development and their capabilities to grasp the basic financial concepts that are thought to underlie good financial decision making.

Since very young children are financially dependent on parents and have few resources (monetary or property) that they independently control, financial education targeted to this age group, in contrast to older individuals, generally does not aim to teach financial facts that would immediately change financial behavior. However, it is generally recognized that very young children can be taught about the basic benefits and tools of sharing, savings, and purchase that will support good financial habits and practices as children, leading to better managed financial lives as adult, independent spenders and savers. It is also thought that incorporating parents into their children's financial literacy education may increase parents own financial knowledge, making them better financial managers and role models for their children.

This review first looks at the key financial concepts that are targeted in the financial education programs aimed at young children. This includes an assessment of the financial literacy standards of those states that have specific standards for this young age group. We next undertake a literature review of children's cognitive ability to grasp complex concepts in general and specifically to understand the important concepts that underlie sound financial reasoning. The concepts we discuss are not just those that are typically seen in the literature as "financial," but the principles, abstract ideas, and values required for developing logical thinking and understanding about complex financial phenomenon.

We use our conclusions from this review to evaluate the probable effectiveness of existing financial education efforts aimed at this age group. We next review evaluations of financial programs education programs targeted on young children; whether such evaluations have been undertaken and, when they were, how data were obtained and evaluation methods used. In this third section of the report we discuss financial literacy programs that have been developed for children in the U.S. and other countries as well.

Our conclusions are generally that the literature on children’s cognitive development and financial literacy education are not well integrated. Few financial literacy programs are explicit about how the concepts taught and the lessons developed are expected to improve financial knowledge and rarely discuss the expected relationship between early financial educational and later financial behavior. There has been virtually no rigorous evaluation of these programs. This is not to say that some of the programs we found—and there are lots of them—may not improve children’s ability to later become better financial decision makers. However, financial literacy programs tend to concentrate on very concrete lessons without apparent consideration of what are the underlying concepts to be taught, the cognitive ability of children to grasp those concepts and the behavior and timing of behaviors that seek to be improved with this education. We highlight the few exceptions.

The literature in cognitive development provides support for the proposition that financial literacy education is appropriate for young (preschool-aged) children. In contrast to an older (Piagetian) tradition that characterized young children as unable to think systematically and abstractly, more recent research finds that deficits (or differences) in children’s thinking have more to do with access than ability. Young children’s conceptions of financial topics reflect their experiences and concerns. There are core cognitive competencies relevant to financial literacy (such as understanding of number, or executive function) that may have innate or maturational components. However, children’s facilities with central financial concepts, such as the purpose of money, savings, or exchange, are best understood in terms of the environmental problems and opportunities they are provided. The central developmental claim is that financial concepts are embedded in more general forms of social interaction. Young children do not appreciate a strictly “financial” sphere of experience. Segregating financial motives from other considerations is a later developmental achievement that is likely a result of increased participation in formal financial/market activities.

We propose that the next stage of this project focus explicitly on:

1. What are the financial concepts (outcomes) that are the stepping stones to financial decisions making and that young children are able to grasp?
2. Which programs (interventions) do this and how?
3. What is the best way (intervention method) to deliver these lessons?
4. What are the practical and legal constraints on and opportunities for the delivery these lessons to young children?
5. How can programs be evaluated, including the gathering of data on later outcomes of young children’s early learning?

6. How should these early childhood education programs targeting financial knowledge be integrated with other education goals for that age group and with financial literacy education at older ages?

Recommendations for Early Financial Literacy Activities

Our review identified several core components of financial literacy. By the preschool-years children generally have some understanding of these core components. The task of financial literacy education is to develop and extend young children's existing knowledge. A key point of our recommendations is that financial literacy education not be seen as something separate from children's everyday experience in families and communities. Children are already engaged in thinking about, and acting within, a financial environment. The conceptual tools they develop in their everyday lives will be the starting point for any formal educational efforts. Everyday financial experiences will also be the most relevant and accessible entry points for development of more sophisticated conceptions. Counting money while shopping in a store with a parent will likely be a more important financial literacy activity than counting coins to complete a worksheet. Below we describe four core areas of financial literacy and describe some of the characteristics of young children's understanding in these areas.

Exchange, Markets & Value. We found the strongest research support for suggestions of developmental differences in conceptions of exchange. Children engage in exchange behavior from a very young age. Some researchers suggest that special cognitive mechanisms support social exchanges. For example, young children can identify the conditions of a trade and recognize when someone has failed to hold up their end of the bargain. At the same time, the financial or economic nature of exchange is not separated from more general features of social interactions. Exchanges are seen as one way people interact, and are typically as much about social affiliation and establishment of friendships as they are about distributing goods. It is later in development that children will come to appreciate a more formal or purely economic activity of exchange, the idea of a "market." Preschool children have a very elementary understanding of how markets work. Many children of this age still have trouble correctly identifying the role of stores or salespersons and while they can sometimes articulate the purpose of demand in a market, they are less able to reason about supply. Critically, for young children exchange is an activity one engages in with friends and family. For older children and adults market exchange is a limited means of interacting with strangers, not (necessarily) a part of a continuing relationship. For this reasons the motives and structures of formal exchange relationships may be quite difficult for young children to understand. Much of the research exploring these beliefs has used a mock-store environment, suggesting that this might be a useful method for documenting children's beliefs and naïve theories in an educational setting. Furthermore, it could be useful in providing additional experiences with difficult concepts, like the limited relation between customer and storekeeper.

Choice. Making choices in the financial world often involves looking to the future. Young children can have a very difficult time both with the concept of the future and also in delaying gratification. Thus, we might expect a child to desire the immediate benefits

of money now instead of potentially greater benefits that come from saving. The capacities to exercise deliberate choice, to delay gratification, and to inhibit immediate responding are part of the more general psychological construct of “executive function.” Executive function has been a major focus of research in school readiness, social cognition, and pro-social development. There are well known neural bases for the development of executive function in young children. At the same time there are strategies for helping children learn to exercise conscious control over their own decisions and not just automatically choosing the most immediate or attractive option. In teaching about making financial choices, programs could de-emphasize the salient, desirable features of the available goods, effectively taking the child’s mind off of the impulse of immediate gratification. They could also denote future dates pertinent to financial decisions as special occasions, thus increasing the likelihood that younger children will understand how far away that future event is.

Social Expectations & Motives. Given that financial practices were created to navigate within and across societies, it only makes sense that some basic social values will need to be understood to successfully learn about personal finances and economics. Beyond the values of exchange and markets, discussed earlier, other issues such as gifts/charity, generosity, public goods/service and a sense of community play particularly big roles here. Many of these concepts can be understood when discussing larger issues, such as children’s understanding of issues like equality/inequality, particularly as they apply to economic status. Actions such as saving or spending have important emotional components. There are also strong social norms governing financial behaviors. Social and emotional motivations for interaction are driving these behaviors. The enjoyment of doing something with the parent, the feeling of mastery in participating in “grown-up” activities like going to the bank, or the familiar ritual of the weekly shopping provide the meanings and motives for young children. Interventions to change financial behaviors may capitalize on any or all of these motives.

Institutions. Young children often have a difficult time understanding the intricacies of social institutions. Preschool-aged children often explain them with a series of facts according to their own experiences, but integration of these facts into a concept of a social system as a whole does not occur until around the age of seven. Furthermore, the less experience children have with these institutions and their place in society, the less knowledge they have about the effects of financial institutions. Again research here suggests that exposure to mock situations could be useful in teaching about how institutions work. Letting children pretend to be tellers could not only teach them facts about how financial institutions work, but could give them valuable exposure to parts of the system they might not normally observe as a bank customer or credit union member.

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