With support from philanthropists, the Center for Social Development at Washington University in St. Louis (CSD) is conducting a third wave of research in the SEED for Oklahoma Kids (SEED OK) experiment. A research study of exceptional quality, SEED OK represents an opportunity to assess the long-term potential of Child Development Accounts (CDAs)—a national system of asset-building accounts for children and youth. Wave 3, taking place in 2019 and 2020, expands the original CDA in SEED OK with an automatic progressive deposit, and extends the longitudinal research to examine the impacts of the CDA when the children are in middle school.

This research brief provides background on the SEED OK experiment, highlights major findings from its first two waves, and describes Wave 3.

**Background**

First proposed by Michael Sherraden in 1991, CDAs are savings and investment accounts for long-term developmental purposes. The policy vision for CDAs is to be universal (everyone is included), automatic (families can opt out of program communications),

progressive (larger subsidies for low-income families), and potentially lifelong (starting at birth). CDAs are about more than money. When focused on postsecondary education, as in SEED OK, CDAs can also lead to financial preparation for college, a college-bound identity, academic preparation, and eventual college success (Figure 1).

![Figure 1. Likely Pathways from Child Development Accounts to College Success](image-url)
The CDA in SEED OK includes advantageous policy features, such as universal eligibility, automatic enrollment, automatic deposits, at-birth start, and a sustainable financial platform. In addition, the research design is a true experiment: It featured no selection bias in the sampling frame, included strong randomization, and is being carried out in a full population over a long period of time (Figure 2). In 2007, infants were selected randomly from state birth records. Next, mothers completed a baseline survey before their children were randomly assigned into treatment or control groups. Infants in the treatment group received automatically opened state-owned Oklahoma 529 college savings plan accounts with $1,000 initial deposits, and their mothers were encouraged to open and save in their own Oklahoma 529 accounts for SEED OK children. Between 2008 and 2011, low- and moderate-income families were eligible for progressive savings matches (larger matches for poorer families) on deposits into these accounts. Mothers completed the Wave 2 survey in 2011, when focal children were about 4 years old. Beginning in 2007 and in every calendar quarter thereafter, CSD receives account and savings data of both treatment and control children from the Oklahoma 529 plan.

Key Findings from Waves 1 and 2

A critical finding from Waves 1 and 2 of SEED OK is the importance of universal automatic enrollment in CDAs. This finding emphasizes that policymakers should focus first on including all children in asset building, and second on improving individual saving behavior (not the other way around). In addition, experimental evidence from the first two waves demonstrate the positive impact of universal, automatic, and progressive CDAs on families and children. As intended, CDAs substantially increase asset-building for postsecondary education. They also improve the social development of young children as well as the mental health, parenting practices, and educational expectations of mothers. Positive effects are usually greater for low-income and disadvantaged families. These and other research results from SEED OK have been published in about 30 peer-reviewed journal articles.

Research results from SEED OK have been influential in CDA policy development in U.S. cities and states, as well as in other countries. These widespread and growing policy impacts, a direct result of social research, are exceptional, and provide a strong rationale for Wave 3.

Figure 2: SEED for Oklahoma Kids: An Experimental Test in a Full Population

1. Infants were selected randomly from 2007 state birth records.
2. Their mothers completed the SEED OK baseline survey.
3. Mothers were assigned randomly to a treatment or control group.

Treatment group

Children received state-owned OK 529 accounts with $1,000.

Mothers received materials about the importance of education, saving for college, and OK 529 accounts.

Low- and moderate-income mothers were eligible for progressive savings matches on deposits into their own OK 529 accounts for SEED OK children.

Children receive quarterly OK 529 account statements.
Wave 3

In Wave 3 of SEED OK, CSD researchers will analyze updated account and savings data from the Oklahoma 529 plan and also data from a survey of mothers to be conducted in 2020, when the children are in middle school. We expect account data to show that CDAs continue to have very strong positive impacts on asset accumulation for education, especially for disadvantaged families. We expect longitudinal survey data to show that CDAs positively affect education-related attitudes and behaviors. Outcomes of interest include parents’ middle-school engagement, parents’ education-related interactions with youth, other parenting behaviors, and the academic engagement of youth.

Wave 3 also includes a new progressive financial intervention (Figure 3). SEED OK deposited funds into the state-owned SEED OK account for half of the treatment children (678) in early 2019. All of these children received $200, and disadvantaged children received an additional $400. This new deposit is more progressive than the savings match SEED OK initially offered to low-income families, which was dependent on individual saving behaviors. The Wave 3 deposit augments the college savings of the lowest-income families, not just “savers.”

SEED OK cannot fully model or test an ideal CDA policy, which would make multiple progressive deposits (to increase assets for college and remind families about the value of academic and financial preparation for college) and be supported by ongoing program features. Because SEED OK is an experiment, it is not possible to conduct a campaign of regular communications to the general public or to all children in school settings, or to incorporate CDAs into school curricula. In the absence of these CDA activities, it may be that positive CDA impacts observed at Wave 2 have “decayed” over time—indeed this is a very common pattern in experimental social research.

Conclusion

Wave 3 will empirically examine the intermediate impacts of CDAs to inform future policy and practices. Accurate quarterly financial data transferred directly from the Oklahoma 529 plan and carefully designed and collected survey data from mothers of middle-school students will allow us to measure CDA impacts with widely accepted scientific standards of quality. Overall, SEED OK has the most rigorous research design possible—a true experiment in a total state population, with a particular focus on disadvantaged families, and carrying out both the policy concept and research over a long period of time. We are proud of SEED OK’s high quality social science and policy impacts. Nevertheless, there is always more to learn. We undertake SEED OK Wave 3 as our next major step along this pathway.

Endnotes

1. See Mason, Nam, Clancy, & Sherraden (2014); and Zager, Kim, Nam, Clancy, & Sherraden (2010).

3. “Opt out” sometimes suggests that a parent can refuse an initial CDA deposit or grant. A better approach is to allow parents to opt out of CDA program communications while preserving CDA funds for the child to access in the future, as in Maine's Harold Alfond College Challenge. See Clancy & Sherraden (2014).


5. See Beverly, Elliott, & Sherraden (2013).

6. Sherraden, Clancy, & Beverly (2018) identify ten policy design elements for universal and progressive CDAs that can be implemented and sustained at scale. All ten of these design elements are modeled in SEED OK.

7. See Mason et al.; and Zager et al. (2010).


10. Examples include Huang, Sherraden, Kim, & Clancy (2014); Huang, Sherraden, & Purnell (2014); Kim, Sherraden, Huang, & Clancy (2015); Nam, Wikoff, & Sherraden (2014); and Sherraden et al. (2015). Most of this research is summarized in Beverly, Clancy, & Sherraden (2016).

11. See, for example Clancy & Beverly (2017); Clancy & Sherraden (2014); Grinstein-Weiss, Covington, Clancy, & Sherraden (2016, April); Center for Social Development (2018, June 27); and Taylor (2016, November 21).

12. For research purposes, CSD chose a relative income-poverty threshold that defined half of the children in the additional deposit group as “disadvantaged.” Future CDA policy will likely use absolute income-poverty thresholds to determine eligibility for larger deposits and use tax returns as the primary source of income data. See Clancy & Beverly (2017) for information on how the Louisiana 529 plan models a progressive and automatic savings match.

13. We do not expect to observe large impacts for several reasons: (1) this is a one-time deposit, not a series of deposits over a number of years; (2) due to changes in contact information, some families will not receive account statements or letters announcing the new deposit; and (3) the timing of the Wave 3 survey will not allow much time for measurable impacts to occur. Assessing the impacts of this one-time progressive deposit is a secondary feature of Wave 3 research. What matters most is the SEED OK policy model of full inclusion, progressive deposits, and long-term asset accumulation.

14. SEED OK provided CDAs to a single cohort of selected children born in 2007. Impact assessment relies on a control group that does not receive the CDA and is not exposed to “extra” communications and program features.

References


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