

The TOP Early Learning Centers Longitudinal Study

Investigating the Process of Planning and Implementing
an Effective Early Childhood Evaluation

Prepared by the University of Kansas
Center for Public Partnerships and Research for
the Kansas Children's Cabinet and Trust Fund







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Over the past seven years, a Wichita preschool has engaged in a project unprecedented in Kansas early childhood education: tracking their graduates' outcomes throughout grade school and continuing to follow them through high school graduation.

More than 95% of school families consented to participate in this study, and two school districts provide ongoing information on these students and a demographically matched control group for researchers to compare outcomes. Results show that their elementary school-age graduates have lower placement in special education, fewer repeat discipline referrals, and higher state test scores – and they expect differences to become even more pronounced as the students progress through middle school.

The story of how this ambitious study came to be is largely the story of the school itself: Wichita's



The Opportunity Project, commonly referred to as TOP. Beginning in 2000, Wichita businessman Barry Downing and educator Janice Suzanne Smith spent three years researching the best strategies for significant and lasting change in their community. Of particular interest was the relationship between education and poverty. They focused in on early childhood education, recognizing quality early learning programs as critical for prevention of many long-term negative effects of poverty.

The first TOP Early Learning Center opened in 2003. Currently, three TOP Centers serve nearly 700 young children, preparing them for kindergarten and lifelong success. Since 2007, researchers at Wichita State University have been tracking TOP graduates as they progress through elementary and middle school to demonstrate TOP's effectiveness to a wide audience of stakeholders, including community members, business leaders, and policymakers. This rigorous evaluation provides an opportunity to analyze the return on investment associated with this innovative program which we present in this report.

TOP is partially supported by an Early Childhood Block Grant, and the school's dual commitment



to high quality early childhood education and results-oriented accountability is central to the mission of the Kansas Children's Cabinet and Trust Fund (the Cabinet). As outlined in the Cabinet's Blueprint for Early Childhood, a significant component of collaborating to improve early childhood outcomes is tracking results and being able to demonstrate effectiveness.

This case study aims to make more visible a strategy for building a longitudinal study to serve as a model for others in the field. To do so, we draw on two stages of data collection and analysis. In the first stage, we read and analyzed all evaluation reports from the TOP Longitudinal Study, including supporting materials such as survey instruments and background information on TOP. Secondly, we conducted semi-structured interviews with individuals who participated in the development of TOP Early Learning Centers and the TOP Longitudinal Research Project. Interview data was analyzed for key themes as well as factual information about how the study was designed and conducted.

This case study will discuss the TOP model and describe the study and its results. We conclude by presenting four key features that make this study distinctive:

Excellent participation The TOP longitudinal study can boast an impressively high level of cooperation among families, teachers, schools, school administration and districts. 95% of all TOP graduates have consented to participate.

Targeted use of professional researchers TOP collaborates with WSU researchers on all aspects of the study, including design, data collection, and communication of the results.

Strategic approach to data The study employs a thoughtful approach to collecting and reporting on data which focuses on the key information needed to understand TOP's impact.

Commitment to demonstrating outcomes The study aims to produce convincing data that quality early childhood programs improve children's well-being – and doing so is considered to be essential to TOP's ability to continue, grow, and thrive as a program.

"Children in poverty must be ready to learn upon entering kindergarten. TOP is an effort to give children in poverty a high-quality early childhood education to have the biggest long-term impact. TOP gives children the right foundation they need to be successful in school, life, and career"

~Cornelia Stevens, Executive Director, TOP Early Learning Centers





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CREDITS

This report was prepared by Dr. Jessica Sprague-Jones, Shabrie Perico, and Shala London at the University of Kansas Center for Public Partnerships and Research.

Contributors to this report include: Barry Downing, Janice Suzanne Smith, Cornelia Stevens, Nola Brown, Dr. Linda Bakken, and TOP staff.

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About TOP

Early Learning Centers

TOP is dedicated to brightening the futures of at-risk children by preparing them for success in kindergarten and beyond. TOP Early Learning Centers promote early education by reducing critical barriers facing working families in Kansas.

Our schools support working families by offering full and half-day learning opportunities to preschool age children. TOP provides a variety of fun learning activities to give these children the motivation and intellectual tools needed for emotional, academic and lifelong success. ~ *TOP Early Learning Centers Website*

Wichita's first TOP center opened in August 2003. Today, three Wichita locations serve nearly 700 children from birth to kindergarten. TOP Centers are strategically located in some of Wichita's lowest-income communities, serving many of Kansas's poorest children. There is currently a waiting list at all locations for all age groups. Families with infants typically get on the waiting

list early so their child can enroll in TOP by the time they reach one year of age.

Although there is no eligibility requirement for TOP enrollment, 92% of students qualify for free or reduced lunch, and the majority qualify for some type of state subsidy and/or scholarship dollars. Various funding streams support qualifying low-income families, including an Early Childhood Block Grant, Child Care Assistance, funding from USD 259 and USD 260, and Head Start and Early Head Start slots. Other families choose to pay for their child's enrollment in TOP because they want their child to experience a high-quality early education. These children make up about 8% of TOP enrollment.

THE TOP PRESCHOOL MODEL

TOP supports healthy, stable families and strong communities by providing low-income children access to affordable, full-day, year-round preschool. Public-private partnerships enable TOP to extend children's learning time in preschool, benefiting those children with the greatest needs. TOP is committed in their approach to early learning for two basic reasons. One, low-income



Research shows that quality preschool provides a number of benefits for at-risk children, immediately, throughout the teenage years, and into adulthood. Quality early learning:

- ★ Offers a safe and nurturing environment for children while parents work
- ★ Reduces special education placements in elementary school and beyond
- ★ Increases likelihood of graduating from high school
- ★ Reduces likelihood of being arrested for violent crimes
- ★ Reduces teen pregnancy
- ★ Improves employment outcomes and lifetime earnings

Additionally, preschool programs for children and families in poverty support job and economic growth for all.

families need opportunities that support increased levels of self-sufficiency, and two, low-income children need foundational skills for kindergarten readiness. The TOP model is built on the belief that if families' basic needs are met, stresses of life can be reduced or become more manageable, ultimately improving family and child outcomes. Safe and stable care is also believed to increase opportunities for parents to secure and maintain jobs.

Janice Suzanne Smith, Executive Director of the Kansas Children's Cabinet and Trust Fund and the original Executive Director of TOP, credits the preschool model's success in part to strong community partnerships and a commitment to assemble a variety of public and private entities for collaboration around serving low income children and families. "From the start, the TOP model took

a step back, allowing for partners to align their common missions and visions." This philosophical view of collaboration was pragmatic in approach, flexible, goal oriented, and understood that each community was going to be unique.

TOP prides itself on prioritizing creativity in their approach to early learning, strategically avoiding a "one size fit all" model. "The real emphasis is to try to have the best quality that you can with the resources and partnerships you have available and the creativeness to figure out ways of moving them along."
~ Janice Suzanne Smith, Executive Director, Kansas Children's Cabinet, Founding Executive Director, TOP

"A full-day, year-round classroom is a solution to providing at-risk children the environment and space they need to develop, moving them along the continuum of acquiring critical cognitive, social and emotional skills."

~Janice Suzanne Smith

In an attempt to bridge the education readiness gap of children in poverty, TOP focused on quality and relationship building at all levels. Ms. Smith noted that, "the highest quality standard among organizations was applied to all partners to achieve the best possible results with available resources." TOP's model is fluid in nature and responsive to community resources and the capacity of partners.

KEY FEATURES OF THE TOP MODEL

Community Collaboration and Partnerships

Creativity, Flexibility, and Responsiveness

Goal-Oriented and Solution-Driven

Commitment to High Quality Instruction

"This blend is driven by the understanding that we need to work together. Because we know that money drives quality and that programs for low-income children are under-funded, we need to pull from both public and private sources. TOP's model really looks at supporting families." A goal-oriented model solidifies continuous quality improvement at all levels. Once goals are achieved, new goals are set to address identified

gaps and improve services, making evolution a key characteristic of the model. For this reason, it's important to note that TOP looks different today than it did in its initial three years and will continue to adapt over time.

We know that children need support from stable families, healthy communities, and great teachers in order to thrive. TOP's blend of public and private resources have driven several notable collaborative efforts to promote successful educational outcomes for all students. The weaving of these unique partnerships into TOP's structure has enabled the organization to enhance the quality, availability, and accessibility of critical resources meeting the needs of low-income children and families.



The following partnerships demonstrate practical, problem-based solutions utilizing the key characteristics of the TOP Model. These partnerships demonstrate TOP's ability to be flexible, responsive, and creative when it comes to collaboration.

INNOVATIVE COLLABORATIONS

Rainbows United, Inc.

Rainbows United is a Wichita nonprofit that serves children with special needs. Rainbows provides on-site support to enhance the social, emotional, and behavioral development of TOP students. Their partnership with TOP enables access to mental health services in the classroom, addressing acute needs of children and families while providing support for TOP teachers and program staff.

GraceMed Health Clinic

GraceMed is a Wichita nonprofit, community health center. TOP has partnered with GraceMed to improve student access to health services, reaching many children and families who would otherwise be underserved. The partnership resulted in improved immunization rates and health outcomes among TOP students, while educating families about health and preventative care.

The TOP model insists on high quality instruction and a positive environment for both teacher and child. Essentially, TOP employs a "grow your own" philosophy, driven by the need for diverse staff serving a diverse population. Ms. Smith recounted that "early on, TOP wanted to be able to train teachers on the unique aspects of their curriculum to enhance teacher's skills and knowledge." TOP staff include state licensed teachers with bachelor's degrees in elementary or early childhood education, unlicensed teachers with bachelor's degrees in elementary or early childhood education, and staff with associate degrees in early childhood development. Because TOP leadership believes that a system of support and a development component are essential for providing opportunities and experiences necessary for good teachers, they have adopted a curriculum that is committed to staff development.

TOP students are the primary beneficiaries of TOP's high quality instruction and curriculum. Structured activities and play create rich learning environments. TOP's unique approach to early learning curriculum is evidenced by their Open Windows Learning Studios (OWLS). OWLS is TOP's adaptation of the Reggio Emilia Approach, which is based on the principles of respect, responsibility, and community through exploration and discovery. This approach integrates arts and education to help preschool children expand their critical thinking skills. As Ms. Smith articulated, "OWLS allows for a more self-guided curriculum, where children take an active role in developing their curriculum. The child-directed curriculum helps children identify for themselves what they want to learn and what they have an interest in where the teacher is a co-collaborator in the children's learning experience." OWLS coordinators work with teachers to blend this instructional approach into their classrooms, and OWLS provides individual remediation for kids in the lower 10-20 percentile in literacy.



TOP: An Exemplary Program for Demonstrating Effectiveness

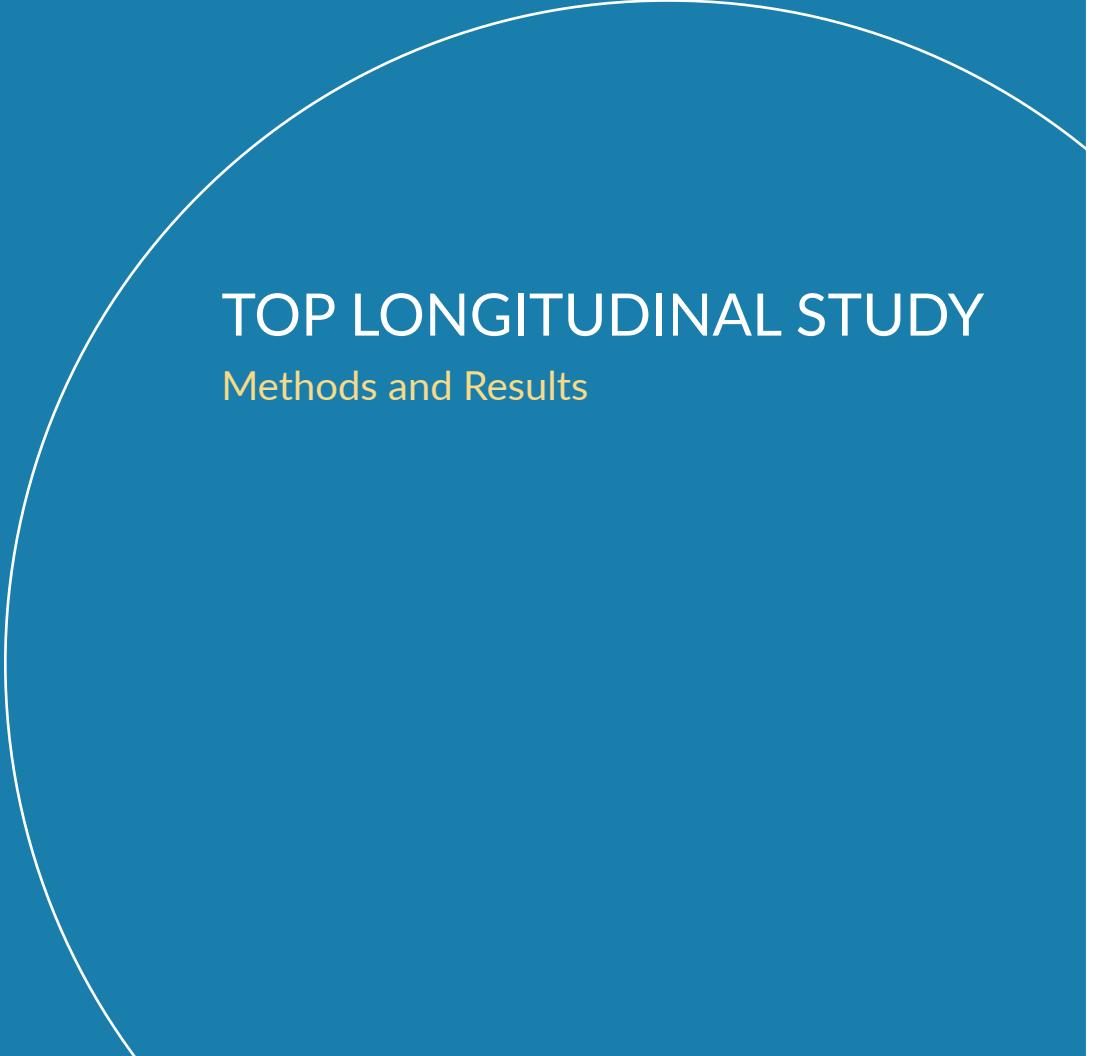
A critical component of collaborating to improve early childhood outcomes is tracking results to demonstrate effectiveness. The Kansas Children's Cabinet and Trust Fund is a strong proponent of rigorous evaluation practices and continuous quality improvement. The Cabinet's Blueprint for Early Childhood offers a vision of what success looks like, in broad terms and measurable goals while offering suggestions of specific measurement tools. TOP exemplifies this practice of rigorous evaluation and is proving that being able to track results and demonstrate effectiveness is necessary for:

- ★ assessing what's working and what needs improvement,
- ★ developing and maintaining community partnerships,
- ★ adapting to new challenges and creative problem-solving, and
- ★ maximizing available resources

Ultimately, demonstrating effectiveness is a fundamental pathway to creating meaningful change for vulnerable children.







TOP LONGITUDINAL STUDY

Methods and Results

Twelve years since its inception, the TOP model has demonstrated remarkable effectiveness and provides substantial savings to the State.

A recent cost analysis of TOP Early Learning Centers found that savings on special education placement alone yielded an 11% annual return on investment over the course of the students' education – approximately \$4.5 million.

TOP COST ANALYSIS

The Opportunity Project (TOP) uses public-private partnerships to deliver a high-quality early learning experience to children living in poverty. According to a cost analysis of **749 TOP graduates**:

33 FEWER TOP GRADUATES

were placed in K-12 special education programs compared to a control group

5 MORE STUDENTS WILL GRADUATE FROM A 4-YEAR UNIVERSITY. LIFETIME EARNINGS INCREASE: \$3,655,110

OF THESE 33:

7 MORE STUDENTS WILL ATTEND A 4-YEAR UNIVERSITY. LIFETIME EARNINGS INCREASE: \$1,841,539

3 MORE STUDENTS WILL GRADUATE HIGH SCHOOL ON TIME COMPARED TO THE CONTROL GROUP. LIFETIME EARNINGS INCREASE: \$730,704

RETURN ON INVESTMENT

Considering just the cost avoidance of Special Education Placement in K-12 of students enrolled at TOP for 2 years:

11%
ANNUAL
ROI

\$4.5 MILLION

SAVINGS OVER THE COURSE OF THE STUDENTS' SCHOOLING OR ALMOST \$500,000 / YR.

Methods

TOP is able to demonstrate this kind of cost effectiveness due to the strength of the TOP Longitudinal Study. The study was designed to provide policy makers, business leaders, and other stakeholders evidence of TOP's effectiveness over the long term.

"Children who live in poverty and attend a high-quality preschool program experience primary and secondary effects that are long-lasting."

Professor Emeritus Dr. Linda Bakken,
Principal Investigator,
TOP Longitudinal Study

WSU researchers issued the first annual report on the longitudinal study in 2009. Over the course of the next 6 years, these reports have demonstrated clear quantitative results. Using approachable language and methods designed to communicate to the layperson, the study investigates whether a high-quality early education program can improve life outcomes for children living in poverty. For instance, how much more likely is a TOP graduate to have better school attendance or exceed standards in reading and math than child who did not attend TOP? How do special education placement rates for TOP graduates compare to those of their peers? Data is collected on children beginning in kindergarten and annually thereafter. Additional cohorts are added every year. Currently, the study comprises 810 TOP graduates and a control group of 2,596 comparable children.

Because research demonstrates that a child's ability to behave appropriately the majority of the time in a school environment is predictive of his or her future capability to adjust later in life to the rules of society (Webster-Stratton, Reid, & Hammond 2004), the study is designed to capture both social-emotional skills and an array of school performance indicators. Data was gathered via teacher surveys and school performance data. Surveys ask teachers to compare the social skills of TOP graduates to the rest of their class.

Eligibility and Consent

The primary criterion to participate in the longitudinal study is eight months of continuous enrollment in the TOP program during the year preceding kindergarten entry. A consent form to participate in the longitudinal study is administered to parents or guardians. Consent covers a TOP graduate through elementary school. A second consent is obtained for middle and high school participation.

Teacher Survey

The social questionnaire asks teachers to compare the TOP graduates to the remainder of the children in their class in order to determine whether the TOP graduates used appropriate social skills more often than their peers. 12 questions address the three dimensions of social skills (four questions for each dimension) on a five point Likert scale:

- "1"* if the child was in the bottom 20% of the class
- "2"* if the child was in the bottom half of the class
- "3"* if the child was about the middle of the class
- "4"* if the child was in the top half of the class
- "5"* if the child was in the top 20% of the class

WSU researchers average these scores for each dimension and divide each average by four to

determine how TOP graduates compared to the rest of their class overall. They then used t-tests to test if these average scores were statistically significantly higher than 3, the score that would indicate the children were typical for their class.

School Performance Data

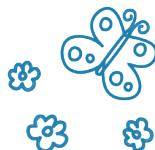
WSU researchers compare TOP graduates' school performance data to a demographically-matched control group using descriptive statistics, including averages and percentages. School performance data include:

- Attendance
- Special education placement

- Repeat discipline referrals
- Cumulative grade point averages
- Reading proficiency
- Mathematics proficiency

Data Synthesis and Analysis

Since a primary goal of the study is to communicate with non-technical audiences such as members of the business community and policymakers, WSU researchers rely on straightforward and approachable methods of synthesis and analysis. The reports largely rely on descriptive statistics to report results.



Results

Social-Emotional Skills

For all grades, teachers rated TOP graduates as having greater emotional maturity, greater ability to behave appropriately, and greater social competence than their classmates. Teacher estimations of TOP graduates' social-emotional skills were statistically significantly higher than average.

Teachers perceived TOP children, on average, to be in the top 20% of the class in terms of appropriate behavior and social interactions. Scores do not erode over time, indicating a permanent shift in competent social skills.

Teachers perceived TOP students, on average, to be significantly more emotionally mature than their classmates, from K-5th grades, scoring in the top 30% of their classmates. Scores do not erode over time.

School Performance Data

For all grades, TOP graduates have noticeably fewer absences on average than their control group peers each year, from kindergarten through the 6th grade.

Among kindergartners, those who are TOP graduates attend school 2 more days in comparison to their control group peers.

When the Wichita and Derby school districts are combined, TOP graduates have a lower percentage of special education placement than their control group peers.

Compared to the control group, there were 33% fewer placements, overall, and in grades 4 through 6, 37% fewer special education placements among TOP graduates.

Discipline referrals were taken into account to determine behavioral problems. Only repeat office visits were a measure of discipline referral. When looking at the total numbers of kindergarten through 6th grade students, TOP graduates were much less likely to have discipline referrals.

TOP graduates are 44% less likely than their control group peers to have repeat discipline referrals.

TOP children in 4th, 5th and 6th grades have a considerably lower percentage of students who do not meet state standards in both math and reading compared to the control group.

By 6th grade, 83% of TOP 6th graders meet or exceed state standards in math, compared to 50% for the control group.

In reading, 94% of TOP 6th graders meet or exceed state standards, compared to 76% for the control group.

TOP EARLY LEARNING CENTERS LONGITUDINAL STUDY

SOCIAL-EMOTIONAL SKILLS

TOP graduates ranked in the top 30% for Emotional Maturity, and the top 20% for both Social Interactions and Appropriate Behavior



SCHOOL PERFORMANCE

ABSENTEEISM - TOP graduates were absent 2 FEWER days than their classmates



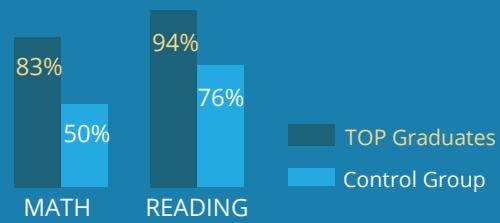
DISCIPLINE - TOP graduates were 44% LESS LIKELY to have repeat discipline referrals than their classmates



INTERVENTION - TOP graduates had 33% FEWER special education placements than their classmates



ACADEMICS - TOP graduates were significantly MORE LIKELY to meet math and reading standards





DISCUSSION

Key Features and Lessons Learned



4 Key Features of the TOP Longitudinal Study

After interviewing the key players who have developed and conducted this ambitious study, and reviewing all reports and instruments, we have identified four key features that make this study distinctive. They are:

- ★ Excellent participation
- ★ Targeted use of professional researchers
- ★ Strategic approach to data
- ★ Commitment to demonstrating outcomes

Key Features

1. Excellent Participation

The TOP longitudinal study can boast an impressively high level of cooperation among families, teachers, schools, school administration and districts, including:

- 95% of all TOP graduates
- 99% of the most recent cohort
- 99% of teacher surveys completed
- Two school districts covering 72% of eligible TOP graduates

Over time, family participation rates have increased dramatically. In 2009, 59% of the cohort parents' consented to study participation. To improve participation rates, TOP staff made a simple, but effective change: they shifted the timing of the ask. Initially, staff asked for parental

consent as graduates were leaving TOP for kindergarten entry. Asking for consent as parents were enrolling children into TOP produced much higher rates of participation. TOP staff noted that because parents were already there in person for enrollment and signing paperwork, it was much easier to fold in yet another form. Moreover, they felt appreciative and excited that their children were going to attend TOP, and were pleased to be able to do something to give back to the organization.

Parents were provided with a longitudinal study brochure explaining the premise of the study. TOP program staff noted that generally the only families who do not give consent were guardians of foster children. In order to keep current TOP graduate and parent contact information, TOP staff send out reminder postcards annually,

and maintain a Facebook page to reach out to parents.

Family consent was only half the battle. In order to collect data for the study, school districts' and teachers' willingness to cooperate was crucial. School systems' central offices provide school performance data, locate a child within the school district, and identify the principal and teacher for each TOP graduate. Due to relocation, they sometimes do this as many as three times a year for the same student. WSU Professor Emeritus Dr. Linda Bakken, the principal investigator, described schools as "fantastically cooperative."

TOP staff noted that communication is key to this relationship. TOP built relationships with school districts, schools, teachers, and administrators, educating them about the goals of the study and why it was important to their overall mission. As a result, Dr. Bakken observed that school districts understood and agreed with the, "premise of the study. Educators saw the value of early childhood education, and the importance of early intervention...getting to children early in terms of development and school readiness."

The central public school administration was key to participation. TOP placed a strategic focus on superintendents to gather teacher surveys and demographic data for TOP study participants. Changing the accountability of gathering survey information directly from teachers to the principals lessened the administrative load on TOP staff. Although school faculty and administration generally recognized the value of the study, as busy professionals they still needed prompting in the form of phone calls and emails to gather the data. Principals and teachers were both rewarded for their participation in the evaluation process with gift cards.

Teacher participation has also been excellent. One TOP staff stated that teachers want more TOP children in their classrooms because of their readiness for school. In addition to education and incentivizing participation, WSU researchers have worked to make the teacher survey less cumbersome, so it takes less time for them to complete. Over time the format was altered and eliminated any redundancy in questions, condensing a three-page survey into a one-page survey that takes teachers less than 10 minutes to complete. Revision of the longitudinal study allotted for the 12 question survey addressing the three dimensions of social skills integral to



the TOP curriculum. By changing the format of the survey, data produced the same answers with fewer questions.

2. Targeted Use of Professional Researchers

A second key feature of the TOP study is the targeted use of professional researchers. Rather than simply handing over the reins of the project to WSU researchers, TOP has collaborated with them on the design, data collection, and communication of the results.

WSU researchers were particularly important at the design stage of the study. With input from TOP, they developed the evaluation plan and identified outcomes that were grounded in the literature and would be possible to replicate in this study. They came up with a workable strategy for having a comparison group to act as a control. They created and revised the surveys. Finally, they collect data and conduct all analyses on an annual basis.

Much of the work gets done through extensive collaboration between WSU researchers, TOP staff, and school administrators. TOP staff do a significant amount of legwork, including getting consent from all the families, and relationship building and maintenance with the school districts. They keep in contact with the families and keep current on contact information. WSU researchers deal with all aspects of fielding the teacher survey – getting in touch with the teachers, sending out and collecting surveys, arranging teacher compensation, and

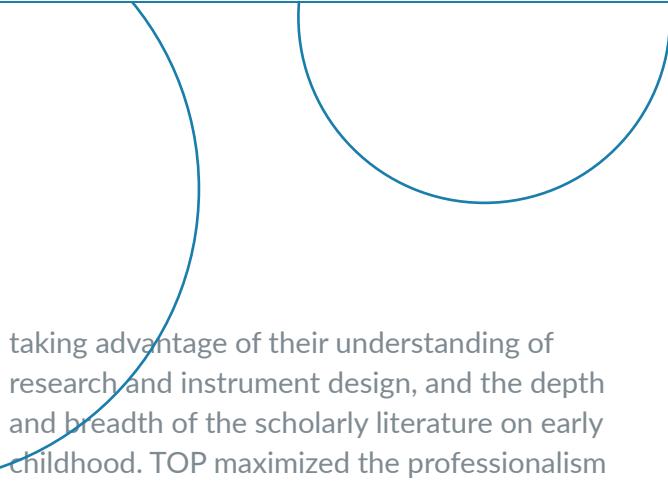
working with school administrators.

Even the reports are fundamentally shaped by TOP. Dr. Bakken stressed that she worked closely with Mr. Downing to create a report that was less academic and more compelling to laypeople, business people, and legislators. This meant avoiding use of inferential statistics, and instead focusing on descriptive statistics which could be immediately understood and appreciated by a non-technical audience.

There are multiple benefits to this approach of using professional researchers in targeted ways. It seems to create a nice collaborative relationship in which the researcher is closely working with staff to ensure she is producing something useful to them. There are obvious cost savings. Finally, it may be part of their ability to achieve excellent participation: families and school districts may be more inclined to participate in a study when approached by an excellent local preschool, rather than a previously unknown university researcher.

Still, TOP worked with professional researchers at the crucial points. WSU expertise was key to designing the study and identifying key research-based outcomes to track. WSU researchers and TOP staff designed the surveys. And, of course, the researchers collect the data, conduct the analyses, and write the reports. Collaborating with researchers on design and analysis utilizes their expertise to produce a higher quality product,





taking advantage of their understanding of research and instrument design, and the depth and breadth of the scholarly literature on early childhood. TOP maximized the professionalism of this project by including researchers the way it did, while still distributing many tasks associated

"It was important to keep the study as rigorous as possible while also framing data in a way that would be relevant to outside entities."

-

Professor Emeritus Dr. Linda Bakken,
Principal Investigator,
TOP Longitudinal Study

with this project that could be done as well or better by TOP staff.

When asked whether a smaller or more rural program could get away with not employing a professional researcher to work on a project such as this, TOP staff suggested they could imagine using researchers just to design a study that laypeople could conduct (say, without conducting any analysis), which a program could then follow indefinitely. In this scenario, it would be wise to periodically consult with a researcher, as even the most carefully designed research project needs to be adapted over time to changing conditions.

3. Strategic Approach to Data.

A theme throughout our interviews with TOP staff and WSU evaluators is that there has been a consistent focus on not collecting and reporting every possible thing they could, but rather focusing on the key information needed to understand TOP's impact. This strategic approach to data collection and reporting highlights the at least two ways that extraneous information can be problematic. First, data or analyses that are not strictly necessary to convey the point of the project are a waste of effort. This is important for TOP staff, who have other things to do besides collect data. It's also important in the context of the partnerships with school districts: a targeted approach signals respect for the time and effort of school administration, staff, and faculty. Second, being selective about what data are presented is key to communicating to a broad audience. TOP staff, and Mr. Downing in particular, have focused on outcomes that will persuade policymakers, potential investors, and the public. Anything additional risks distracting attention from TOP's successes, garbling the real message, redirecting attention to less important outcomes of TOP, and even attracting undue skepticism.

TOP staff described many instances in which this strategic approach guided decision making. One was the revision of the teacher surveys to get the same amount of information in fewer questions. A second instance is the decision to report the characteristics of cohorts, rather than individuals. Study researchers are following individual children, which is how they are able to collect data on them year to year. However, individual characteristics of the children, such as race, gender, socioeconomic status, or tenure at TOP, are not taken into account in the analyses.

While the study does not report on every possible characteristic of these children, this means that estimates are likely conservative. The difference between children who attended TOP and those who didn't would likely be more pronounced if individual characteristics and changes in cohort composition were taken into account. And, there are clear benefits to this simpler approach. It simplifies data collection greatly, and likely makes it easier to get district and teacher cooperation. Furthermore, it may be true that including individual-level variables is just not that important to persuading others – it might even look to the layperson like trying to lie with statistics.

A third example of the strategic approach to data is the decision to follow the children in two school districts rather than try to follow all TOP graduates. Mr. Downing's original goal was that any child who was eligible to be part of the study would be tracked throughout the Kansas school system. This turned out to be overly cumbersome. It was very difficult to check all the school districts in the state to track study participants who had moved out of Wichita. After the third year of the project, they limited the study to Derby and Wichita school districts. Limiting the study to these two districts captures the vast majority of TOP graduates, and allows staff to focus their efforts on getting excellent participation rates.

There are multiple benefits to this strategic approach to data. First, it offers necessary focus: on the goals of the project; on respecting time and effort of partners and staff; and finally, on the intended audience. This is not a study designed to sit on a shelf; it's a study designed to persuade laypeople about the value of high-quality preschool.

Second, a strategic approach to data has offered staff and evaluators the flexibility to change what's not working, or could be working better. Examples include the willingness to streamline the teacher survey, and to focus on two school districts rather than following every TOP graduate around the state.

Finally, it's effective. This study may not have succeeded if TOP hadn't been so selective about what to collect and present. It made this project fundamentally manageable – which in turn allowed it to be exceptional.

4. Commitment to Demonstrating Outcomes

The final key feature ties everything else together: demonstrating outcomes is a central value of this organization. Being able to track and demonstrate effectiveness was always a secondary goal of TOP. When Mr. Downing and Ms. Smith started TOP, they expressly planned to be tracking children's outcomes over the long term from the beginning – it was always a secondary goal of the school, essentially baked into the operation. The value of doing so seems self-evident to every person we spoke to: all perceived that continued support of TOP is dependent on being able to show long-term results on issues the public cares about.



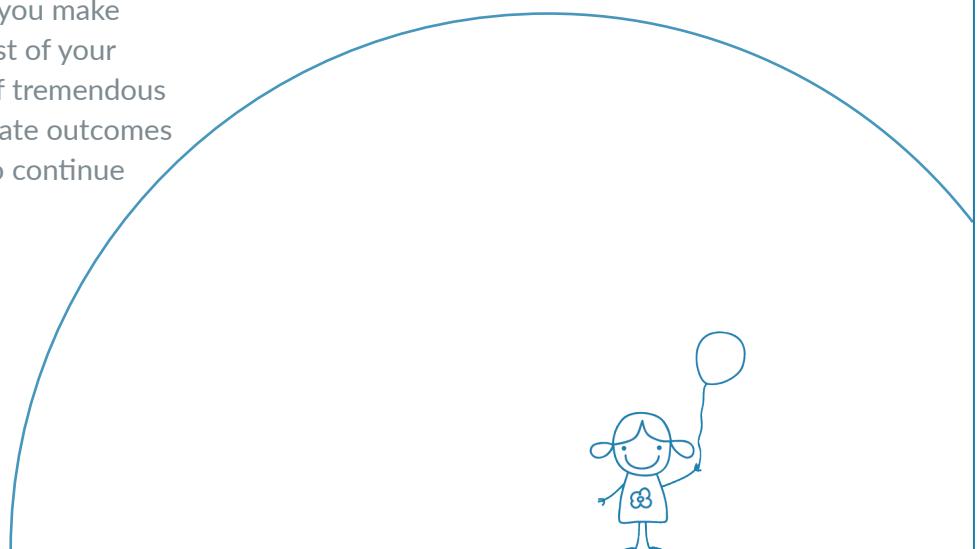
The study aims to produce convincing data that quality early childhood programs improve children's well-being – and doing so is considered to be essential to TOP's ability to continue, grow, and thrive as a program.

This level of commitment to demonstrating results can be rare in the world of early childhood services. Many early childhood program staff worry that evaluation takes time and money away from the real work of the organization – the work that will directly benefit children. In a context in which everything is tight – time, money, expertise – and the need is vast, growing, and desperate, it can be difficult to justify directing resources towards evaluation.

However, the fact remains that without a method of tracking the outcomes of your program, your belief that you are helping kids is based on your own experiences and intuition, which are heavily colored by your personal biases. In a world in which demand is great and resources are limited, it is crucial that programs be as effective as they can be in helping their target populations. This requires tracking outcomes continuously, systematically weighing the evidence, and continuously looking for ways to improve. Evaluation is part of how you make sure you are helping kids to the best of your ability. Furthermore, in a context of tremendous skepticism, being able to demonstrate outcomes is your best chance at being able to continue

helping kids, and even expand your efforts to help more.

TOP's commitment to demonstrating outcomes is really at the heart of everything that makes this study special. It's responsible for the ambitiousness of the project – they are tracking all of the kids they can, for as long as they can, because they believe that their program is good enough to yield long-term results, and they want others to see it. It's responsible for the numerous instances of creative problem-solving they've employed along the way: roadblocks are not seen as a reason to give up or scale back, but rather challenges to be overcome. Finally, it's resulted in a willingness to ask. They are willing to ask districts, teachers, and parents for their cooperation and time because they think this project is important. They also think that TOP is yielding benefits for these groups, so they should also want to help it and demonstrate its value.



Lessons Learned

Take the time to develop relationships. A recurring theme in the story of this project is the strength of TOP's partnerships. These relationships have been fundamental to carrying out such a large-scale study.

Be transparent. Let both partners and participants know exactly what you are studying and why. It will be vital to both recruitment and participation, and will ultimately improve data quality.

Don't be afraid of change. Too often, we feel stuck within the confines of our previous decisions. A key strength of the TOP study has been the willingness to acknowledge what isn't working and fix it. Be pragmatic in your choices and flexible in response to new information.

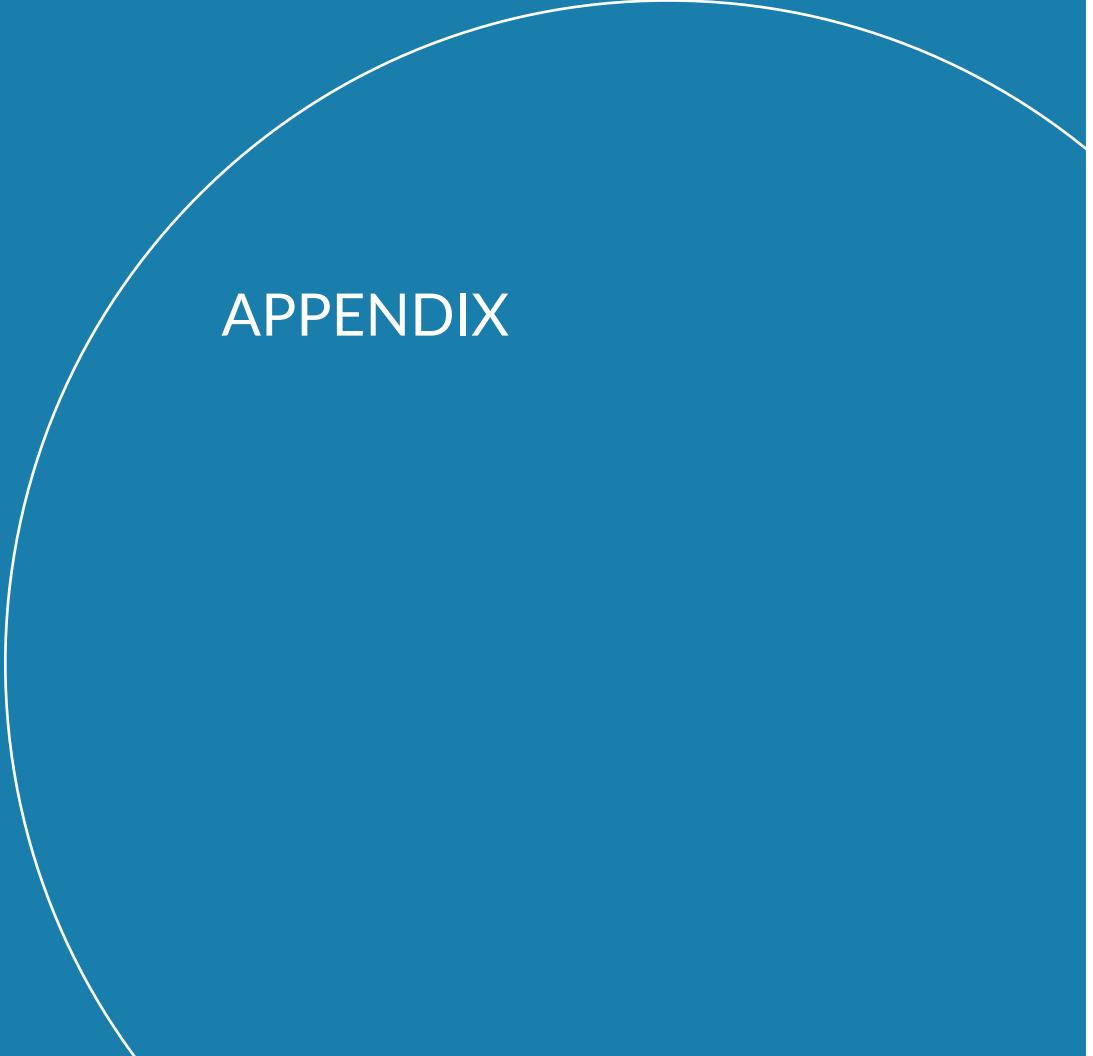
Allow for your study to expand. Programs and populations change over time; so, too, do the goals of research. Periodically review your research design to determine whether you're really getting what you need to make decisions and inform others.

Be persistent about tracking procedures. The TOP Longitudinal Study has achieved such high participation rates across levels by continually asking and following up.

"However long you think it will take, double it." Data collection and analysis are rarely efficient and linear processes. Do your best to plan efficient methods of collection and synthesis, but know that no one gets everything right the first (or second, or third...) time.

Go big! Small additional investments in evaluation can yield large returns in terms of impact. The results of this study are exceptionally useful and compelling because of the scale of the project.

Keep your eyes on the prize. TOP staff, evaluators, and school faculty and administration are all committed to the value of early education, and the power of demonstrating its impact. Your research should be motivated by the same goals that guide your work: improving the lives of at-risk kids.



APPENDIX

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