

# FosterEd Arizona: Year 2 Evaluation of Statewide Expansion

Prepared for National Center for Youth Law

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### Contents

Executive Summary	v
I. Introduction	1
II. Students Served and Supports Provided by FosterEd	7
III. Students' Social and Emotional Well-Being	22
IV. Academic Indicators for Youth Receiving Intensive Services	27
V. Summary and Recommendations	34
Appendix A: FosterEd Feedback Surveys	A-1
Appendix B: Youth Social and Emotional Well-Being Survey	B-1
Appendix C: Academic Outcomes Methodology	C-1

### **Executive Summary**

FosterEd, an initiative of the National Center for Youth Law, aims to improve the educational experience and outcomes of children and youth in foster care. FosterEd Arizona was piloted in Pima County between 2014 and 2016. Promising results from the pilot<sup>1</sup> and the release of a report that demonstrated Arizona's students in foster care consistently underperformed academically compared with their peers who are not in foster care<sup>2</sup> drove Arizona policymakers to action. In 2016, Governor Doug Ducey signed into law House Bill (HB) 2665, which included provisions to establish and fund a statewide expansion of FosterEd.

FosterEd Arizona is guided by a framework that all foster youth should have an Education Champion, who supports their long-term educational success, and an Education Team of engaged adults, including the Education Champion, parents, other caregivers, teachers, representatives from the child welfare system, and behavioral health providers. The Education Team, coordinated by an Education Liaison, supports educational needs and goals through student-centered engagement. FosterEd recognizes that the needs of every young person are individualized, requiring differing levels of time investment. For high-school-age youth with complex educational needs, Education Liaisons provide intensive services over a period of one to two years to ensure those young people are on a pathway toward high school graduation. Youth in kindergarten through grade 12 who have educational needs that can be addressed in a short period are served with responsive services for a period of one to six months.

RTI International conducted a two-part evaluation of the FosterEd Arizona expansion: an implementation evaluation of FosterEd in Maricopa, Pima, and Yavapai Counties and an impact evaluation of the effectiveness of FosterEd on students' social-emotional and academic outcomes. The evaluation covered two program years, associated with the 2017-18 and 2018-19 school years.

### FosterEd's Supports

Since the launch of the statewide expansion at the end of August 2017 through the end of July 2019:



866 youth have been served by FosterEd.



**57%** of youth served with intensive supports and **88%** of youth served with responsive supports had an Education Champion identified.



2,240 adults have served on youths' Education Teams.



Youth and their teams set 2,026 educational goals.



**100%** of youth served with intensive supports who completed a feedback survey reported that they would recommend FosterEd to other foster youth. **98%** reported that their Education Liaison was helping them achieve their education goals.

<sup>&</sup>lt;sup>1</sup> Laird, J. (2016). *FosterEd Arizona: Year 2 Evaluation*. Berkeley, CA: RTI International. <u>http://foster-ed.org/wp-content/uploads/2017/02/FosterEd-Arizona-Year-2-Evaluation.pdf</u>

<sup>&</sup>lt;sup>2</sup> Barrat, V. X., Berliner, B., & Felida, N. J. (2015). *Arizona's invisible achievement gap: Education outcomes of students in foster care in the state's public schools*. San Francisco, CA: WestEd.

https://www.azfoundation.org/Portals/0/Uploads/Documents/AZ\_Invisible\_Achievement\_Gap\_FINAL.pdf

### Students' Social and Emotional Well-Being

RTI, in close consultation with FosterEd staff, developed a student survey to measure relevant aspects of students' social and emotional well-being. This report examined potential changes, after being provided with FosterEd intensive supports, in students' sense of self-efficacy (e.g., "I will be able to achieve most of the goals that I have set for myself"), future orientation (e.g., "When I think about my future, I feel very positive"), and support from adults (e.g., "I have at least one adult in my life who supports and encourages my education").<sup>3</sup> Of the 145 students receiving intensive services who completed a baseline survey, 66 (46%) had taken a six month follow-up survey by July 2019, in time for inclusion in this report. Readers are cautioned from drawing firm conclusions because of the small sample size.

 Students who received intensive services experienced increases in both self-reported selfefficacy and positive future orientation.

There were no statistically significant changes in students' perceptions of support from adults other than their Education Liaison.

### Students' Academic Indicators

Several of the long-term outcomes that FosterEd Arizona hopes to influence are related to how foster youth progress through the educational system. RTI analyzed data from the Arizona Department of Education and the Arizona Department of Child Safety to estimate the effect of the FosterEd program on the educational outcomes of participating students. The impact analyses rely on a propensity-score-based method called inverse probability of treatment weighting. This method mimics the design of a randomized experiment using observational data by removing observed baseline differences between foster youth receiving FosterEd intensive services (the treatment group) and foster youth not receiving FosterEd services (the comparison group).<sup>4</sup>

The results shown in this evaluation report provide some evidence of FosterEd's impact on the youth it serves with intensive supports. Although preliminary, the academic impact results presented in this report point to several promising findings:

- Receiving intensive FosterEd services increases the amount of time students were in school. FosterEd participation led to an average of 13 fewer unenrolled days and to an average of 5 fewer out-of-school days (either absent or unenrolled) during the 2018-19 school year. These differences were statistically significant, meaning that differences of these magnitudes were unlikely to have been observed purely by chance.
- Receiving FosterEd intensive services increases student English achievement as measured by the AzMERIT assessment. Relative to non-FosterEd youth, participation in FosterEd increased English scale scores by 14 points (effect size = 0.53), a statistically significant result.

Although effect estimates for all other academic indicators (positive end-of-year status<sup>4</sup>, continuous enrollment, and mathematics achievement) except one (participation in statewide assessment) trend towards a positive direction, there were no other statistically significant results, suggesting that the outcomes of the FosterEd treatment group were similar to those of the foster youth comparison group.

<sup>&</sup>lt;sup>3</sup> With regard to adult supports, the social and emotional well-being survey included instructions for youth to consider all adults other than the Education Liaison working directly with them in the FosterEd program. Appendix B contains the survey items associated with each of the social and emotional well-being dimensions.

<sup>&</sup>lt;sup>4</sup> Positive end-of-year status was defined as graduating, completing a grade, or remaining enrolled at the end of the school year.

### I. Introduction

FosterEd, an initiative of the National Center for Youth Law (NCYL), aims to improve the educational experience and outcomes of children and youth in foster care. FosterEd has been piloted in counties in Arizona, California, Indiana, and New Mexico with positive results. RTI International, a nonprofit research organization, conducted independent evaluations of the Pima County, Arizona; Santa Cruz County, California; and Lea County, New Mexico pilots and found attendance and grade point averages improved for students served by the program.<sup>5</sup>

After the launch of the Pima County, Arizona pilot in 2014, FosterEd partnered with WestEd, a research organization, to produce *Arizona's Invisible Achievement Gap*. The report documented for the first time that Arizona's students in foster care consistently underperform academically compared with their peers who are not in foster care.<sup>6</sup> In fact, students in care consistently lag behind other vulnerable populations of students, such as low-income students, English language learners, and students with disabilities. The report stated that Arizona's students in foster care

Figure 1: FosterEd Arizona Timeline

- are consistently among the academically lowest performing subgroups in math and English;
- have the highest dropout rates;
- are more likely than the general population to be enrolled in the lowest performing schools; and
- are more likely to change schools during the school year.

With promising results from the Pima County pilot and stark data on statewide education indicators for foster youth, Arizona policymakers took action. In January 2016, leadership in the Arizona House and Senate introduced House Bill (HB) 2665, endorsed by a bipartisan group of more than 20 sponsors. The legislation included provisions to establish and fund a statewide expansion of FosterEd, providing \$1 million in state funding and an additional \$500,000 in state funding contingent on private matching funds. The bill passed and, in May 2016, Arizona Governor Doug Ducey signed HB 2665 into law.<sup>7</sup> NCYL was selected as the nonprofit organization to implement the statewide program. **Figure 1** presents a timeline of the



Source: Image provided by the National Center for Youth Law.

<sup>&</sup>lt;sup>5</sup> See Laird, J. (2016). *FosterEd Santa Cruz County: Evaluation final report*. Berkeley, CA: RTI International. <u>http://foster-ed.org/wp-content/uploads/2017/01/Year-3-report-FosterEd SCC Draft-10-18-16.pdf</u>; Laird, J. (2015). *FosterEd Santa Cruz County: Year 2 Evaluation*. Berkeley, CA: RTI International. <u>http://foster-ed.org/wp-content/uploads/2017/02/FosterEd-Santa-Cruz-County-Year-2-Evaluation.pdf</u>; Laird, J. (2016). *FosterEd Arizona: Year 2 Evaluation*. Berkeley, CA: RTI International. <u>http://foster-ed.org/wp-content/uploads/2017/02/FosterEd-Santa-Cruz-County-Year-2-Evaluation.pdf</u>; Laird, J. (2016). *FosterEd Arizona: Year 2 Evaluation*. Berkeley, CA: RTI International. <u>http://foster-ed.org/wp-content/uploads/2017/02/FosterEd-Arizona:</u> *Year-2-Evaluation.pdf*; and Laird, J. (2018). *FosterEd New Mexico Evaluation Report*. Berkeley, CA: RTI International. The FosterEd Indiana evaluation was not conducted by RTI and did not examine education outcomes, but it did report positive implementation of the program. See Yoder, S. (2012). *FosterEd: Indiana Evaluation and Recommendations*. <u>https://foster-ed.org/wp-content/uploads/2017/02/FosterEd-Indiana-Evaluation.pdf</u> <sup>6</sup> Barrat, V. X., Berliner, B., & Felida, N. J. (2015). *Arizona's invisible achievement gap: Education outcomes of students in foster care in the state's public schools*. San Francisco, CA: WestEd.

https://www.azfoundation.org/Portals/0/Uploads/Documents/AZ\_Invisible\_Achievement\_Gap\_FINAL.pdf 7 In 2019, the requirement to secure private matching funds was eliminated.

development of the Pima County Pilot and the Arizona statewide expansion.

RTI conducted a two-part evaluation of the FosterEd Arizona expansion: an implementation evaluation of FosterEd in Maricopa, Pima, and Yavapai<sup>8</sup> Counties and an impact evaluation of the effectiveness of FosterEd on students' social, emotional, and academic outcomes. The evaluation covered two program years, associated with the 2017–18 and 2018–19 school years. A report released in January 2019 presented findings from the first year of the evaluation.<sup>9</sup> This report covers the full two years of the evaluation.

The impact evaluation was guided by the following two research questions:<sup>10</sup>

- <u>Research Question 1</u>: Does FosterEd improve students' self-efficacy, positive adult relationships, and future success orientation?
- <u>Research Question 2</u>: Does FosterEd improve students' academic outcomes, such as grade promotion, high school graduation, and performance on state assessments?

### FosterEd Practice Model

**Figure 2** depicts FosterEd's practice model, including its three key components. FosterEd's model is customized for each county and state; however, the overall objectives remain consistent.

### **1** Education Champion

Parental involvement in education is one of the strongest predictors of a student's educational success. Foster youth often do not have anyone in their lives to champion their education by monitoring their academic progress and advocating for their educational needs. Collaboration with foster youth and their caretakers is often focused solely on the youths' immediate safety. Consequently, their educational needs are typically not sufficiently addressed in child welfare team meetings or service plans.

FosterEd aims to focus attention on the individual educational needs of each youth in foster care by identifying at least one person who can serve as the student's Education Champion. Ideally, this would be a biological parent or long-term caregiver—someone who can be part of a youth's life for a long time and can continue to support the child educationally after state involvement ends.



Source: Image provided by the National Center for Youth Law.

#### Figure 2: FosterEd Practice Model

<sup>&</sup>lt;sup>8</sup> FosterEd expanded to Yavapai County in the summer of 2018.

<sup>&</sup>lt;sup>9</sup> See Laird, J. and Warkentien, S. (2019). *FosterEd Arizona: Preliminary Evaluation final report*. Berkeley, CA: RTI International. <u>http://foster-ed.org/wp-content/uploads/2019/05/FosterEd-AZ-Prelim-Evaluation-Report.pdft-FosterEd\_SCC\_Draft-10-18-16.pdf</u>

<sup>&</sup>lt;sup>10</sup> RTI initially planned to examine a third research question: Within counties with sufficient FosterEd services to reach the majority of foster youth, are the academic gaps between foster youth and non-foster youth declining? RTI and FosterEd determined mid-way through the evaluation that this research questions was premature given that the roll out of the statewide expansion had not yet reached the majority of foster youth in an one particular county.

FosterEd recognizes that Education Champions (ECs) may need support to develop their capacity to serve youth effectively.

### Education Team

FosterEd recognizes that to fully support the educational strengths and needs of youth, a team of adults must be engaged. This includes representatives from the children's schools, the child welfare agency, and behavioral health providers. Other adults in the youths' lives (e.g., caregivers, coaches, or engaged relatives) may also be team members.

### 3 Student-Centered Engagement

FosterEd believes that positive engagement and empowerment at school starts with putting students at the center of their educational decisionmaking. FosterEd is committed to giving students "voice and choice" in shaping every element of their education and believes it will lead to educational success, particularly for systeminvolved youth who have experienced the trauma and loss of control associated with involvement in the child welfare system.

### *The Critical Role of the Education Liaison*

Education Liaisons (ELs) staff the FosterEd program. In Arizona, 10 ELs provided direct support to foster youth during the 2017–18 school year. During the 2018–19 school year, that number increased to 12 as FosterEd expanded to Yavapai County. ELs identify a team of adults to support the youth educationally, identify an EC, and help the youth and their team to develop, track, and achieve educational goals. The ELs stay in regular contact with the youth and the team of adults. The EL role is further described in the next section about the three tiers of support provided by FosterEd.

In addition to ELs, during the 2017–18 school year, FosterEd Arizona had a manager of youth development and volunteer engagement, a director of student supports and systems partnership, and a state director. In early 2019, a director of policy and youth leadership joined the FosterEd team.

### Three Tiers of Support

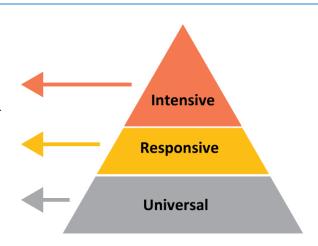
FosterEd recognizes that the educational needs of youth are individualized and may not require the same type of engagement or amount of time to address. By tailoring its services, FosterEd can maximize the number of youth effectively served. FosterEd's three tiers of support are depicted in **Figure 3**.

#### Figure 3: FosterEd Tiers of Support

"Intensive" Education Liaisons provide individualized and long-term (1- to 2-year) intensive supports (weekly) to highest need grade 9–12 students.

"Responsive" Education Liaisons provide shortterm (1- to 6-month) youth-level interventions triggered by a pressing education need for grade K–12 students.

Successful implementation of system-level policies and practices ensuring youth are accessing academic and social and emotional interventions intended for all students.



Source: Image provided by the National Center for Youth Law, with some modifications from RTI.

### **Intensive Tier**

For high-school-age youth with complex educational needs, ELs provide intensive services over a period of one to two years to ensure those young people are on a pathway toward high school graduation. During the 2017–18 and 2018–19 school years, Intensive ELs were co-located at six high schools in Maricopa County and three high schools in Pima County. During the 2018–19 school year, one Intensive EL was co-located at a high school in Yavapai County. The schools were selected in consultation with the Arizona Department of Child Safety (DCS) and district and state education agency partners, based on available data of the high schools attended by relatively large numbers of youth in foster care. Intensive ELs serve youth at their co-located schools and continue to work with those students when they transfer to other schools, most frequently due to changes in their foster care placement. As a result, FosterEd provides intensive services to students attending high schools throughout Maricopa, Pima, and Yavapai Counties.

ELs work with school staff to identify youth in foster care who are at risk of not graduating high school. DCS and other community members can also refer students for intensive services. Indicators of risk include, for example, being credit deficient, having a history of discipline issues, low attendance, and having special education needs.

Once a youth in such a situation has been identified, the EL meets with the young person to describe the FosterEd program and seek participation. If the young person agrees, the EL obtains DCS and caregiver consent. When consent has been obtained, the EL meets with the young person to identify and develop goals.

FosterEd is committed to youth engagement that is empowering for young people. Therefore, the EL asks the young person about future goals. For example, a young person may aspire to be a music producer. The EL and youth will talk about how a high school diploma can help achieve this goal and set targets to be on track to graduate (e.g., bring a current F in math, a required course, to at least passing). This process of setting goals can take anywhere from one to four meetings, depending on the young person's interests, initial comfort in working with the EL, and extent to which goals were clearly articulated previous to meeting with the EL.

The young person receiving intensive FosterEd supports will meet in person with the EL at least every other week, typically at the school site. In between these meetings, the EL connects with the young person two to three times via text, phone, or by sending a note to class. These contacts may include an encouraging note about a test happening the next day, congratulations on a good grade on an assignment, or checking in about an action the young person was going to take toward achieving one of their goals.

Each week the EL checks the young person's education data via the school's parent portal, to which ELs have access. The EL monitors the youth's attendance, homework completion, grades, behavior infractions, and course completion.

Once a month, during an in-person meeting, the EL reviews goals with the young person, documenting any updates. They also look ahead together at any key deadlines, such as college application or FAFSA (Free Application for Federal Student Aid) due dates.

The EL stays in frequent contact with the adult team members, communicating as needed with regard to actions the adults are taking in support of the youth's goals. The EL also attends schoolrelated or DCS-related meetings for the youth (e.g., Individualized Education Plan (IEP), school discipline, or Team Decision Making or Child and Family Team meetings). Once a semester, the EL organizes a FosterEd and education-focused meeting that includes the youth and the adult Education Team members. If the young person wants to lead the meeting, the EL provides support.

Intensive ELs support approximately 20–25 students at any one time. FosterEd expects to serve these young people for one to two years. Intensive ELs continue to support youth one semester after high school graduation, so long as the youth agrees and is enrolled in or trying to enroll in a formal education program, such as a training program, a community college, or four-year college. Often this support includes connecting the young person with supports offered at the postsecondary institution.

### **Responsive Tier**

Youth with needs that can be addressed in a short period are served by ELs "responsively" for a period of one to six months. Whereas the Intensive ELs focus on supporting high school youth, Responsive ELs serve youth in kindergarten through grade 12. During the 2017–18 and 2018– 19 school years, Responsive ELs were co-located in three Maricopa DCS offices and two DCS offices in Pima County. During the 2018–19 school year, one Responsive EL was co-located at a DCS office in Yavapai County. The fact that Responsive ELs are co-located at the DCS offices helps maintain awareness of the program and facilitates collaboration with DCS staff.

ELs receive referrals from DCS Specialists via an online referral form. FosterEd accepts referrals from DCS Specialists in any office throughout Arizona, so long as the student they are referring resides in one of FosterEd's service areas. The form includes a list of discrete educational concerns from which the DCS Specialist chooses to request FosterEd's support, including:

- School mobility: transportation
- Immediate enrollment
- Enrollment in appropriate school, grade level, or course
- Obstacles to IEP/504
- Retention process support
- School discipline/behavioral concern
- Post-graduation planning and options counseling
- Credit recovery
- Other educational concern

A Responsive EL responds to the DCS Specialist within 48 hours to ask any clarifying questions about the referral and for the DCS Specialist to sign a consent form enabling the FosterEd EL to work with the young person and access educational records. The EL then reaches out to the caregiver, biological parent, and youth (depending on the youth's age) to explain the supports FosterEd can provide. The EL works with the adult team members and the youth, if age appropriate, to refine a goal and identify steps for achieving that goal. For example, if the referral issue were "transportation to school of origin," the EL would translate that goal more specifically for the team, such as "help arrange for transportation to and from Franklin Middle school" and list the steps the EL and other team members would take to help achieve this goal. The EL would then take any selfassigned actions and check in with team members who also have actions assigned to them. When the goal has been accomplished, the EL would tell all team members that, if no additional issues arise, they will end services in two weeks. If services were provided for more than a month, the EL would send a monthly email update to the team and call any team members who do not have email accounts.

Responsive ELs provide support to approximately 25–30 students at any one time, and their roster of students is expected to roll over three to four times a year. Thus, in the course of a year, Responsive ELs are expected to serve between 75 and 120 students.

### **Universal Tier**

A third tier of the program involves promulgating best practices and advocating for policy change at the local and state levels to support the educational success of students in foster care. During the 2017– 18 year, this was primarily accomplished by FosterEd staff conducting outreach activities to help inform stakeholders about the unique educational needs of foster youth and steps they can take to help address those needs. In the Spring of 2019, FosterEd hired a Director of Policy and Youth Leadership to advance work in the universal tier, including producing an Arizona foster youth education toolkit to be completed and released in 2020.

### **Evaluation Data**

RTI incorporated multiple sources of data into the evaluation. **Table 1** briefly lists the data sources used for the evaluation. Additional information is provided in the relevant sections of the report.

### Table 1: FosterEd Arizona Data Sources for the Evaluation

Quantitative Data	Report Section	Notes
Educational Case Planning Data	Section II	FosterEd tracks administrative data (e.g., number of youth served, number and relation of Education Champions) and educational case planning data (e.g., student goals and progress) in EdTeamConnect. These data were extracted and transferred to RTI in August 2019, covering activities through July 31, 2019 for analysis and inclusion in this evaluation report.
Youth Social and Emotional Well- Being Survey Data	Section III	RTI developed a survey for foster youth receiving intensive supports designed to measure youths' self-efficacy, future orientation, and support from non-Education Liaison (EL) adults in their lives. ELs administered a <i>baseline</i> survey to youth as they entered FosterEd. Follow-up surveys were administered approximately every 6 months thereafter while youth received FosterEd services. FosterEd transmitted the surveys to RTI for data entry and analysis.
Education Data	Section IV	RTI established a data sharing agreement with the Arizona Department of Education (ADE) to access education data, including data regarding enrollments, absences, end-of-year status (e.g., promotion, graduation), and state standardized test participation and performance. The data sharing agreement included provisions for protecting the data and identity of the students.
Child Welfare Data	Section IV	RTI established a data sharing agreement with the Arizona Department of Child Safety (DCS) to access child welfare data, including length of time in foster care and number of placements. RTI used the DCS data to identify foster youth in the ADE data and conduct analyses which compared educational outcomes of youth served by FosterEd and similar youth in foster care who were not served by FosterEd. The data sharing agreement included provisions for protecting the data and identity of the students.
FosterEd Feedback Survey Data	Section II	During the second year of the evaluation, RTI developed surveys to collect feedback from youth who received either responsive or intensive services and from parents, relatives, and caregivers of youth supported with responsive services. Surveys were intended to be administered to youth receiving intensive services after six months of support, every six months thereafter, and at exit from FosterEd and for youth receiving responsive support at exit from FosterEd.

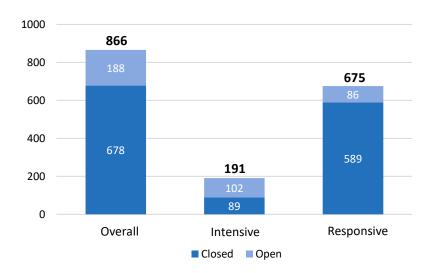
### II. Students Served and Supports Provided by FosterEd

This section focuses on program implementation, describing the first year of the FosterEd Arizona statewide expansion, from launch on August 28, 2017, to July 31, 2019. It begins by presenting information about the foster youth served during that period. It then summarizes information about the adult team members identified to support the youth, education goals set by the youth and their teams, and progress made toward those goals. The data come from EdTeamConnect, FosterEd's educational case management data system, extracted for RTI.

# How Many Youth Were Served by FosterEd Arizona?

Between late August 2017 and end of July 2019, FosterEd served 866 youth, with about threequarters of them supported via the responsive tier of service (**Figure 4**).

At the time the data were extracted, 188 youth had open services with FosterEd. Among those students, slightly more were receiving intensive services. With six Intensive ELs and six Responsive ELs, one might expect about 120 youth to have open intensive services and 150 youth to have open responsive services. The lower-than-expected numbers of open services is at least partially explained by the timing of the data extract, which took place in the summer of 2019, before the start of the new school year. This is when FosterEd typically serves the fewest number of youth.





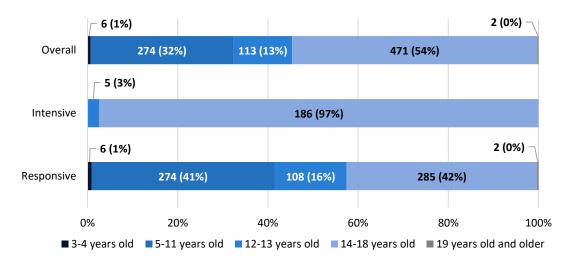
Note: This figure represents all of the unique times that students were served by FosterEd between launch of the statewide expansion on August 28, 2017 and July 31, 2019. The total number of unique students served is 821. There were 45 instances where a student was served more than once by FosterEd: 40 instances were a second time served, four instances a third time served, and one instance a fourth time served. Forty-seven students started being served in Pima County before the launch of the statewide expansion; 19 of those cases were converted to the Intensive level and 28 were converted to the Responsive level. Source: EdTeamConnect data, extracted August 13, 2019.

### Who Were the Youth Served?

When considering the overall group of youth served by FosterEd, the largest overall share of youth served were ages 14 to 18, which most typically corresponds to high school students (**Figure 5**).

As should be expected given that the intensive tier of service was developed for and only offered to older youth, the age distribution looks quite different between youth supported with intensive services compared with those served with responsive services. The vast majority of youth in the intensive service group were of high school age (97%), compared with just 42% of youth in the responsive group. About two-fifths (41%) of responsive youth were ages five to 11, which typically corresponds to elementary grades, while none of the intensive youth were in this age group, as is expected. Six students ages three and four were served with responsive services. Although the FosterEd program is not specifically designed for this age group, it supports preschool-age students under certain circumstances, most often when they attend a preschool operated by a public school district and/or they have an IEP.

FosterEd has served more males than females (56% of students were male compared to 43% who were female) **(Table 2).** Hispanic students were the largest racial/ethnic group served (40%), followed by White and Black students (30% and 14%, respectively). With regard to special needs status, 45% of the FosterEd youth had either an IEP or 504 plan, and an additional one percent of youth were being evaluated for special education services. Note that these relatively large percentages likely reflect the fact that many of the referrals FosterEd receives are for special education advocacy. Nevertheless, a 2015 Arizona statewide report



#### Figure 5: Number and Percentage of Students Served, by Age at Referral and Support Level

Note: Detail may not sum to totals due to rounding. *N* =866 students. Students who were served more than once are included in the figure based on each time they were referred to FosterEd. The age of referral of students who started being served in Pima County before the statewide expansion was calculated based on the expansion launch date of August 28, 2017. Source: EdTeamConnect data, extracted August 13, 2019.

found that 23% of youth in foster care qualified for special education supports, compared with 11% of the statewide student population.<sup>11</sup>

A small percentage of youth served by FosterEd were dual status (six percent), meaning they are both under the care of DCS and under probation supervision via the juvenile justice system. **Figure 6** shows the child welfare placement types youth experienced while being served by FosterEd. About half of youth supported with intensive services, and about one-third of youth supported with responsive services, lived in a group home.

	Overall		Intensiv	Intensive		Responsive	
	Number of		Number of		Number of		
	Students	Percent	Students	Percent	Students	Percent	
Sex							
Female	356	43%	88	51%	268	41%	
Male	463	56%	84	49%	379	58%	
Other gender	2	0%	0	0%	2	0%	
Race/ethnicity							
American Indian/Alaska Native	34	4%	7	4%	27	4%	
Asian/Native Hawaiian/							
Pacific Islander	4	0%	1	1%	3	0%	
Black, non-Hispanic	113	14%	39	23%	74	11%	
Hispanic or Latino <sup>1</sup>	331	40%	59	34%	272	42%	
White, non-Hispanic	244	30%	58	34%	186	29%	
Multiracial	54	7%	5	3%	49	8%	
Unknown/Other <sup>2</sup>	41	5%	3	2%	38	6%	
Child has special education needs							
Yes (either 504 or IEP)	373	45%	63	36%	310	48%	
No (neither 504 nor IEP)	435	53%	107	62%	328	51%	
Under evaluation <sup>3</sup>	8	1%	2	1%	6	1%	
No data entered	5	1%	0	0%	5	1%	
Dependency Type							
Child welfare	773	94%	156	91%	617	95%	
Dual status	48	6%	16	9%	32	5%	
Total	821	100%	172	100%	649	100%	

Table 2: Characteristics of Students Served

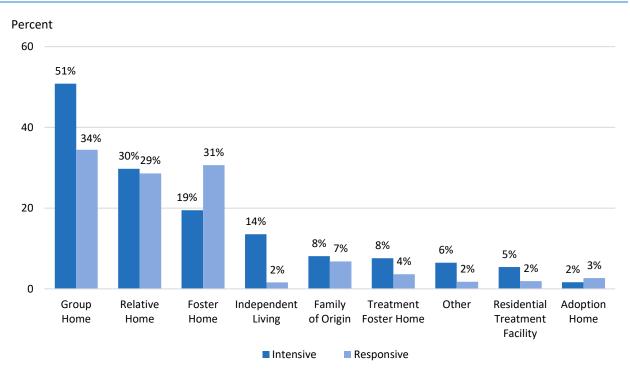
<sup>1</sup> Hispanic students may be any racial background.

<sup>2</sup> Unknown/Other includes students whose race/ethnicity was not reported or reported as "unknown".

<sup>3</sup> A child is considered "Under evaluation" if s/he is not receiving any services and still needs to be evaluated for either a 504 or IEP. Note: Detail may not sum to totals due to rounding. N = 821 unique students. For students served as both intensive and responsive levels; the information shown in this table is for their initial service level. IEP = Individualized Education Program. Source: EdTeamConnect data, extracted August 13, 2019.

<sup>&</sup>lt;sup>11</sup> Barrat, V. X., Berliner, B., & Felida, N. J. (2015). Arizona's invisible achievement gap: Education outcomes of students in foster care in the state's public schools. San Francisco, CA: WestEd. Authors' analysis of linked administrative data from the Arizona Department of Education and Arizona Department of Child Safety, 2012/13.





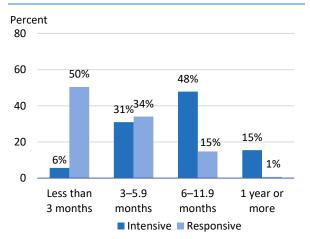
Note: Detail may not sum to totals due to rounding. N = 818. Forty-eight youth did not have child welfare placement information in EdTeamConnect and are therefore not included in this figure. Some youth had more than one placement type while they were served by FosterEd. This analysis includes all available placement type information (i.e., whether the youth ever experienced a given placement type) and percentages therefore sum to more than 100.

Source: EdTeamConnect data, extracted August 13, 2019.

### How Long Were Students Served by FosterEd?

**Figures 7** and **8** report the length of time students were served by FosterEd, among those with closed and open services, respectively. As expected given the model, students served with intensive supports tend to be served for longer periods. For example, among youth with closed services, 63% in the intensive group were served for at least six months, compared with 16% of youth in the responsive group.

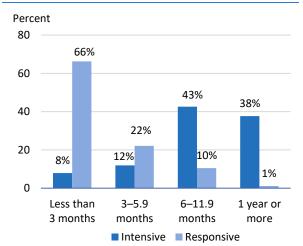
### Figure 7: Length of Time Served, Among Students with Closed FosterEd Services



Note: Detail may not sum to totals due to rounding. N = 632 total youth who are no longer being served and whose referral date was after the launch of statewide expansion (August 28, 2017, or later).

Source: EdTeamConnect data, extracted August 13, 2019.

FosterEd intends to serve youth in the intensive service tier for one to two years. RTI examined cases for youth provided with intensive supports and who could have been served for at least one year (i.e., their referral date was at least 12 months prior to the date the data were extracted from EdTeamConnect for this report). Of those 63 students, 35 (56%) had cases that closed prior to being served for one year (data not shown in figures).



### Figure 8: Length of Time Served, Among Students with Open FosterEd Services

Note: Detail may not sum to totals due to rounding. N = 187 total youth who are currently being served and whose referral date was after the launch of statewide expansion (August 28, 2017, or later).

Source: EdTeamConnect data, extracted August 13, 2019.

Figure 9 lists the reasons for ending FosterEd services. Among youth provided with responsive services, the vast majority of FosterEd services were closed because the youths' goals had been met. However, most FosterEd intensive services closed for one of three other reasons: the youth went AWOL<sup>12</sup> (33%); the caregiver or youth refused continuing services (26%), something that often occurs when there is a change in the caregiver or the student exists foster care; or the youth moved out of the service area (22%). FosterEd intends to serve youth receiving intensive supports for one to two years. Thus, it is not surprising that most of the services for intensivesupport youth ended because of youth or caregiver decline in service or because youth were no longer available to receive services.

Among youth served with intensive services who could have been served for at least one year by the time data were extracted for this report but were not (N=35), none of those cases closed because youth completed their goals and four (11%) closed because the youth transitioned to postsecondary education (data not shown in figures). Seven (20%) of the students had moved out of the service area. The remainder had closed cases due to refusing services (10 or 29%) or because they were AWOL or FosterEd was otherwise unable to locate them (14 or 40%).

### Who Served on Youths' Teams?

A cornerstone of the FosterEd model is identification and engagement of adults in the participating youth's life to support the youth educationally. Some adults serve on many teams. For example, a child welfare worker may serve on more than one youth's team. There were 3,478 duplicated team members, including those who served on more than one team.

**Figure 10** shows that 2,240 unduplicated team members served on teams. The two largest groups of unduplicated team members were 1) parents, relatives, and caregivers and 2) mental health workers and other service providers. The third largest group was child welfare workers, probation officers, and attorneys.

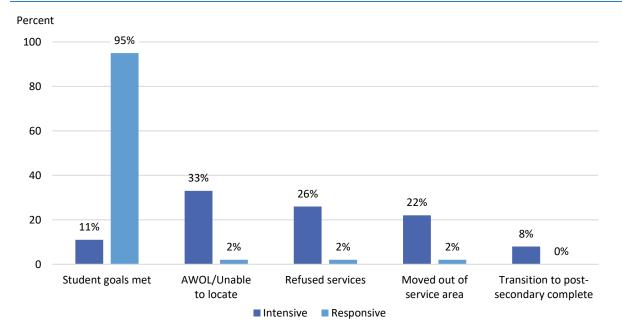
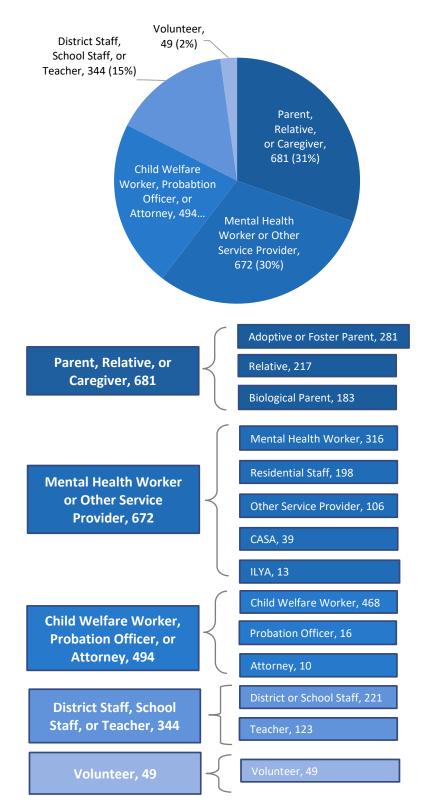


Figure 9: Reason for Ending FosterEd Services

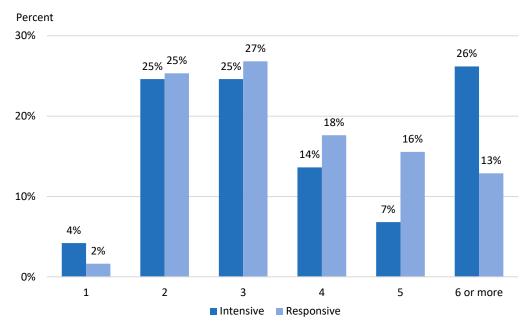
NOTE: Detail may not sum to totals due to rounding. Source: EdTeamConnect data, extracted August 13, 2019.

 $<sup>^{\</sup>rm 12}$  When a youth leaves the placement without permission, they are considered "AWOL" from foster care.

#### Figure 10: Nonduplicative Student Team Members



Note: *N* = 2240 nonduplicative student team members. The volunteer program was discontinued in August 2019. CASA = Court Appointed Special Advocate; ILYA = Independent Living Young Adult program. Source: EdTeamConnect data, extracted August 13, 2019.



#### Figure 11: Total Number of Team Members, by Support Level

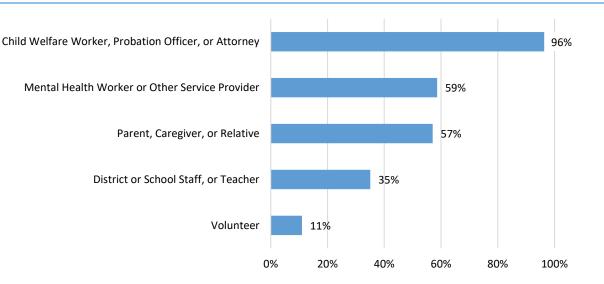
Note: Detail may not sum to totals due to rounding. Figure includes 191 youth with intensive supports and 674 youth with responsive support. The team member totals include all team members that served on a child's team while s/he was being served by FosterEd. Team members may not have served on the team at the same time. One youth with responsive supports had no team members because the youth was referred to FosterEd immediately prior to data extraction. That youth represents less than 1% of the responsive services group and is not reflected in the graph.

Source: EdTeamConnect data, extracted August 13, 2019.

**Figure 11** reports the percentage of teams by total number of adult members. For both the intensive and responsive groups, most youth have at least three adult team members (71% and 73%, respectively). However, youth in the intensive group were more likely to have six or more adult team members (26% versus 13% for the responsive group).

**Figures 12** and **13** report the percentage of teams by member type, for the intensive and responsive groups, respectively. All or almost all of youth from

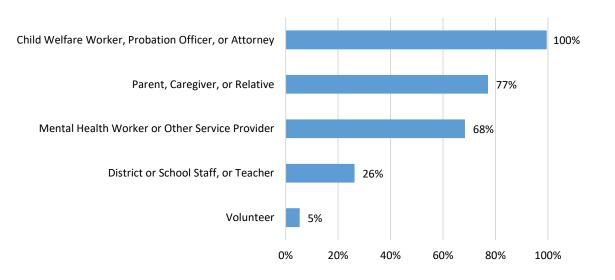
both groups have a child welfare worker, probation officer, or attorney on their team. One notable difference between the groups is the percentage who have a parent, caregiver, or relative on their team. Among the responsive group, 77% fit into this category, whereas only 57% among the intensive group do. This result is perhaps not surprising given that about 50% of youth who receive intensive services reside in a group home (**Figure 6**).



#### Figure 12: Percentage of Youth Receiving Intensive Supports with Key Roles on Team

Note: *N* = 191. See Figure 10 for information about the number of team members for specific categories of team members. Source: EdTeamConnect data, extracted August 13, 2019.

#### Figure 13: Percentage of Youth Receiving Responsive Supports with Key Roles on Team



Note: N = 674. One youth receiving responsive services did not have any team members as of the data extraction date. See Figure 10 for information about the number of team members for specific categories of team members. Source: EdTeamConnect data, extracted August 13, 2019.

In addition to identifying adults in a youth's life who can serve on the youth's education team, the FosterEd EL works with the youth to identify a team member who can be the youth's Education Champion (EC). **Table 3** reports the percentage of youth receiving intensive and responsive services for whom an EC was identified. A little more than half of youth in the intensive services group (57%) and 88% of youth in the responsive services group have an identified EC on their team. The final total row in **Table 3** reveals that there are more ECs than there are teams with an EC. This is because some teams have more than one EC.

	Over	all	Intens	sive	Respon	sive
Education Champion	Frequency	Percent	Frequency	Percent	Frequency	Percent
No	164	19%	84	43%	80	12%
Yes	701	81%	107	57%	594	88%
Total	865	100%	191	100%	674	100%
Team Member Role of Education	Champion					
Parent, Relative, Caregiver	621	74%	80	63%	541	75%
Mental Health Worker, Other Service Provider	159	19%	21	17%	138	19%
Child Welfare Worker, Probation Officer, Attorney	39	5%	15	12%	24	3%
District or School Staff, Teacher	13	2%	3	2%	10	1%
Volunteer	11	1%	7	6%	4	1%
Total	844	100%	126	100%	717	100%

Table 3: Percentage of Youth with an Education Champion on Their Team

Note: Detail may not sum to totals due to rounding. The total for team member roles (n=126 and n=717) is higher than the number of youth with an Education Champion (n=107 and n=594) because multiple youth who had Education Champions had more than one.

Source: EdTeamConnect data, extracted August 13, 2019.

Among ECs of youth in both the intensive services and responsive services groups, ECs were mostly commonly a parent, caregiver, or relative (63% and 75%, respectively). ECs on intensive teams were more likely to be child welfare workers, probation officers, or attorneys compared with ECs on responsive teams (12% and 3%, respectively).

### How Many Unmet Educational Needs Were Identified and Addressed?

ELs work with youth and their adult team members to identify youths' strengths and needs and develop goals to address their unmet education-related needs. The goals may focus on helping youth thrive by leveraging their strengths or improve in areas that need strengthening.

After two years of statewide expansion, a total 2,026 goals had been set for or by youth, including 854 for youth receiving intensive services and 1,172 for youth receiving responsive services. As expected given the different purposes of the service tiers, youth in the intensive services group had a higher median number of goals than youth in the responsive services group (**Table 4**).

Table 4: Median, Minimum, and Maximum Number of Goals for Students, by Student Level of Support

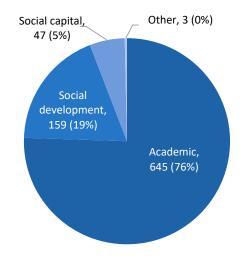
	Median	Minimum	Maximum
Intensive	3.0	1	32
Responsive	2.0	1	5

Note: *N* = 848 students provided goal data for a total of 1,172 goals among students receiving responsive support; and 854 goals among students receiving intensive support. Eighteen students who were included in table 2 are not included here because they had no recorded goals. Five students had cases that opened prior to expansion, were given a Responsive or Intensive designation post-expansion, but did not have any new goals created post-expansion. Twelve additional students were being served in either Responsive or Intensive capacities but did not have goals entered prior to the data being pulled for analysis. One student did not consent to providing goal data after turning 18.

Source: EdTeamConnect data, extracted August 13, 2019.

**Figures 14** and **15** report the types of goals set for youth. Among the intensive services group, about three-quarters relate to academics, and about 20% relate to social development. A small minority (5%) are social capital goals or "other" goals. Among the responsive services group, the vast majority of goals are academic, with the remainder being social development or "other" goals.

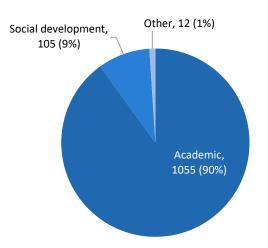
Figure 14: Total Number of Goals, Among Students Receiving Intensive Support, by Goal Category



Note: Detail may not sum to total due to rounding. *N* = 854 total goals among students receiving intensive support. Source: EdTeamConnect data, extracted August 13, 2019.

The goals are further described in **Figures 16** and **17**, including the number of subcategory goals that have been completed and the number that are current. FosterEd has different goal subcategories for intensive and responsive services because of the different tiers of engagement. The responsive tier is a short-term intervention addressing barriers to school success. The subcategories shown in **Figure 17** are the types of issues that commonly arise for students in foster care and are listed as checkbox options for responsive services on FosterEd's referral form for DCS. The intensive tier, on the other hand, is a long-term and highly individualized engagement. There are fewer and different subcategories of goals, but the EL tailors

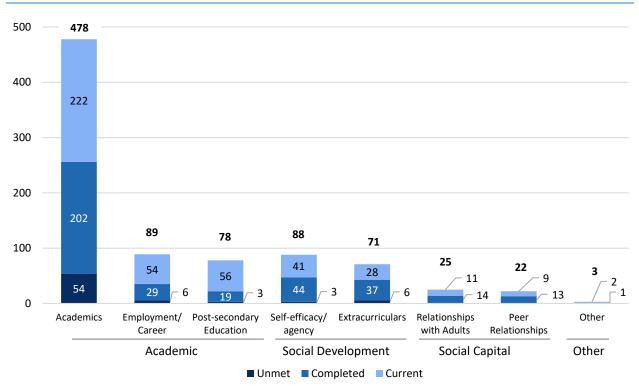
Figure 15: Number of Goals, Among Students Receiving Responsive Support, by Goal Category

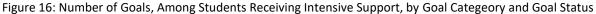


Note: Detail may not sum to total due to rounding. N = 1,172 total goals among students receiving responsive support. Source: EdTeamConnect data, extracted August 13, 2019.

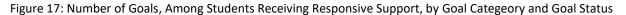
the goal to the youth. Those goals are noted in EdTeamConnect, but they are so individualized that the descriptions are not shared with RTI and not easily summarized beyond the subcategories shown in **Figure 16**.

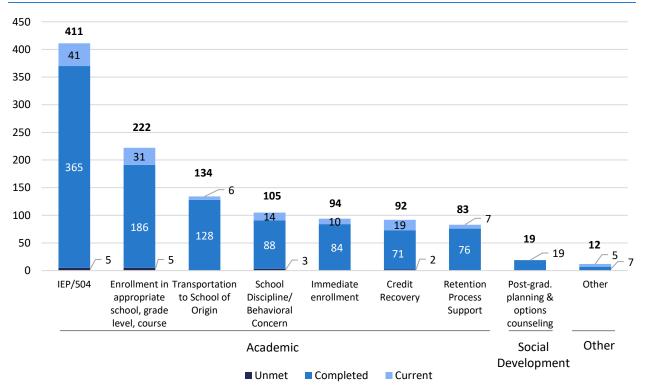
Among youth receiving intensive supports, the largest subcategory of goals is academic, followed by employment/career goals, self-efficacy/agency goals, and postsecondary education goals. Among youth receiving responsive supports, the largest subcategory of goals is IEP/504 followed by enrollment in the appropriate school, grade level or course, and transportation to school of origin.





Note: *N* = 854 total goals among students receiving intensive support. Source: EdTeamConnect data, extracted August 13, 2019.





Note: N = 1,172 total goals among students receiving responsive support. Source: EdTeamConnect data, extracted August 13, 2019.

## What Feedback Do Youth Have About the FosterEd Program?

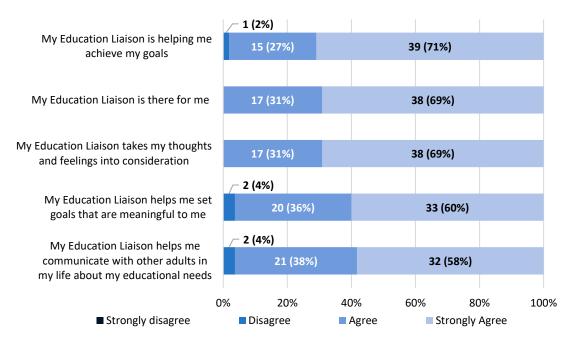
At the end of the first year of the statewide evaluation, RTI and FosterEd agreed it was important to collect youth feedback about the FosterEd program for a number of reasons. One reason was that the social and emotional well-Being survey (discussed in next section) asked about adult support but specifically excluded inquiry about the support received from the youth's EL. The original focus on adults other than the EL was rooted in the theory that as the Education Liaison helped to coordinate other adults in the youth's life to support the youth's education, youth would come to feel more supported by those other adults. When the preliminary evaluation report of the first year of statewide expansion did not reveal changes in youths' perceptions of support from other adults, RTI and FosterEd recognized the need to understand the experiences youth were having with their ELs by soliciting feedback.

In early 2019, during the second year of the evaluation, RTI developed three short feedback surveys in collaboration with FosterEd. One was designed for youth served by intensive services, another for youth served by responsive services, and a third for parents, relatives, and caregivers of youth served by responsive services (see **Appendix A**).

FosterEd Education Liaisons were asked to administer the feedback survey to intensive youth every six months, or when the youth exited the program. For responsive services, Education Liaisons were asked to send a survey request via email or text to parents, relatives, and/or caregivers when the case was closed. If a high school youth was supported by responsive services and the Education Liaison met with them at least twice, the EL administered a feedback survey to the youth during their final meeting. All surveys were programmed into Survey Gizmo, with English and Spanish versions. Survey administration started mid-March, 2019 and survey data were extracted for analysis for this report on October 19, 2019.

RTI determined there was an insufficient number of completed feedback surveys for responsive services cases (15 from youth and 15 from caregivers) to be analyzed. Fifty-five youth served by intensive services completed a feedback survey. From mid-March through October 19, 2019, 109 youth served by intensive supports had an open case and had been served for at least six months and were therefore eligible to complete a survey. Thus, the response rate for the feedback survey of youth receiving intensives services is 50%. Results from the intensive services feedback survey are summarized below.

Youth served by FosterEd with intensive services were asked to respond to a number of statements about their Education Liaison and their overall satisfaction with the FosterEd program. Almost all students "agreed" or "strongly agreed" to the set of positive statements about their Education Liaison shown in **Figure 18**, with the majority answering "strongly agree" to each statement. The statement that received the largest share of "strongly agree" was: "My Education Liaison is helping me achieve my educational goals." The statement that received the lowest share of "strongly agree" was: "My Education Liaison helps me communicate with other adults in my life about my educational needs."



#### Figure 18: Feedback on Education Liasons from Youth Served with Intensive Services

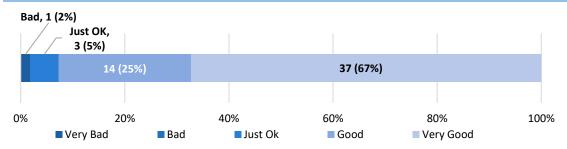
Note: Detail may not sum to total due to rounding. N = 55. Source: FosterEd Youth Feedback Survey.

With regard to overall satisfaction of FosterEd, 93% of youth supported by intensive services who completed the survey rated their experience with the FosterEd program as "good" or "very good" (**Figure 19**). All "agreed" or "strongly agreed" that they would recommend FosterEd to other foster youth (**Figure 20**).

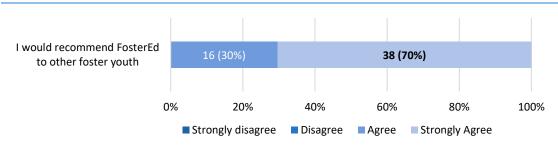
Students were presented with an open-ended question: "What else could FosterEd do to improve your experience in the program?" Forty-two of the 55 respondents answered the question, with most (25 of 42, or 60%) not suggesting changes. Example responses include, "Nothing," "I see no part that needs improvement. I have been very pleased with the help my worker has provided," and, "The FosterEd program does very good at keeping up with the kid that they are with and there is nothing to improve in my opinion."

Of the students who did offer suggestions for improvement, two categories of suggestions were offered by more than one student. Five students referenced providing snacks, and four students suggested Education Liaisons meet with students more often.

Figure 19: Overall Statisifcation with FosterEd Among Youth Served with Intensive Services.



Note: Detail may not sum to total due to rounding. N = 55. Source: FosterEd Youth Feedback Survey.



### Figure 20: Percentage of Youth Served with Intensive Services Who Would Recommend Fostered

Note: Detail may not sum to total due to rounding. N = 55. Source: FosterEd Youth Feedback Survey.

### III. Students' Social and Emotional Well-Being

This section presents preliminary data from student surveys regarding social and emotional well-being. In summer 2017, RTI developed a student survey in close consultation with FosterEd staff. After reviewing current literature and the FosterEd logic model, RTI identified previously validated scales with the potential to measure relevant aspects of students' social and emotional well-being. Modifications to existing scales were made only when necessary to reflect the target population of foster youth or to better align with the goals of the program.<sup>13</sup>

The survey contained six scales, five of which had multiple items. The goal of the survey was to measure youths' initial sense of self-efficacy, future orientation, and support from adults in their lives when they began receiving services from FosterEd, and then to track any changes youth may experience during the course of their time with FosterEd.

All ELs delivering intensive support participated in a training in how to administer the survey. ELs were instructed to administer the *baseline* survey to youth during their second in-person meeting. *Follow-up* surveys were to be administered approximately every six months thereafter while youth were receiving FosterEd services.

As of the first week of July 2019, RTI had received responses from 145 unique students, 79 of whom had completed only one survey and 66 of whom had completed a second survey.

### Measures of Students' Social and Emotional Well-Being Upon Entering FosterEd

Results from the baseline surveys administered to youth between August 2017 and July 2019 are presented in **Tables 5** and **6**. Self-efficacy refers to youths' judgment about their ability to accomplish a task or succeed in an activity. Prior research has shown that students with higher self-efficacy (i.e., a stronger belief in their ability to succeed) are more likely to persist and succeed in educational pursuits.<sup>14</sup>

Table 5: Baseline Estimates for Self-Efficacy and Future Success Orientation

	Estimate (mean)	SD	Percentage "high" responses <sup>2</sup>	Percentage "low" responses <sup>2</sup>	Total # Responses
Self-efficacy scale <sup>1</sup>	3.12	0.49	12%	14%	145
Future success orientation scale <sup>1</sup>	3.23	0.56	14%	17%	145

SD=Standard deviation.

<sup>1</sup>4-level Likert responses from Strongly Disagree (1) to Strong Agree (4).

<sup>2</sup> "High" and "low" indicators were defined as youth who had scale means at least one standard deviation above or below the group mean.

<sup>&</sup>lt;sup>13</sup> For example, an existing scale measured teacher supports for education, with the prompt "Indicate your level of agreement with each of the statements about teachers at your school." The statements included, "Care about me," "Listen to what I have to say," and "Care about whether I come to school." For the purpose of this evaluation we modified the prompt to "In general, adults in my life:" with the same set of statements following. This change was made to better align the scale with the goals of FosterEd, which include increasing adult, not exclusively teachers', support for youth education.

<sup>&</sup>lt;sup>14</sup> Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human behavior* (Vol. 4, pp. 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998); Pajares, F., & Urdan, T. (Eds.). (2005). *Self-efficacy beliefs of adolescents*. Greenwich, CT: Information Age Publishing.

The baseline surveys demonstrate that FosterEd students have a generally positive sense of selfefficacy, with a mean of 3.1 on a scale of 1.0 (lowest) to 4.0 (highest). See **Appendix B** for individual survey items associated with each scale. About 12% of students had "high" scale scores (at least one standard deviation above the mean) and 14% had "low" scores (at least one standard deviation below the mean).

FosterEd's program is also designed to improve students' future success orientation, including how positive and confident students feel about their plans and chances for success. Similar to selfefficacy, results from the baseline survey were generally positive (mean score 3.2). About 14% of students had "high" responses and 17% had "low" responses.

Led by ELs, FosterEd builds "teams" of adults to support foster youth in achieving their educational goals. An important component of the program is to surround youth with adults in their lives who they can trust and from whom they can receive advice and encouragement. **Table 6** presents results from the baseline survey questions that asked students about the support from adults in their lives. It is important to note that students were asked to consider all adults other than the EL working directly with them in the FosterEd program.

In a positive but somewhat surprising finding, the baseline survey indicates that nearly all foster youth receiving intensive FosterEd supports agreed as they entered the FosterEd program that they had an adult in their lives who supported and encouraged their education (94% agreed or strongly agreed; mean 3.6). Youth also reported generally high levels of adult support on the eightitem scale (mean 3.3), with 25% of youth reporting "high" levels of adult support, and just 14% reporting "low" levels.

The final two survey scales asked students to respond to how often in the past 30 days adults in their lives either discussed various topics with them or encouraged them. In general, at baseline, youth reported discussing school activities, current events or politics, and plans with adults once or twice in the last month (mean 2.1) and also reported receiving encouragement from adults in their lives once or twice in the last month (mean 2.1).

	Estimate (mean)	SD	Percentage "high" responses <sup>3</sup>	Percentage "low" responses <sup>3</sup>	Total # Responses
Have adult who supports and encourages education <sup>1</sup>	3.58	0.66			143
Sense of adult support scale <sup>1</sup>	3.32	0.53	25%	14%	145
Discussion frequency with adults scale <sup>2</sup>	2.08	0.48	17%	15%	145
Encouragement frequency from adults scale <sup>2</sup>	2.14	0.52	21%	17%	145

#### Table 6: Baseline Estimates for Adult Supports

SD=Standard deviation.

-- N/A (responses based on single question).

<sup>1</sup>4-level Likert responses from Strongly Disagree (1) to Strong Agree (4).

<sup>2</sup> 3-level responses including (1) Never in last 30 days, (2) Once or twice in last 30 days, (3) More than twice in last 30 days.

<sup>3</sup> "High" and "low" indicators were defined as youth who had scale means at least one standard deviation above or below the group mean.

### Changes in Students' Social and Emotional Well-Being After Six Months of FosterEd Intensive Supports

We now present changes in students' social and emotional well-being after beginning to receive FosterEd intensive supports. Of the 145 students who completed a baseline survey, 66 students (or approximately 46%) had taken a 6-month followup survey by July 2019.

**Table 7** presents results for changes in self-<br/>efficacy and future success orientation. Students<br/>who received intensive services experienced<br/>modest increases in both self-reported self-efficacy<br/>and positive future orientation between when they<br/>began receiving services and approximately six<br/>months later.

**Table 8** shows results for changes in the adultsupports indicators. One measure appears todecline ("Have adult who supports and encourageseducation"), but the difference is not statisticallysignificant. There is no change in the "Sense ofadult support" scale between the baseline and first

six-month follow-up survey. While not statistically significant, the direction of change is positive for both "Discussion frequency with adults scale" and "Encouragement frequency from adults scale" between the baseline and first 6-month follow-up surveys. Although the mean differences are small and not statistically significant, the positive direction provides tentative suggestive evidence that conversations between youth and the adults in their lives may be starting to occur with more frequency.

Although the increase from the baseline survey to the first follow-up for student self-efficacy and future success orientation is relatively small, the results are noteworthy given a large body of literature that documents a general decline in student self-efficacy over time, particularly for adolescents during the period from middle school to high school and particularly for students in urban schools.<sup>15</sup> During a period when many youth are experiencing declining self-efficacy, students receiving intensive services from FosterEd—who are likely facing more challenges than typical adolescents—seem to be protected against similar declines and, on average, experience modest increases.

	Baseline (mean)	First follow-up (mean)	Direction	Significance (p-value)	Total # Responses
Self-efficacy scale <sup>1</sup>	3.2	3.3	$\mathbf{T}$	* (p=.03)	66
	2.2		•	*	
Future success orientation scale <sup>1</sup>	3.3	3.4	个	(p=.03)	66

Table 7: Changes in Self-Efficacy and Future Success Orientation

<sup>1</sup>4-level Likert responses from Strongly Disagree (1) to Strong Agree (4).

Note: Significance testing was conducted using paired Wilcoxon tests for continuous outcomes from pre-test to post-test within participants. \* p<.05.

<sup>&</sup>lt;sup>15</sup> Unrau, N., & Schlackman, J. (2006). Motivation and Its Relationship with Reading Achievement in an Urban Middle School. *Journal of Educational Research, 100*(2): 81–101. Archambault, I., Eccles, L.S., & Vida, M.N. (2010). Ability Self-Concepts and Subjective Value in Literacy: Joint Trajectories from Grades 1 through 12. *Journal of Educational Psychology, 102*(4): 804–816. Caprara, G. V., Fida, R., Vecchione, M., Del Bove, G., Vecchio, G. M., Barbaranelli, C., & Bandura, A. (2008). Longitudinal analysis of the role of perceived self-efficacy for self-regulated learning in academic continuance and achievement. *Journal of educational psychology, 100*(3), 525.

### Table 8: Changes in Sense of Adult Support

	Baseline (mean)	First follow-up (mean)	Direction	Significance (p-value)	Total # Responses
Have adult who supports and encourages education <sup>1</sup>	3.6	3.5	$\checkmark$	NS (p = .37)	62
Sense of adult support scale <sup>1</sup>	3.3	3.3	$\leftrightarrow$	NS (p = .66)	66
Discussion frequency with adults scale <sup>2</sup>	2.1	2.2	$\uparrow$	NS (p = .22)	66
Encouragement frequency from adults scale <sup>2</sup>	2.1	2.2	$\uparrow$	NS (p = .19)	66

\* = Statistically significant (p<0.05). NS = Not statistically significant.

<sup>1</sup> 4-level Likert responses from Strongly Disagree (1) to Strong Agree (4).

 $^{\rm 2}$  3-level responses including (1) Never, (2) Once or twice, (3) More than twice.

### IV. Academic Indicators for Youth Receiving Intensive Services

Several of the long-term outcomes that FosterEd Arizona hopes to influence are related to how foster youth progress through the educational system. This section asks whether the FosterEd program positively impacted the educational outcomes of participating students. Using data from multiple administrative data systems, we compare the outcomes of foster youth receiving services from FosterEd to similar foster youth who were not served by the program.

### Data and Methods

**RTI** worked with the National Center for Youth Law, the Arizona Department of Education (ADE), and Arizona Department of Child Safety (DCS) to access administrative data from each data system pertaining to students who were in foster care at any point during the period of statewide expansion (i.e., between August 2017 and the end of 2018-19 school year). By linking student records from ADE, child welfare records from DCS, and EdTeamConnect records from FosterEd Arizona, RTI constructed a unique data file containing educational outcomes for foster youth receiving FosterEd intensive services (the treatment group) and foster youth not receiving FosterEd services (the comparison group). Appendix C provides details about the data linking process and results. We then used quasiexperimental methods to balance the treatment and comparison groups on multiple student educational, demographic, and child welfare characteristics from the year prior to the launch of statewide expansion (school year 2016-17) to estimate FosterEd's effect on key educational outcomes during the 2018-19 school year.

### Educational Outcomes

This report focuses on seven educational outcomes of interest to the FosterEd program, given the available data (see *Limitations* section): (1) the student's completion status at the end of the 2018–19 school year; (2) whether the student was continuously enrolled during the 2018-19 school year; (3) the student's gaps in enrollment during 2018-19 (in days); (4) the student's total out-of-school time, defined as the sum of absences during enrollment periods and total number of days unenrolled during the 2018-19 school year; (5) whether the student participated in any standardized assessment, defined as taking a spring 2019 AzMERIT assessment or any AZELLA assessment; (6) mathematics achievement and (7) English achievement scores from the spring 2019 AzMERIT. Appendix C describes in greater detail the definition and construction of each outcome variable.

### Defining the FosterEd and Comparison Youth

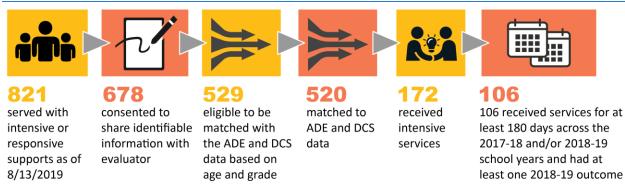
Although FosterEd Arizona served over 800 foster youth with intensive and responsive services as of August 2019 (approximately two years after the launch of the statewide expansion of the program), the sample for this analysis was restricted in several ways. We focus on students who received intensive services, which restricts the sample to youth who were enrolled in grades eight through 12 while receiving services, and we analyze outcomes for youth who were served by the FosterEd program for at least six months (180 days) between August 2017 and the end of the 2018-19 school year (**Figure 21**).<sup>16</sup> The final number of foster youth in the treatment group

<sup>&</sup>lt;sup>16</sup> This restriction on time served is set at a low threshold to keep as many FosterEd youth in the treatment group as possible. However, because youth who receive intensive services are intended to participate in the program for 1-2 years, nearly all youth in the treatment group have received only a partial "dose" of services, which likely weakens the estimates of program effects. As a result, the following findings should be interpreted with some caution.

is 106. The comparison group was restricted to include foster youth who did not receive any FosterEd services, including responsive services. The final size of the comparison sample is 4,332.<sup>17</sup>

**Table 9** presents the sample characteristics of foster youth in the study sample who did and did not receive FosterEd services during the 2017–18 and 2018–19 school years. Student baseline demographic and education characteristics are drawn from the school year prior to the launch of the FosterEd Arizona statewide expansion (2016–17) so that the groups can be balanced on characteristics before exposure to FosterEd. In 2016-17, prior to balancing the treatment and comparison groups, there is evidence that youth receiving FosterEd services differed in some ways from foster youth not receiving FosterEd services. FosterEd youth in the analysis sample were more likely to have spent more time overall in foster care; or have ever been placed in non-relative foster care, or a group home. FosterEd youth were more likely to have had a positive year-end status, continuous enrollment, and have participated in statewide assessments in 2016–17. In addition, compared with the comparison group, FosterEd youth had fewer out-of-school days in 2016–17 and shorter enrollment gaps.<sup>18</sup>

#### Figure 21: Changes in FosterEd Sample Size for Youth Served in the Intensive Tier



<sup>&</sup>lt;sup>17</sup> There were 143 youth served by FosterEd who could potentially be in the comparison group, either because FosterEd did not have consent to share identifiable information about youth with RTI to enable matching with ADE and DCS data (134 youth), or because RTI was unable to identify the youth in the DCS and ADE data given differences in names and birthdates (9 youth). Nearly all of youth who could potentially be in the comparison group were served with responsive supports (120 youth). Given the comparison group size of 4,332, at most 3.3% of the comparison group are actually FosterEd youth.

<sup>&</sup>lt;sup>18</sup> Total time in foster care (coefficient = .001; SE = .0001; p < .001); ever placed in non-relative foster care (coefficient=.91; SE = .21; p < .001); ever placed in group home (coefficient = 1.00; SE = .22; p < .001); positive year-end status in 2016-17 (coefficient = .85; SE = .33; p = .01); continuous enrollment in 2016-17 (coefficient = .57; SE = .22; p = .01); participation in statewide assessment in 2016-17 (coefficient = .71; SE = .26; p = .01); total out-of-school time (coefficient = -.005; SE = .002; p = .01) and enrollment gap (coefficient = -.006; SE = .002; p = .01).

	Non-FosterEd Youth ( <i>N</i> =4332)	FosterEd youth receiving intensive services for at least 180 days (N = 106)
Days served by FosterEd (mean)	-	436
Sex		
Male	53%	51%
Female	47%	49%
Grade Level (in 2016–17)		
7	20%	19%
8	23%	21%
9	23%	25%
10	17%	22%
11 or 12	17%	13%
Race/Ethnicity		
Hispanic or Latino	42%	40%
Black	34%	39%
White	15%	16%
Economically disadvantaged status (in 2016–17)	410/	220/
No Yes	41%	32%
Receiving Special Education Services <sup>2</sup> (in 2016–17)	59%	68%
No	76%	71%
Yes	24%	29%
Number of schools attended in 2016–17	24/0	23%
Attended 1 school	47%	44%
Attended 2 schools	31%	34%
Attended 3 or more schools	22%	22%
Participated in any state assessment 2016–17	71%	83%
English AzMERIT score (spring 2017) (mean)	2542	2538
Mathematics AzMERIT score (spring 2017) (mean)	3636	3638
Positive year-end-exit status in 2016-17		
(graduated, completed grade, still enrolled)	80%	91%
Had Continuous Enrollment in 2016–17	56%	71%
Number of Days Out of School 2016–17	57	38
Total Days in Foster Care (mean)	813	1224
Ever placed in relative foster care (paid)	41%	47%
Ever placed with non-relative foster care	17%	34%
Ever placed in a group home	51%	73%
Ever place in independent living	15%	22%
Ever placed in behavioral group home	9%	14%
Ever placed in correctional facility/detention center	17%	16%
Ever placed in hospital	11%	18%
Ever placed in other facility	24%	36%
Ever placed with parent or relative (unpaid)	12%	17%
Ever lived with relative 6 months prior to removal	16%	16%
Ever lived with non-relative 6 months prior to removal	8%	11%

### Table 9: Characteristics of Foster Youth Not Receiving and Receiving FosterEd Intensive Services

<sup>1</sup> The Hispanic or Latino category includes a small percentage of youth who were identified as American Indian/Alaska Native, Native Hawaiian or Other Pacific Islander, or Asian. These three racial/ethnic groups could not be shown separately due to small cell sizes. <sup>2</sup> A small percentage of youth in the treatment and comparison groups were missing in this indicator, but due to small cell sizes in the treatment group, they cannot be shown separately. They are included in the "No" category. **Table 10:** Unweighted Educational Outcomes for Foster Youth Not Receiving and Receiving FosterEd Intensive

 Services

	Non-FosterEd Youth ( <i>N</i> = 4,332)	FosterEd youth receiving intensive services for at least 180 days ( <i>N</i> = 106)
End-of-Year Completion Status (2018–19)		
Not enrolled at end of year	33.4%	23.6%
Graduated, completed grade, still enrolled	66.6%	76.4%
Continuous Enrollment Throughout 2018–19		
No	50.2%	45.2%
Yes	49.8%	54.8%
Enrollment gap (2018–19) (# days)	68	48
Total Out-of-School Days (2018–19) (mean)	85	74
Participated in Spring AzMERIT or AZELLA (2018–19)		
No	60.0%	58.5%
Yes	40.0%	41.5%
Mathematics Scale Score (spring 2019) (mean)	3663	3663
English Scale Score (spring 2019) (mean)	2549	2556

NOTE: Sample sizes for FosterEd youth for the mathematics and English scale scores were n = 28; sample sizes for the non-FosterEd youth for the mathematics and English scale scores were n=1,089 and 1,190, respectively.

**Table 10** presents the unweighted educational outcomes for non-FosterEd and FosterEd youth in the study sample. Approximately three-quarters (76%) of the FosterEd sample successfully completed the 2018–19 school year and about half (55%) were continuously enrolled throughout the 2018–19 school year. Students in the FosterEd sample were unenrolled in school for an average of 48 days and had an average of 74 out-of-school days (either absent or unenrolled) during the 2018–19 school year. **Table 10** does not account for the differences between the FosterEd and non-FosterEd youth samples in school year 2016-18 and therefore does not provide an estimate of the impact of FosterEd on educational outcomes.

### Analytic Steps

The impact analyses rely on a propensity-scorebased method called inverse probability of treatment (IPT) weighting to estimate the effect of receiving FosterEd intensive services on students' educational outcomes. The method mimics the design of a randomized experiment using observational data by removing the observed differences between the treatment and comparison groups and making treatment status independent of all baseline covariates.<sup>19</sup> See **Appendix C** for additional details.

In the first step, we modeled the likelihood of receiving the treatment (i.e., receiving FosterEd intensive services) conditional on baseline covariates constructed from the merged ADE and DCS data file. We then estimated a weight for each student that was equal to the inverse of the probability of receiving the treatment (either receiving FosterEd services or not) for students in the comparison group, and equal to 1 for FosterEd students. In the second step, we assessed the balance to ensure that the treatment group (FosterEd youth) and comparison group (non-FosterEd foster youth) were similar after weighting. Finally, we estimated the effect of receiving FosterEd intensive services on the six

<sup>&</sup>lt;sup>19</sup> Austin, P. C., & Stuart, E. A. (2015). Moving towards best practice when using inverse probability of treatment weighting (IPTW) using the propensity score to estimate causal treatment effects in observational studies. *Statistics in Medicine*; Woolridge, J.M. (2007). Inverse probability weighted estimation for general missing data problems. *Journal of Econometrics* 141:1281-1301.

educational outcomes with weighted regression using the IPT weights.

### Results

The analysis results shown in this report provide estimates of FosterEd's impact on the youth it serves with intensive supports. **Table 11** presents the impact estimates (as weighted means and predicted probabilities) for each of the seven outcomes described above.

## Encouraging results for enrollment, attendance, and persistence

Results suggest that FosterEd had a positive impact on the amount of time students were in school, with FosterEd students being unenrolled (i.e., experiencing gaps in enrollment) for an average of 13 fewer days than foster youth who did not receive FosterEd services (effect size = -.11), and being out of school (either absent or unenrolled) for an average of 5 fewer days than non-FosterEd students. Although not statistically significant, the direction of the estimated program effect was positive for end-of-year status (probability that a student would have graduated, completed, or remained enrolled in school at the end of the 2018-19 school year). The probability of successful yearend status among foster youth who did not receive FosterEd services was 69%, while the probability for youth receiving FosterEd services was 77% (effect size = .25). In terms of whether students were continuously enrolled throughout the 2018-19 school year, the findings do not indicate any statistically significant results and a small effect size, suggesting that the outcomes of the treatment group were similar to those of the comparison group.

#### Positive results for English achievement

The analysis for students' mathematics and English achievement as measured by the spring AzMERIT standardized test was limited by the number of

Table 11: Treatment effect estimates for receiving intensive FosterEd services for at least 180 days (Average Treatment Effect on Treated (ATT))

	Non-FosterEd youth	FosterEd youth	Difference (Impact)	Effect Size	p-value
Enrollment, Atter	ndance, Persister	nce			
End-of-year status (2018–19): Graduated, completed grade, still enrolled	0.692	0.767	0.075	0.25	0.11
Continuous enrollment (2018–19)	0.519	0.545	0.026	0.06	0.62
Enrollment gap (2018–19) (# days)	60.5	47.3	-13.2†	-0.11	0.09
Total out-of-school time (2018–19) (# days)	77.5	72.9	-4.6†	-0.04	0.09
Participation and Achievemen	nt in Standardize	d Assessm	ents		
Participated in statewide assessment	0.418	0.417	0.000	0.00	1.00
Mathematics achievement (Scale score)	3660.4	3660.8	0.4	0.01	0.94
English achievement (Scale score)	2542.2	2556.4	14.2*	0.53	0.02

† *p* < 0.10; \* *p* < 0.05.

NOTE: The table presents weighted means for continuous outcomes (out-of-school time, math and English scale scores) and predicted probabilities for dichotomous outcomes (end-of-year status, continuous enrollment, and participation in statewide assessments). The total sample size for all enrollment, attendance, and persistence outcomes and participation in statewide assessment is N=3,793 (with 103 students receiving FosterEd services). The total sample size for mathematics achievement is N=740 (with 21 students receiving FosterEd services); the total English achievement sample size is N=668 (with 21 students receiving FosterEd services).

foster youth participating in the assessment.<sup>20</sup> In addition, the AzMERIT is only given to students in grades three through eight and grade 10. Because FosterEd intensive services largely serve high school students, the number of FosterEd (and comparison) students with valid spring assessment scores in 2018 and 2019 in the tested grades was small. Despite the limited numbers of foster youth who were enrolled, the results indicate a positive effect of FosterEd on English achievement of approximately 14 scale score points (effect size = 0.53). Similar results were not found for math, where the estimated effect was not statistically different from zero.

Overall, youth in FosterEd appear to be improving in the dimensions that are most closely aligned with the program model, including keeping youth engaged in their education. Program effects are positive for end-of-year status and negative for total enrollment gaps, suggesting that students served by FosterEd are more likely to successfully complete the school year and to avoid lengthy enrollment gaps compared to their peers not receiving similar intensive FosterEd supports. Results for positive end-of-year status are particularly noteworthy despite being marginally significant, given the effect size of 0.25 – a threshold commonly used to indicate substantive significance in education studies.<sup>21</sup>

The finding that FosterEd youth have fewer enrollment gaps and less total out-of-school time suggests that FosterEd may be helping to keep students engaged in and attending school once they have enrolled, or helping to quickly re-enroll students if they experience an enrollment disruption. In either case, the estimated effect of FosterEd on the enrollment gap was approximately two weeks (13 days)—a significant amount of time given that missing 10% of instructional time (or about two weeks of school) has been shown to be an early-warning indicator for dropping out.<sup>22</sup>

### Limitations

The current study has several important limitations that should be considered when interpreting the results. First, the analyses adjust for pre-treatment differences between youth who received FosterEd intensive services and foster youth who did not. The results can provide an unbiased estimate of program effects under the assumption that there are no remaining differences between the two groups given the observed covariates. Although many pre-treatment covariates were included (such as student background characteristics, education outcomes from the 2016-17 school year, and multiple variables characterizing the students' time in foster care), if these covariates do not fully capture differences between the treatment and comparison groups, then the program estimates may be biased.

In terms of the educational outcomes examined, some outcomes that may be most relevant to the work of FosterEd were not available within the ADE data system. Although academic achievement as measured by standardized tests can provide one measure of academic growth, academic outcomes as measured by course grades and credit accrual are more directly tied to the work done by ELs and teams within the FosterEd program model as they can demonstrate academic persistence and engagement.

In addition, this report was limited to some extent by the amount of time youth had spent receiving services from FosterEd at the time the data was pulled for analysis. Because the program launched

<sup>&</sup>lt;sup>20</sup> The 2015 Arizona Achievement Gap report found that students in foster care were less likely than any other student group to participate in statewide testing. Citation: Barrat, V. X., Berliner, B., & Felida, N. J. (2015). Arizona's invisible achievement gap: Education outcomes of students in foster care in the state's public schools. San Francisco, CA: WestEd.

<sup>&</sup>lt;sup>21</sup> Institute of Education Sciences. (2017). *What Works Clearinghouse: Procedures handbook (version 4.0)*. Washington, DC: Institute of Educational Sciences, US Department of Education.

https://ies.ed.gov/ncee/wwc/Docs/referenceresources/wwc procedures handbook v4.pdf

<sup>&</sup>lt;sup>22</sup> Allensworth, E., & Easton, J. (2005). The on-track indicator as a predictor of high school graduation. Chicago: Consortium on Chicago School Research. Allensworth, E., & Easton, J. Q. (2007). What matters for staying on-track and graduating in Chicago Public High Schools: A close look at course grades, failures and attendance in the freshman year. Chicago: Consortium on Chicago School Research.

in August 2017, only youth who were served from the very beginning could be served for a maximum of two school years, or the intended dosage of intensive services. However, most youth were enrolled in the FosterEd program at various points throughout the 2017-18 and 2018-19 school years, resulting in a variety of service times. While the average length of time served for the treatment group was more than one year, over half were served for less than 12 months. As such, many foster youth in the treatment group were exposed to only a partial dose of FosterEd, which may weaken effect estimates and make it more difficult to detect significant differences between the treatment and comparison groups.

A final potential limitation is that several of the outcome measures reported may include data prior to when the youth started receiving FosterEd services. For instance, if a youth was not served by FosterEd for the first 3 months of the 2018-19 school year (e.g., September – December 2018), those days are included in the FosterEd youth's enrollment gap and total out-of-school time estimates even though it occurred prior to the youth's involvement with the program.

## V. Summary and Recommendations

The National Center for Youth Law has implemented a number of county-level pilots of FosterEd. Each has been accompanied by an independent evaluation and each yielded some promising results, although none incorporated a comparison group. The statewide expansion of FosterEd Arizona presented an opportunity to increase the evaluation rigor by comparing academic indicators for foster youth served by the program and foster youth not served by the program.

Although preliminary, the academic impact results presented in this report point to several promising findings:

- Receiving intensive FosterEd services increases the amount of time students were in school. FosterEd participation led to an average of 13 fewer unenrolled days and to an average of 5 fewer out-of-school days (either absent or unenrolled) during the 2018-19 school year. These differences were statistically significant, meaning that differences of these magnitudes were unlikely to have been observed purely by chance.
- Receiving FosterEd intensive services increases student English achievement as measured by the AzMERIT assessment. Relative to non-FosterEd youth, participation in FosterEd increased English scale scores by 14 points (effect size = 0.55), a statistically significant result.

Although effect estimates for all other academic indicators except one (participation in statewide assessment) were in a positive direction, there were no other statistically significant results, suggesting that the outcomes of the FosterEd treatment group were similar to those of the foster youth comparison group.

Analysis of data from the youth survey of social and emotional well-being revealed that as youth started receiving intensive supports, they had a generally positive sense of self-efficacy and a generally positive future success orientation. Almost all (94%) agreed or strongly agreed that they had an adult in their life who supported and encouraged their education.

Students who received intensive services experienced increases in both self-reported selfefficacy and positive future orientation between when they began receiving services and approximately six months later. With regards to adult supports, the findings were more mixed. One measure appears to decline. While not statistically significant, the direction of change is positive for two others: "Discussion frequency with adults scale" and "Encouragement frequency from adults scale."

RTI views the academic impact results presented in this report as reflecting positively on the FosterEd program and encourages continued attention to program impacts in the areas that FosterEd most hopes to affect. The implementation of new programs, or in this case the implementation of the statewide expansion, often comes with early challenges. As the program continues to become more established within Arizona, including increasing awareness and familiarity of child welfare and educational professionals with the program, it will be important to continue to track the outcomes of foster youth involved in the program.

### Recommendations

RTI offers the following recommendations as FosterEd continues to serve foster youth throughout Arizona.

1

Consider modifications to the intensive services practice model, or at least its description, given that about half of youth served in that tier leave the program in less than a year.

FosterEd describes the intended length of service for intensive supports as being one to two years. The data in this report, however, reveal that about half of youth leave the program in less than a year. Among the 63 students served with intensive supports who could have been served for at least a year by the time data were extracted for this report, 35 (56%) left the program in under one year. This was due primarily to the youth going AWOL or FosterEd being otherwise unable to locate the youth (N=14), youth or caregiver declining further services (N=10), or the youth moved out of the service area (N=7). For a minority of these case (4 or 11%) services stopped earlier than expected for a positive outcome (i.e., the youth transitioned to postsecondary education).

RTI recommends that FosterEd consider whether programmatic adjustments are warranted to address the fact many youth do not receive the intended "dose" of intensive services. Perhaps the "dose" could be strengthened in the early months, with Education Liaisons and youth meeting more frequently. Regardless of whether FosterEd decides to make programmatic adjustments to this tier, we recommend FosterEd modify how the tier is described. If the intended dose for intensive services remains at least year, acknowledge to partners that many youth leave the program in under that timeframe.

2

# Reconsider assumptions about existing adult supports and the impact of the Education Liaison.

The social and emotional well-being survey included measures of support from adults other than the Education Liaison, self-efficacy, and future success orientation. Results revealed that selfefficacy and future success orientation increased, but youth perceptions of adult support (not including the Education Liaison) did not change. In fact, youth rated such support as relatively high as they entered FosterEd.

Results from the more recently instituted youth feedback survey suggest that youth developed positive relationships with their Education Liaisons. Perhaps one of the potential contributions of FosterEd is that the Education Liaisons provides focused support for the youth's educational goals, and are able to leverage the support of other adults in the youth's life in ways that might not be readily apparent to the youth, or not captured in the current version of the youth survey. It appears that growth in self-efficacy and future success orientation did not depend on increasing perceived support from existing adults in the youth life, but could relate to the focused support of the Education Liaison and the relationship that develops between the Education Liaison and the youth. Further study would be needed to more clearly understand how and which FosterEd practices lead to the positive findings documented in this evaluation.

## Appendix A: FosterEd Feedback Surveys

## Youth Feedback Survey for Intensive Services

We want to provide young people the best supports possible. Please fill out this brief additional questionnaire about your experiences with the FosterEd program. Your Education Liaison will not see your answers.

1. Please rate your overall experience with the FosterEd program.

Very Bad	Bad	Just Ok	Good	Very good
0	0	0	0	0

2. How much do you agree or disagree with each of the following statements?

	Strongly Disagree	Disagree	Agree	Strongly Agree
a. My Education Liaison helps me set goals that are meaningful to me.	0	0	0	0
<ul> <li>b. My Education Liaison takes my thoughts and feelings into consideration.</li> </ul>	0	0	0	0
<ul> <li>c. My Education Liaison helps me communicate with other adults in my life about my educational needs.</li> </ul>	0	0	0	0
d. My Education Liaison is there for me.	0	0	0	0
e. My Education Liaison is helping me achieve my educational goals.	0	0	0	0
f. I would recommend FosterEd to other foster youth.	0	0	0	0

3. What else could FosterEd do to improve your experience in the program?

## Youth Feedback Survey for Responsive Services<sup>23</sup>

We want to provide young people the best supports possible. Please fill out this questionnaire about your experiences with the FosterEd program. The survey will take about 5 minutes. Your responses will be kept anonymous. Your individual answers will not be tied back to your name. Your Education Liaison will not see your answers.

The survey information will be analyzed by RTI International, a non-profit research organization. RTI will combine the answers from all youth who take the survey and share the results with FosterEd. The survey is voluntary.

1. How helpful was FosterEd to you in addressing the educational barrier(s) or challenge(s) you were facing?

Not at all	Just a little	Somewhat	Very helpful	Extremely
helpful	helpful	helpful		helpful
0	0	0	0	0

2. How much do you agree or disagree with each of the following statements?

	Strongly Disagree	Disagree	Agree	Strongly Agree
<ul> <li>a. My Education Liaison listened to my thoughts and feelings.</li> </ul>	0	0	0	0
b. My Education Liaison helped me communicate with other adults in my life about my educational needs.	0	0	0	0
c. My Education Liaison included me in problem-solving the educational challenge or barrier I experienced.	ο	0	ο	0
d. I would recommend FosterEd to other foster youth.	0	0	0	0

3. What else could FosterEd have done to improve your experience in the program?

<sup>&</sup>lt;sup>23</sup> The introductory section at the start of this feedback survey for responsive services is longer than the introductory section of the feedback survey for intensive services shown on the prior page. This is because youth receiving intensive services were to have complete a social and emotional well-being survey during the same meeting with their Education Liaison as they completed the feedback survey, and to complete the social and emotional well-being survey first. That survey, presented in Appendix B, contains introductory information about anonymity and RTI analyzing the data. RTI and FosterEd therefore agreed to a more abbreviated introduction to the feedback survey for youth receiving intensives supports.

## Adult Survey for Responsive Services

(for parents, caregivers and relatives of youth supported by responsive services)

FosterEd recently helped a youth in your life with a specific educational barrier or issue they were facing. We very much appreciate your feedback. Your responses will be kept anonymous and your participation in the feedback survey is voluntary.

The survey information will be analyzed by RTI International, a non-profit research organization. RTI will combine the answers from all adults who take the survey and share the results with FosterEd.

1. How helpful was the Education Liaison in addressing the educational issue your youth faced?

Not at all helpful	Just a little helpful	Somewhat helpful	Very helpful	Extremely helpful
0	0	0	0	0

2. How much do you agree or disagree with each of the following statements?

	Strongly Disagree	Disagree	Agree	Strongly Agree
a. The Education Liaison treated me with respect.	0	0	0	0
b. The Education Liaison explained things to me clearly.	0	0	0	0
c. The Education Liaison was responsive to my questions and concerns.	0	0	0	0
d. The Education Liaison provided me with information I needed to help advocate for my child.	0	ο	0	0
e. I would recommend FosterEd to others.	0	0	0	0

Please mark the reason for ending the engagement of FosterEd services.

- \_\_\_ The goals were completed.
- \_\_\_ The youth moved out of the area.
- \_\_\_\_ The youth went AWOL.
- \_\_\_ I don't know.

What else could FosterEd have done to improve your experience in the program? (respondents shown there is a 500 word limit)

## Appendix B: Youth Social and Emotional Well-Being Survey





### Youth Survey: You are the expert about you!

#### Why am I being asked to complete this survey?

The FosterEd program is committed to helping you and other foster youth succeed in school and prepare for your future. We understand that there are many factors, other than academics, that play a role in succeeding in school, such as how well-supported students feel by the adults in their lives and their mindsets associated with their future possibilities. Your answers to this survey help us understand how we can best support you in those non-academic areas that are also important aspects of succeeding in school. We will be asking you to complete this survey about every six months to see if your perspectives and experiences change.

#### What do you want me to do?

This survey will take about 20 minutes to complete. This is <u>not a test</u>. There are no right or wrong answers. It is important that you read each question carefully. Please mark the response that best represents your answer.

#### Must I complete the survey?

No. Your participation is voluntary. However, we encourage you to take the survey so we can learn about you and learn what supports are most helpful to you.

#### Will my survey information be given to anyone else?

Your Education Liaison will see your answers. FosterEd will also share survey answers for all youth with researchers at RTI International who will be studying whether FosterEd is effective at supporting foster youth. When we share the survey answers with RTI, we will not give them your name or any other identifying information about you. They will combine your answers with the answers from all of the youth participating in FosterEd.

#### What if I have questions?

If you have a question, such as not understanding a word or knowing how to mark an answer, at any point while completing the survey, please ask your Education Liaison for help. If you want to know more about the study of FosterEd, you can contact Jen Laird at 510-665-8238, <u>jlaird@rti.org.</u>



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## **About You**

#### (Self-efficacy scale)

Question 1. Indicate your level of agreement with each of the following statements.

		Strongly Disagree	Disagree	Agree	Strongly Agree
a.	I will be able to achieve most of the goals that I have set for myself.	0	0	0	0
b.	When facing difficult tasks, I am certain that I will accomplish them.	0	0	0	0
c.	In general, I think that I can obtain outcomes that are important to me.	0	0	0	0
d.	I believe I can succeed at almost anything to which I set my mind.	0	0	0	0
e.	I will be able to successfully overcome many challenges.	0	0	0	0
f.	I am confident that I can perform effectively on many different tasks.	0	0	0	0
g.	Even when things are tough, I can perform quite well.	0	0	0	0

## **Adults in My Life**

#### (Have adult who supports and encourages education)

Indicate your level of agreement with each of the following statements about the adults in your life.

<u>Please do not consider your Education Liaison</u> when answering the next <u>four</u> questions. Instead, think about other adults in your life, such as your caregivers, foster parents, aunts, uncles, grandparents, other relatives, teachers, counselors, CASA, coaches, or adult friends.

Question 2. I have at least one adult in my life who supports and encourages my education.

Strongly Disagree	Disagree	Agree	Strongly Agree
0	0	0	0

#### Question 3. In general, the adults in my life:

#### (Sense of adult support scale)

		Strongly Disagree	Disagree	Agree	Strongly Agree
a.	Care about me.	0	0	0	0
b.	Listen to what I have to say.	0	0	0	0
с.	Care whether or not I come to school.	0	0	0	0
d.	Give me a lot of encouragement.	0	0	0	0
e.	Show me respect.	0	0	0	0
f.	Know my strengths as a student.	0	0	0	0
g.	Praise my efforts when I work hard.	0	0	0	0
h.	Care about the grades I make.	0	0	0	0

Question 4. During the past 30 days, how often did you discuss the following with any adult in<br/>your life?(Discussion frequency with adults scale)

		Never	Once or twice	More than twice
a.	Selecting courses or programs at school	0	0	0
b.	School activities that interest you	0	0	0
с.	Things you've studied in class	0	0	0
d.	Current events	0	0	0
e.	Politics	0	0	0
f.	Your plans for the future	0	0	0
g.	Your interest in future jobs or careers	0	0	0
h.	Your plans for college	0	0	0

Question 5. During the past 30 days, how often did any adult in your life do the following? (Encouragement frequency from adults scale)

		Never	Once or twice	More than twice
a.	Encourage you to do well in school	0	0	0
b.	Encourage you to take part in activities that are not part of class work	ο	0	0
c.	Help you get books or supplies you needed to do your school work	0	0	0
d.	Praise or reward you for working hard on school work	0	0	0
e.	Offer to help you with homework or a special assignment	0	0	0
f.	Attend a school event	0	0	0

2

B-3

## **Your Future**

#### (Future success orientation scale)

**Question 6.** Indicate your level of agreement with each of the following statements about your future.

		Strongly Disagree	Disagree	Agree	Strongly Agree
a.	When I think about my future, I feel very positive.	0	0	0	0
b.	I have a clear image of myself being successful in life.	0	0	0	0
c.	I know how I don't want my life to turn out.	0	0	0	0
d.	I have a good sense of what it takes to be successful as an adult.	0	0	0	0
e.	I am on the "right track" for future success.	0	0	0	0
f.	I try to make good choices to increase my chances for a good future.	0	0	0	0
g.	I see a strong connection between success in school and success in life.	0	0	0	0
h.	I am prepared to work hard to have a good life.	0	0	0	0
i.	I feel confident that I have what it takes to be successful in life.	0	0	0	0
j.	I feel certain that I will graduate from high school.	0	0	0	0
k.	I plan to attend college after I graduate from high school.	0	0	0	0
Ι.	I see myself accomplishing great things in life.	0	0	0	0

For the Education Liaison to complete:											
Youth's ETCID:						]					
Date youth filled out the survey (MM/DD/YY) / / 20											
					Ν	/ONTH		DAY		YEAR	

Source of Scale for Q1: Chen, G., Gully, S.M., & Edan, D. (2001). Validation of New General Self-Efficacy Scale. *Organizational Research Methods, Vol 4* (1), 62 – 83. Scales for Q3-6 adapted from: Bowen, G. L., & Richman, J. M. (1997). *The School Success Profile*. Chapel Hill, NC: The University of North Carolina at Chapel Hill.

## Appendix C: Academic Outcomes Methodology

## **Data Matching Process**

The first step in creating the unique data file containing the educational outcomes of foster youth was to define the populations of interest for the Arizona Department of Child Safety (DCS) and Arizona Department of Education (ADE) data prior to linking them. RTI constructed a child-level dataset from DCS files that contained any children who were at least nine years old as of August 1, 2019, and who were in foster care at any point during the 2017-18 and 2018-19 school years (August 1, 2017, to July 30, 2019). These restrictions resulted in 17,348 youth. The studentlevel files from ADE contained data from all public school students who were in grades four through 12 during the 2016–17, 2017–18, and 2018–19 school years (N = 607,796). The student-level file from FosterEd Arizona's EdTeamConnect system included all youth of all ages served in both responsive and intensive tiers who had provided consent for the National Center for Youth Law to share identifiable data with RTI, which enabled RTI to attempt to match the student with the ADE dataset (*N* = 529 unique students).

Because the DCS and ADE data systems do not share a unique identifier, the second step was to conduct fuzzy matching to link foster youth in DCS to their educational records in the ADE files. To do this, RTI relied on similar fields across the two data systems, including first name, last name, birthdate, and gender. Prior to matching, the name fields in each data system were cleaned (spaces, hyphens, other nonalphabetical characters removed). The two data systems were then matched using the following strategies in order: direct matches on first name, last name, and birthday; direct matches on first name and last name with a manual review of birthday; use of the SOUNDEX function on a concatenation of first name, last name, and birthdate.

Of the 529 FosterEd youth, 520 had corresponding data in the DCS data system (match rate of 98.2%). Of the 520 FosterEd youth with DCS data, 496 had corresponding data in the ADE data system as a result of the matching procedure and sample restrictions (i.e., students had to be grades four through 12 during the 2016-17, 2017-18, or 2018-19 school years). The match rate from DCS to ADE for non-FosterEd youth was approximately 70% overall. This figure is lower than that reported in the Invisible Achievement Gap; however, researchers for this report prioritized matches with a high level of certainty given that the purpose was not to provide a comprehensive account of educational outcomes for all foster youth in Arizona, but instead to construct a comparison group of students similar to those served by FosterEd.

# Outcome Variables: Definition and Construction

**Completion status.** This is a dichotomous variable coded as 1 for students whose last enrollment during the 2018–19 school year indicated that the student had completed the academic year, and 0 otherwise. Students who completed the academic year could have experienced a variety of outcomes, including graduation; grade completion, promotion, or retention;<sup>24</sup> or an indicator for continuing enrollment. Students who did not complete the academic year (coded as 0) had exit dates for their last enrollment that were prior to the end of the academic year and had not subsequently re-enrolled at another school. Students who were in grade 12 during the 2017–18 school year had their final completion status

<sup>&</sup>lt;sup>24</sup> RTI considered being "retained" as a positive outcome because it indicates that the student is still enrolled in school. The outcome of retention was rare for both the treatment and comparison groups (cell size too low to report).

carried forward into 2018–19 so that these students were not dropped from the analysis due to missing outcome data.

Continuous enrollment. This dichotomous variable was coded as 1 for students who met either of the following criteria: (a) the student was enrolled in a single school during the 2018-19 school year and completed the school year there, or (b) the student had multiple enrollments during the 2018-19 school year, but the total number of days between enrollment periods (referred to as enrollment gaps) was no more than seven days.<sup>25</sup> Students who were enrolled in a single school but who left prior to the end of the school year or who had enrollment gaps larger than seven days were coded as 0. Similar to completion status, students who were in grade 12 during the 2017-18 school year had their continuous enrollment value from that school year carried forward to 2018-19.

**Enrollment gap.** The enrollment gap variable is a continuous variable constructed by summing all of the gaps (in number of days) between each enrollment spell during the 2018–19 school year. For instance, if a student's first enrollment spell ended on November 7, 2018 and the second spell did not begin until January 2, 2019, the enrollment gap would be calculated as 56 days. If a student left school mid-year without completing the grade, the enrollment gap was calculated by subtracting the end date from that final enrollment spell from June 30, 2019.

**Total out-of-school time.** Out-of-school time is a continuous variable that was constructed by summing the amount of time a student was reported absent during enrollment periods throughout the 2018–19 school year and the total enrollment gap during 2018–19. Absences could be reported as fractions of days, including 0.25, 0.5, 0.75, and 1.0 days, such that total out-of-school time includes noninteger values.

Participation in statewide assessments.

Assessment participation was coded as a dichotomous variable. Students were coded as 1 if they participated in the spring AzMERIT assessment, regardless of content area, test completion status, or score, or if they took the AZELLA assessment at any point during the 2018– 19 school year. Students who did not take the AZELLA and did not participate in any spring AzMERIT assessment were coded as 0.

Mathematics achievement. Student mathematics achievement was measured using the AzMERIT assessment, Arizona's statewide achievement test. Arizona public school students in grades 3 through high school take the assessment, either at their grade level (through grade eight) or as an end-ofcourse assessment (high school level). Only spring assessment scores were included in the analysis. If students had more than one spring assessment, only the highest of the scores was retained. AzMERIT scores are vertically scaled to allow inferences about student growth over time.<sup>26</sup> Mathematics scores for grades eight through 11 range from 3566 (reflecting minimally proficient in grade eight) to 3839 (reflecting highly proficient in grade 11). 27

**English achievement.** Student English achievement was measured using the AzMERIT assessment, Arizona's statewide achievement test. Arizona public school students in grades three through high school take the assessment, either at their grade level (grades three through eight) or as an end-of-course assessment (high school level). Because students participating in FosterEd started receiving services throughout the 2017–18 school year, only spring assessment scores were included in the analysis. If students had more than one spring assessment, only the highest of the scores was retained. English AzMERIT scores for grades 8 through 11 range from 2448 (reflecting minimally

<sup>&</sup>lt;sup>25</sup> RTI decided to allow for apparent enrollment gaps of up to 7 days and still consider the youth continuously enrolled because weekend days could not be deleted when considering the ending date for one enrollment and the start date for the next enrollment. Additionally, many youth had more than two enrollment spells.

<sup>&</sup>lt;sup>26</sup> American Institutes for Research. (2018). *Annual technical report: Arizona statewide assessment in English language arts and mathematics, 2017–2018 school year.* Washington, DC: Author.

<sup>&</sup>lt;sup>27</sup> See <u>https://cms.azed.gov/home/GetDocumentFile?id=5bed920b1dcb2511f439448e</u> for more detail (Exhibit 7.3.1). The three mathematics assessments following grade 8 are administered as end-of-course assessments for Algebra I, Geometry, and Algebra II instead of in grades 9, 10, and 11.

proficient in grade eight) to 2675 (reflecting highly proficient in grade 11).

### **Analytic Steps**

The impact analysis to estimate the effect of receiving FosterEd intensive services on students' educational outcomes relies on a propensity-scorebased method called inverse probability of treatment (IPT) weighting. This method removes the observed differences between the treatment and comparison groups thereby mimicking the design of a randomized experiment using observational data.<sup>28</sup>

In the first step, we modeled the likelihood of receiving the treatment (i.e., receiving FosterEd intensive services) conditional on baseline covariates constructed from the merged ADE and DCS data file. The variables included were those related to treatment and outcomes, including student background characteristics (indicators for student race/ethnicity, whether the student received special education services, was identified as an English Language Learner, and student grade in 2016–17); student academic characteristics from the 2016-17 school year (indicators for whether the student participated in the AzMERIT mathematics or English assessment; whether the vouth had continuous enrollment, the number of schools attended, and the total number of out-ofschool days); and characteristics of the youth's time in foster care (total time in removal episodes in days, and detailed placement characteristics). We then estimated a weight for each student that is equal to the inverse of the probability of receiving the treatment (either receiving FosterEd services or not) that the student actually received for students who did not receive FosterEd services and equal to 1 for students received FosterEd services. This step allows for an estimate of the average treatment effect on the treated (ATT) - the estimate of interest to understand how FosterEd affected youth who received the program.

In the second step, we assessed the balance to ensure that the treatment group and comparison group were similar after weighting. **Table B-2** provides the raw and weighted standardized differences for each of the covariates included in the treatment model. Weighted standardized differences were close to zero for all covariates.

Finally, we estimated the effect of treatment status (of receiving FosterEd intensive services for at least 180 days) on the seven outcomes using regression weighted with the IPT weights. Three outcomes relied on a weighted logistic regression model (end-of-year status; continuous enrollment; and participation in assessments), and four outcomes used a weighted linear regression (enrollment gaps; total number of out-of-school days; mathematics achievement; English achievement).

<sup>&</sup>lt;sup>28</sup> Austin, P. C., & Stuart, E. A. (2015). Moving towards best practice when using inverse probability of treatment weighting (IPTW) using the propensity score to estimate causal treatment effects in observational studies. *Statistics in Medicine*. <u>https://onlinelibrary.wiley.com/doi/full/10.1002/sim.6607</u>; Woolridge, J.M. (2007). Inverse probability weighted estimation for general missing data problems. *Journal of Econometrics* 141:1281-1301.

	End-of-year Status; Continuous Enrollment; Enrollment gap; Out-of- school time; Participated in			ematics	En	glish	
	Asse	ssment	Achie	evement	Achievement		
Baseline Characteristics (2016–17)		Sta	ndardized D	Differences			
	Raw	Weighted	Raw	Weighted	Raw	Weighted	
Male	-0.01	0.01	0.03	0.06	-0.01	0.05	
Grade 7	-0.04	-0.01	-0.10	0.02	-0.12	0.01	
Grade 8	-0.10	0.00	-0.20	0.08	-0.09	0.06	
Grade 9	0.06	0.00	0.17	-0.09	0.15	-0.09	
Grade 10	0.11	0.00			0.09	0.07	
White	0.09	0.00					
Black	0.05	0.01					
Hispanic	-0.06	-0.01	0.11	-0.05	0.08	0.02	
Economically disadvantaged status	0.15	0.01	0.01	-0.02	0.02	0.00	
Identified as English Language Learner	0.09	-0.01	0.22	0.01	0.23	0.11	
Receiving Special Education Services	0.12	0.01	0.04	0.02	0.04	-0.01	
Attended 1 school	-0.05	0.00			-0.18	0.02	
Attended 2 schools	0.07	0.01					
Total Days in Foster Care	0.51	0.00	0.22	-0.02	0.20	-0.01	
Ever placed in relative foster care (paid)	0.08	-0.01	-0.03	0.05	-0.11	-0.01	
Ever placed with non-relative foster care	0.36	0.00	0.28	-0.01	0.12	-0.02	
Ever placed in a group home	0.44	-0.01	0.23	-0.07	0.27	-0.04	
Ever placed in independent living	0.20	0.01					
Ever placed in behavioral group home	0.16	0.00					
Ever placed in correctional facility/detention center	0.00	0.00					
Ever placed in hospital	0.21	0.01					
Ever placed in other facility	0.28	0.01			-0.03	-0.04	
Ever placed with parent or relative (unpaid)	0.14	0.00					
Ever lived with relative 6 months prior to removal	0.01	-0.01	0.16	-0.08	0.13	0.03	
Ever lived with non-relative 6 months prior to removal	0.12	0.00			0.06	-0.06	
Year-end exit status (2016–17)	0.19	-0.02					
Total out-of-school days (2016–17)	-0.18	0.01					
Enrollment gap (2016 –17)					0.03	0.03	
Continuous enrollment (2016 –17)	0.17	0.00	-0.08	0.09	-0.04	-0.01	

#### Table B-2: Balance Diagnostics for Inverse Probability of Treatment Weights

	End-of-year Status; Continuous Enrollment; Enrollment gap; Out-of- school time; Participated in Assessment		Mathematics Achievement		English Achievement		
Baseline Characteristics (2016–17)		Stand	dardized Diff	erences			
Participated in any statewide assessment (2016–17)	0.17	-0.01					
Spring math scale score (2016–17)			0.00	0.02			
Spring English scale score (2016–17)					-0.13	-0.01	

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