Education Program Participation Among Students Affected by Intergenerational Poverty

Utah State Board of Education, Data and Statistics

Wynn Shooter, Malia McIlvenna, David Mackay

ADA Compliant: 1/19/2021

Executive Summary

The Department of Workforce Services (DWS) asked the Utah State Board of Education (USBE) to provide a longitudinal perspective on progress toward education outcomes for students experiencing intergenerational poverty (IGP). As of 2020, students affected by IGP often had higher rates of chronic absence and lower proficiency rates than students statewide.

Given readily available evidence of a disparity in academic performance, both in the literature and in USBE data, we began looking for promising programs designed to serve students from low-income backgrounds. We quickly realized that we did not have a complete list of programs, nor did we know what programs were serving enough students affected by IGP to warrant further analyses. Therefore, this study focused on understanding the extent to which students affected by IGP have accessed USBE administered programs designed for students from low-income backgrounds.

We first compiled a list of USBE administered programs that serve low-income students and then looked for available data that described the extent to which students participated in these programs. We include brief, narrative descriptions of all programs identified as serving low-income students, and for programs with data, we provide percentages of participation. This study had two primary goals:

1) To create a comprehensive list of programs that serve low-income students and students affected by IGP, and
2) To determine the extent to which the students affected by IGP are accessing programs and services that are designed to serve them.

A prevailing theme from the literature suggests that poverty is a complex phenomenon and so are the solutions. Within the recognition of complexity, authors have focused on various factors believed to be related to poverty and the list is long. It includes personal characteristics, the labor market, policies, housing and neighborhoods, health and healthcare, family, home life, education, and many others.

Among the myriad factors and explanations of poverty and how it could potentially be overcome, researchers interested in the intergenerational transmission of poverty have given a great deal of attention to the role of education. In the context of IGP, children born into poverty have less access to resources, lower chances for success in school, and typically perform disproportionally worse than their peers. Due to the reliable positive relationship found between education and earning, many authors have pursued education as one of many networked solutions to IGP.

Methods

We first gathered information from USBE directors and coordinators about programs they administered that were designed to serve students from low-income backgrounds. Once a list of programs was complete, we determined if student participation in these programs was documented in the USBE data system or if program specialists at the USBE collected and maintained program participation records. For all available programs and services with accessible student-level participation data, we matched students affected by IGP (data provided by DWS) with USBE data to determine the extent to which these students have accessed the programs. For each program, we matched as many years of data as were available, going back as far as 2013.

Where data were available, we calculated the percent of all students who participated in a given program, the percent of program participants who were affected by IGP, and the percent of eligible

students affected by IGP who participated. To calculate eligible students affected by IGP for a given program, we accounted for the grade ranges, schools, or LEAs each program served.

Results

We found 24 programs and 12 of those programs[1] had available data. Results are organized into three categories that differentiate the extent to which programs were specifically designed to serve low-income students. We categorized **general programs** as those designed for all students and that may benefit low-income students, **student support programs** as those designed to serve and benefit students who are underserved or who need additional academic support, and **targeted low-income programs** as having been created to serve and benefit low-income students . Table 1 shows a list of programs for which student-level data were not available, followed by Table 2, which provides an abbreviated view of program participation among students affected by IGP.

Table 1. List of programs, by category, for which student-level data were not available

General Programs
Becoming High Quality (PreK grant)
School-based Mental Health Qualified Grant Program:
School Safety Center
School Counseling Program
SAFEUT
Project AWARE Grant- Resiliency and Mental Health services
Academic Parent Teacher Teams (APTT) and Parent Teacher Home Visit Project
Student Support Programs
Enhancement for At Risk Students for Academic Failure (EARS)
Grants for Educators in High Need Schools
Targeted Low-income Programs
ESEA Title V-B Rural Low-Income Schools
ESEA Title IV-B 21st CCLC
Partnerships for Student Success

Table 2. Programs for which student-level data were available

School Year	Program Name	Program Category	Percent of all Participants who were Identified as IGP	Percent of IGP Students who Participated
2019-20	Early Literacy Program	student support	7.90%	61.80%
2019-20	OEK	student support	10.80%	46.40%
2019-20	Title I School Wide	targeted low-income	9.60%	40.10%
2019-20	KSEP	targeted low-income	11.70%	13.40%
2019-20	McKinney-Vento	targeted low-income	16.36%	11.11%
2019-20	ETHPS	targeted low-income	12.30%	10.50%
2018-19	UPSTART	student support	2.60%	9.90%
2018-19	CTE (participants)	general program	1.86%	8.84%
2019-20	Title I Targeted Assistance	targeted low-income	4.30%	8.60%
2018-19	IGP Afterschool Program	targeted low-income	2.00%	3.80%
2018-19	HQSRE	student support	2.60%	2.30%
2018-19	CTE (concentrators)	general program	1.75%	1.55%

[1] We considered Title 1 and CTE as one program.

2018-19	CTE (completers)	general program	1.88%	1.04%
2019-20	Neglected and Delinquent	student support	10.20%	0.11%
2018-19	Afterschool PQE Grant	targeted low-income	1.50%	NA

Key Findings and Policy Considerations

Based on the results summary (Table 2), three programs stood out as serving the highest percentages of students affected by IGP. Two of which were early childhood education programs and one is Title I, school wide. Based on the literature review and presumed importance of early childhood programs, we consider the higher participation rates in two early childhood education programs as a positive finding, but also recognize that these percentages could be higher and better represented across programs.

For other programs, the percentages of participants affected by IGP ranged from .11% to 13.4%. This suggests that in some cases, although programs and services were available, students affected by IGP may not be accessing them. Although challenging, recruiting efforts may be needed to overcome the relatively low participation of students affected by IGP.

The need for available and high-quality program data was evident. Data needs should be carefully considered and identified at the start of any grant program. We recommend that program specialists work with data experts to determine how data will be collected, stored, and utilized. It will be important not to overlook promising programs due to a lack of student-level participation data. Future studies should likely focus on identifying and strengthening programs that show evidence of closing the achievement gap.

Out-of-school-time programs help play a critical role in serving students from low-income families. In addition to offering academic support, these programs offer enrichment activities, and fill a critical need for working parents. High quality afterschool programs present an opportunity to fund and support programs with evidence of effectiveness.

Diversity of program offerings is also evident in the results of the present study. Programs ranged from typical educational services to meal programs, afterschool programs, services for students experiencing homelessness, family engagement programs, mental health programs, and programs that promote career and postsecondary preparation. For some of these programs we had limited or no data from which to describe participation of students affected by IGP. However, such diverse support systems are well-aligned with literature regarding the needs of students who experience poverty. Similarly, although not directly addressed in the present study, increased collaboration across agencies would surely expand the web of support needed by students affected by IGP. Adequate training for educators and school staff regarding available resources would likely be important.

Finally, given the fundamental role of education in overcoming poverty and the critical importance of student achievement, it should be beneficial to invest in programs that seek to identify and address students' academic needs. Programs such as the Early Literacy program, which incorporate testing for the purpose of identifying and addressing literacy needs are likely of high value. Another example of such programs is the EARS program, which intends to improve academic achievement of all students who are at risk of academic failure. When the goal is serving low-income students, programs that identify academic needs and address them might be thought of as foundational education programs. Along with quality program implementation, the success of such programs will depend on the extent to which students' basic needs are met.

Education Program Participation Among Students Affected by Intergenerational Poverty

Utah State Board of Education, Data and Statistics

Wynn Shooter, Malia McIlvenna, David Mackay

Introduction

The Department of Workforce Services (DWS) asked the Utah State Board of Education (USBE) to provide a longitudinal perspective on progress toward education outcomes for students experiencing intergenerational poverty (IGP). As of 2020, the chronic absence rates of students affected by IGP were 20% greater than that of students statewide, third grade language arts proficiency rates were 24% lower than the state level proficiency rates, and eighth grade math proficiency rates were 26% lower than state level proficiency rates. There is no question that, as a group, students affected by IGP were performing below state averages.

Given readily available evidence of the disparity in academic performance, we began looking for promising programs designed to serve students from low-income backgrounds. We quickly realized that we did not have a complete list of programs, nor did we know what programs were serving enough students affected by IGP to warrant further analyses. Therefore, this study focused on understanding the extent to which students affected by IGP have accessed USBE administered programs and services designed for students from low-income backgrounds.

We first compiled a list of USBE administered programs that serve low-income students and then looked for available data that described the extent to which students participated in these programs. Following a summary of literature and a detailed methods section, the results include brief, narrative descriptions of all programs identified as serving low-income students, and for programs with data, we provide percentages of participation.[2] We believe that this offers an opportunity for policy makers to gain a comprehensive view of related programs and will provide a necessary foundation for future investigations. The present study has two primary goals:

3) To create a comprehensive list of programs that serve low-income students and students affected by IGP, and
4) To determine the extent to which the students affected by IGP are accessing programs and services that are designed to serve them.

Literature Summary

This literature summary provides context for USBE administered programs that support students who are economically disadvantaged. Providing a comprehensive review of literature related to poverty, exiting poverty, and the transmission of poverty from one generation to the next is beyond the scope of

[2] For many important programs, there were no participation data available. For example, the Project AWARE grant is a school-based mental health grant that provides funding, support, and services to three school districts in Utah. Low-income students in general and students affected by IGP, in particular, may benefit from such programs. However, we have no way to make the connection between this grant program and the students who may have benefited from it.

this study. Rather, we offer short summaries of contextual factors of poverty with a focus on the role of education in overcoming poverty. We give particular attention to poverty that is passed from one generation to the next and its effects on children.

One of the most consistent themes in the literature we reviewed is the recognition of complexity surrounding issues of poverty. Some authors have attempted to address these complexities by offering frameworks that focus on the full context in which children live and learn. For example, Eamon (2001) used Bronfenbrenner's ecological systems model to identify five aspects of poverty believed to affect children's socio-emotional development. These included microsystems (individual, family, peers, school), mesosystems (the interrelationships of microsystem components), exosystems (parents' social network, neighborhood, community environments), macrosystems (material resources, culture, lifestyle), and chronosystems (life events and changes over time). Likewise, Harper, Marcus, and Moore (2003) concluded, "it is the complete context, with recognition of a wide range of necessary connections, which is fundamental to good childhood development and the prevention of poverty transmissions" (p. 357).

Many authors have acknowledged the complexity of poverty and focused on groups of factors believed to play a role in overcoming poverty. Kim, Lee, and Lee (2010) considered the role of personal characteristics, along with changes in the labor market, social policies, and institutionalized structures, to be critical considerations for addressing poverty. Bower and Rossi (2019) listed 18 factors related to the education achievement gaps and grouped them into three categories of: housing and neighborhoods, health and health care, and family and home. Similarly, Harper et al. (2003) identified education, employment opportunities, role models, aspirations, health, and the timing at which poverty occurs in a child's life as key factors related to moving out of IGP. They implicated social relations (household structure, social norms, social connectedness), survival and protection, education, attitudes and aspirations, and other factors, as all playing roles in the transfer of poverty from one generation to the next.

Many researchers interested in understanding and eliminating IGP have studied extensively the role of family context and the outcomes of being born into situations of poverty. Mihai, Titan, and Manea (2015) recognized that children born into poverty have lower chances for success in school and later in life than other children. Students from low-income households perform disproportionally worse than their peers in school and likely face a variety of challenges, such as poor healthcare, lack of access to educational resources in the home, lack of access to enrichment opportunities, and limited access to quality preschool programs, all of which influence their learning outcomes (Ladd, 2012). Duncan et al. (1998) noted that family income is related to children's developmental outcomes, school completion, and success as young adults. Children who experience poverty during their formative years often face lower academic achievement, more frequent health challenges, and generally live less resourced lives than children who grow up in families with adequate incomes (Brooks-Gunn & Duncan, 1997).

The role of the family is further realized by the strong relationship between parents' education and their children's educational attainment. Families transmit cultural and social values, including how education is viewed (Engle & Black, 2008). According to Harper et. al. (2003), educated parents are more likely to have access to employment opportunities and an array of other resources compared to undereducated parents. Although education programs can, to some extent, address such disparities, it is important to realize that all students do not have access to the same resources and do not start from the same baseline. Just as education can contribute to overcoming poverty, growing up poor creates situations that can make learning and succeeding in school more challenging (Tilak, 2002).

In addition to the central role of family, education also plays a major role in children's developmental experiences and outcomes (Ryzin, Fishbein, & Biglan, 2018). Among the myriad factors and explanations of poverty and how it could potentially be overcome, researchers interested in the intergenerational transmission of poverty have given a great deal of attention to the role of education. This is likely due to the reliable positive relationship found between education and earning; as education increases, earning increases (Tilak, 2002). According to Talik, "Education is viewed as either one of the, or the most, important instruments of reduction of poverty" (p. 201). Similarly, Harper et al. (2003) asserted that there is no question regarding the positive relationship between education and increased income and Hango (2007) stated plainly "…education reduces the intergenerational transmission of disadvantage" (p. 1373).

Many authors interested in the ability of education to reduce poverty have focused on early childhood experiences. Arguments for the effectiveness of early childhood programs often begin with statistics pointing to the gap in educational attainment between students affected by poverty and those who are not (Lamey, 2013). These arguments often narrow quickly to the potential of preschool programs and the importance of kindergarten readiness (Wamba, 2010).

This focus on early learning and kindergarten readiness may well be justified given that most researchers report positive effects of preschool. Engle and Black (2008) identified early learning programs and policies, among others, as successful approaches to reducing negative outcomes associated with poverty. Tran, Luchters, and Fisher (2016) agreed that participating in preschool can "reduce the adverse effects of poverty" (p. 424). Barnett (1998) reviewed 38 studies that examined the effects of early childhood education on children's success in school. He reported evidence of success into third grade and beyond and ultimately concluded that at least one year of preschool should be available to all children who live in poverty. In her summary of related research, Lamey (2013) concluded that preschool can help students from low-income families gain confidence and skills that are important foundations for succeeding in school.

In response to the reports of positive outcomes, Duncan, Ludwig, and Magnuson (2007) proposed a national preschool program for 3 and 4-year-old children that they believe would reduce poverty. The rationale for their proposal leans partly on the frequently cited Perry preschool study (Wilson, 2000) and the Abecedarian program study (Sparling & Meunier, 2019), both of which make arguments for the value of preschool based on financial returns later in life and numerous long-term benefits. They also pointed out the potential lack of educational resources in low-income homes and the explosive brain development that occurs during this time in life. Boatright and Metcalf (2019) agreed that participating in preschool programs can offer critical support for brain development, including foundational academic skills and socioemotional learning.

High quality early childhood programs may be critical, but there are many approaches to improving education outcomes and narrowing the achievement gap. For example, a Wallace Foundation Report (Redd, Boccanfuso, Walder, Princiotta, Knewstub, & Morre, 2012) groups full-day kindergarten programs into a larger category they refer to as *expanded learning time*. Such programs span K-12, and include extending the school day or school year, offering learning opportunities outside of school hours (afterschool programs), and community school models. After reviewing 27 studies, they concluded that these strategies can yield positive outcomes. The National Education Association (2006) suggests the following nine strategies for closing the achievement gap: enhanced cultural competence, comprehensive support for students, outreach to students and families, extended learning

opportunities, classrooms that support learning, supportive schools, strong district support, access to qualified staff, and adequate resources and funding. There is no single solution to closing the achievement gap, rather a collection of high quality programs and services are required to adequately support student achievement.

When attempting to address the complex barriers to overcoming poverty, education is necessary but not sufficient. As noted above, researchers have emphasized the importance of addressing contextual factors that include education, family, community, policy, and many others (Bower & Rossi, 2019; Engle & Black, 2008; Wamba, 2010). Ladd (2012) promoted the importance of working across agencies and with community groups as part of the solution to challenges faced by students from low-income families. Bower and Rossi (2019) suggested that 75% of the achievement gap is related to out-of-school-time factors. They believe that health, housing, and family engagement are critical areas in which to provide support.

From this summary of literature, we understand that overcoming poverty, whether it be situational or multigenerational, is not conditioned on one solution. While educational attainment can improve socioeconomic mobility, there are many other complex factors such as family situations, neighborhood contexts, access to healthcare, access to high quality food, institutionalized structures, policies, and more that all have considerable influence. It is beyond the context of institutionalized education to address all the complexities related to overcoming poverty. However, the nature of public education places educators in unique positions to serve families and children who experience poverty. The present study presents a comprehensive overview of Utah's programs that serve families and students within the context of public education.

Methods

Following initial discussions with USBE department directors, the research team created a short data collection tool that we sent to USBE directors and specialists, asking them to identify the programs and services they administer. Using this list, we followed up with program administrators and directors to learn more about the programs and the extent to which student-level data were available. Finally, we followed up with USBE leaders to review the list of programs for which they were responsible and determine if the list was complete and accurate.

Once the list of programs and services was complete, we determined if student participation in these programs was documented in the USBE data system or if program specialists at the USBE collected and maintained program participation records. For all available programs and services with accessible student-level participation data, we matched students affected by IGP (data provided by DWS) with USBE data to determine the extent to which these students have accessed the programs. For each program, we matched as many years of data as were available, going back as far as 2013.

The DWS provided the USBE with a list of persons between the ages of 5 and 25 who received Public Assistance (PA) in 2013 through 2020. Participation in public assistance included receiving cash assistance, subsidies for childcare, Children's Health Insurance Program (CHIP), the Supplemental Nutritional Assistance Program (SNAP), or Medicaid.[3] The list further identified each person as being

[3] To learn more about how Utah defines IGP and to read more about state efforts to address IGP, please review previous annual reports here: https://jobs.utah.gov/edo/intergenerational/annualreport.html).

affected by IGP or in a matched, non-IGP comparison group[4]. We did not use the matched comparison group in our study, but rather focused specifically on students affected by IGP. Although IGP is typically defined by successive generations experiencing poverty, the students in this study were identified by the use of public assistance for at least one full year.[5] We used the list provided by DWS to match students to education records available in the USBE data warehouse.

The DWS source file included a total of 1,407,305 distinct records for the eight years, or an average of approximately 176,000 person records per year. Many of the persons in the source file had records for more than one year (including persons with records in all eight years). The DWS source data included 435,478 distinct persons. The USBE ad-hoc matching process matched 300,948 distinct individuals to a PK-12 record during the 2013 through 2020 school year, resulting in a match rate of 69%. Of the 300,948 individuals in the matched PA data, 75,481 (25%) were identified as IGP.

While reviewing the summary statistics provided in this report it is important to keep a few issues in mind. First, students are identified as IGP if the DWS has data identifying the student's parent as having received public assistance as a youth. Students who are first generation Utahns cannot be identified as IGP due to lack of data about their parents; thus, the IGP population is under-identified in the data. At the school level, administrators and educators may be able to attain additional information about students' IGP statuses and better determine which students require IGP-targeted programming. Second, the DWS source file and the USBE education datasets use different definitions of a 'year'. While the DWS data identifies persons receiving assistance during a calendar year, the education year runs from July 1 to June 30. The 'School Year' is the calendar year in which the school year ended. For example, the 2019-2020 school year is referred to as the 2020 school year. The PA cohort years are matched to USBE enrollment data of the matching school year. So, for example, persons who received public assistance in the 2020 calendar year were matched to their 2020 school year data. Third, students may have multiple enrollments in a single school or across several different schools or districts during a school year. To ensure that each student is included in each statistic only once (unless appropriate to do otherwise), methodology was applied to each measure to ensure that a given student was included only once. These methods differed according to the needs of the measure. Finally, some measures had to be limited to only the students who met certain additional inclusion criteria. As such, enrollment across measures may appear inconsistent.

The USBE complies with FERPA regulations to protect student privacy and does not disclose data when fewer than ten students are included in the sample. Furthermore, the USBE Statistical Reporting Method for Protecting PII (which can be found on the USBE Data Gateway under the Data Privacy tab), includes that in most cases the "Underlying counts for groups or subgroups totals are not reported." As such, most of the data herein is limited to percentages rather than counts.

[4] It is worth noting that there could be additional children experiencing intergenerational poverty whose families have not accessed public assistance and are therefore not included in the students identified as affected by IGP.

[5] For additional information, see: https://jobs.utah.gov/wi/data/library/other/igp.html#:~:text=Intergenerational%20Poverty%20in%20Utah,adult%20and%20as%20a%20child

Data Sources

The data sources for this study include a list of students affected by IGP (provided by DWS), data from the USBE data warehouse, and program participation data provided by USBE program specialists. Data sources include:

- The USBE data warehouse: Title I Part D Subpart 1, Neglected and Delinquent; Early Intervention (previously Optional Enhanced or Extended-day Kindergarten (OEK)); Early Literacy Program: ESEA Title I, Part A; ESEA Title VII-B McKinney-Vento Homeless Education; Kindergarten Supplemental Enrichment Program (KSEP)
- Perkins IV, CTE
- High Quality School Readiness – Expansion (HQSRE)
- Utah Preparing Students Today for a Rewarding Tomorrow (UPSTART)
- IGP Afterschool Program grant and Afterschool Program Quality grant.
- Effective Teachers in High Poverty Schools (ETHPS) program

Data Analysis

Where data were available, we calculated the percent of all students who participated in a given program, the percent of program participants who were affected by IGP, and the percent of eligible students affected by IGP who participated. To calculate eligible students affected by IGP for a given program, we accounted for the grade ranges, schools, or LEAs each program served. Table 3 provides an explanation of the formulas and layout we used to present percentages of participation for each program.

Table 3. Overview of data analyses

Year	Percent of student population who participated in a program	Percent of program participants who were IGP	Percent of IGP students who participated in a program
School year	number of students who participated in the program / the number of students enrolled in the grade levels, schools, or LEAs the program served	number of students affected by IGP who participated in the program / the total number of program participants	number of students affected by IGP who participated in the program / the number of students affected by IGP enrolled in the grade levels, schools, or LEAs the program served

The two percentages that include students affected by IGP (*percent of program participants who were IGP* and *percent of students affected by IGP who participated in the program*) provide two measures of the extent to which the program effectively attracted the IGP population. We would expect that if a program is designed to specifically target students affected by IGP the percentage of participants who are identified as IGP should be high, especially among eligible participants affected by IGP. If a program is broader, targeting students who are identified as at-risk due to a variety of factors, we might not expect the percentage of participants who are identified as IGP to be as high. Appendix A provides percentages of students affected by IGP in each grade level for the years 2013 – 2020. This might provide additional context for interpreting the overall percentages of program participants who were affected by IGP.

For each program, we calculated participation percentages for as many years as we could (2013 to 2020). This allowed us to explore the extent to which program participation has decreased or increased on pace with statewide efforts to better serve students affected by IGP. This is not an evaluation or

assessment of programs or of program quality. Although we provide a summary table at the end of the results section, it is important to note that we are not suggesting a hierarchy of programs. Further, we did not treat the program descriptions evenly. Rather, we included more information for programs with which we were already familiar, that had data available, or for which program descriptions were easily accessible.

Results

The results are organized into three categories that differentiate the extent to which programs were specifically designed to serve low-income students. The categories include programs designed for all students and that may benefit low-income students (**general programs**), programs designed to serve and benefit students who are underserved or who need additional academic support (**student support programs**), and programs specifically created to serve and benefit low-income students (**targeted low-income programs**). Each category begins with a list of programs for which data were not readily available, followed by the programs for which data were available. Within each category we provide brief program descriptions.[6]

General Programs

The following list includes **general programs** that may not be specifically designed to serve low-income students, but that contribute to the overall network of support students receive through USBE administered grants and programs. Perkins IV, Career and Technical Education was the only one of these eight programs had student-level data available.

General Programs with no available participation data

- **Becoming High Quality (PreK grant):** This is a school readiness grant that provides resources to existing early education programs administered by LEAs, private childcare providers, and home-based educational technology programs to become high-quality environments that support child development. It provides coaching, funding for curriculum and classroom materials, and family engagement resources.
- **School-based Mental Health Qualified Grant Program:** This Grant Program provides LEAs across the state with funding for mental health professionals.
- **School Safety Center:** The School Safety Center program provides technical assistance and support to improve outcomes for all students across the state.
- **School Counseling Program:** The School Counseling program provides funding, support, and services to school counselors to reach all students across the state.
- **SAFEUT:** This program utilizes a mobile and web-based app to provide a crisis and tip-line service that supports students (or adults) who seek mental health or safety supports.
- **Project AWARE Grant- Resiliency and Mental Health services:** The Project AWARE Grant targets three districts with 5 years of additional funding to increase mental health services in schools, improve access for all students, and screen students for mental health concerns.

[6] Program descriptions were taken from https://www.schools.utah.gov/ and from the USBE Annual Report, 2020 (https://www.schools.utah.gov/superintendentannualreport).

- **Academic Parent Teacher Teams (APTT) and Parent Teacher Home Visit Project:** These companion programs are implemented primarily at Title I schools. The goal is to connect teachers and families in meaningful ways that support strong relationships and maximize student learning.

General Programs with available participation data

- **Perkins IV, Career and Technical Education:** This federally funded program provides access to career and technical education (CTE) programs of study. The CTE program is designed to provide training that will support students' career and postsecondary efforts. We utilized USBE maintained records of student participation and focused on grades 9 through 12 because these students can utilize CTE courses to complete specific career pathways. We counted 143,919 CTE participants in 2019, and 2,608 of those participants were students affected by IGP. Among the 26,826 CTE concentrators 470 were students affected by IGP, and among 16,838 CTE completers 316 were students affected by IGP.

  We calculated percentages of students who participated, as well as students who were identified as concentrators and completers. Participants are identified by earning at least one credit, concentrators earn a credit and a half, and completers earn three credits. These categories are not mutually exclusive, as completers are, by definition, also concentrators and participants. Similarly, concentrators are also participants.

Table 4. Percentages of 9th through 12th grade CTE Participants (1 credit)

School Year	Percent of 9th – 12th grade student population who were CTE participants	Percent of 9th – 12th grade CTE participants who were IGP students	Percent of 9th – 12th grade IGP students who were CTE Participants
2014	68.14%	1.52%	6.54%
2015	76.90%	1.78%	8.36%
2016	76.99%	1.97%	9.18%
2017	77.33%	1.93%	8.97%
2018	75.90%	1.91%	9.09%
2019	73.43%	1.86%	8.84%

Table 5. Percentages of 9th through 12th grade CTE Concentrators (1.5 credits)

School Year	Percent of 9th – 12th grade student population who were CTE Concentrators	Percent of 9th – 12th grade CTE Concentrators who were IGP	Percent of 9th – 12th grade IGP students who were CTE Concentrators
2014	20.84%	1.24%	1.63%
2015	24.60%	1.46%	2.19%
2016	25.61%	1.63%	2.51%
2017	24.49%	1.78%	2.62%
2018	25.02%	1.71%	2.68%
2019	13.69%	1.75%	1.55%

Table 6. Percentages of 9th through 12th grade CTE Completers (3 credits)

School Year	Percent of 9th – 12th grade student population who were CTE Completers	Percent of 9th – 12th grade CTE Completers who were IGP	Percent of 9th – 12th grade IGP students who were CTE Completers
2014	6.53%	1.02%	0.42%
2015	7.40%	1.28%	0.58%
2016	7.52%	1.01%	0.46%
2017	8.71%	1.60%	0.83%
2018	6.92%	1.25%	0.54%
2019	8.59%	1.88%	1.04%

Student Support Programs

Student support programs target underserved populations and/or students who need additional academic support. Some, but not all, of these programs were designed to serve students affected by poverty. Five of these seven programs had student-level participation data available.

Student Support Programs with no available participation data

- **Enhancement for At Risk Students for Academic Failure (EARS):** The intent of this program is to improve academic achievement of all students who are at risk of academic failure. Funding is based on low academic performance, limited English proficiency, poverty, mobility, chronic absenteeism, and homelessness. Every LEA receives some level of EARS funding.
- **Grants for Educators in High Need Schools:** Approved in 2020, this grant program provides funding for LEAs to hire an additional first-year educator in a high-need school.

Student Support Programs with available participation data

- **Title I Part D Subpart 1, Neglected and Delinquent:** This federal program provides allocations for State Agency programs designed to serve the needs of students residing in state-funded facilities for neglected or delinquent children and youth where average length of stay exceeds 30 days annually.

  Table 7 provides an overview of IGP student involvement in the Neglected and Delinquent program. The Neglected and Delinquent participation statistics include only students enrolled in K-12. Data were available for school year 2015 and later.

Table 7. Percentages of students served by the Neglected and Delinquent program

School Year	Percent of student population served by the Neglected and Delinquent Program	Percent of Neglected and Delinquent Program Participants who were IGP	Percent of IGP students served by the Neglected and Delinquent Program
2015	0.01%	N<10	N<10
2016	0.05%	10.3%	0.12%
2017	0.04%	9.8%	0.10%
2018	0.03%	8.7%	0.06%
2019	0.02%	N<10	N<10
2020	0.04%	10.2%	0.11%

- **Optional Enhanced Kindergarten (OEK) (previously known as Early Intervention):** This program provides $7.5 million in ongoing funding to LEAs for an extended or full-day kindergarten program. The OEK program targets at-risk students, uses an evidence-based early instruction model, focuses on building age-appropriate literacy and numeracy skills, and provides full-day or extra hours of instruction for students in kindergarten. The OEK participation statistics in Table 8 include only students enrolled in Kindergarten.

Table 8. Percentages of OEK participation

School Year	Percent of student population who participated in the OEK program	Percent of OEK participants who were IGP	Percent of IGP students who participated in the OEK program
2013	15.9%	9.3%	25.3%
2014	17.1%	11.1%	28.2%
2015	18.7%	9.9%	26.8%
2016	19.9%	10.8%	32.0%
2017	19.9%	10.2%	29.7%
2018	24.1%	10.7%	40.6%
2019	24.5%	10.6%	41.3%
2020	27.5%	10.8%	46.4%

- **Early Literacy Program:** The Early Literacy Program provides funding to all elementary LEAs to enhance their K-3 literacy programs and target at-risk students. LEAs with high numbers of low-income students can receive extra funding. The funding includes testing for all students in grades 1-3 in literacy three times a year with Acadience Reading. If a student does not meet the Acadience Reading benchmark level, the LEA must provide the student with one or more reading interventions. Table 7 shows the percentages of students who were provided with a reading intervention at any time during the school year. The Reading Intervention participation statistics include only students enrolled in grades 1 through 3. Higher percentages of students affected by IGP received a reading intervention as compared with all students. Importantly, this means that, as compared with all students, higher percentages of students affected by IGP were below reading benchmarks and therefore needed reading intervention.

Table 9. Percentages of students who received Reading Interventions

School Year	Percent of student population who received Reading Intervention(s)	Percent of students who received Reading Intervention(s) who were IGP	Percent of IGP students who received Reading Intervention(s) program
2013	35.1%	7.9%	57.8%
2014	40.7%	8.2%	59.6%
2015	38.8%	9.1%	59.8%
2016	42.0%	8.9%	62.5%
2017	42.3%	9.1%	64.3%
2018	41.9%	8.7%	63.2%
2019	39.7%	8.4%	60.6%
2020	41.6%	7.9%	61.8%

- **High Quality School Readiness – Expansion (HQSRE):** This was a school readiness grant that provided expanded access for eligible students to high quality preschool programs. This grant was available to both to LEAs and private providers who had been deemed high-quality by the state.

This program was funded with one-time reserved TANF funding. An eligible student was defined as a student who was experiencing intergenerational poverty or was economically disadvantaged. The HQSRE grant ended in June 2019. The School Readiness Amendments were passed in the 2019 session, continuing the Becoming High Quality and Expanded Student Access to High Quality School Readiness Grant Programs.

The HQSRE grant program had student-level data available for the 2017-18 and 2018-19 school years. We found 23 separate, usable files of student-level data, and these data were inconsistently formatted across files. Inconsistencies in these data resulted in several limitations to arriving at precise student counts. For example, in some cases these files lacked key variables needed for matching to IGP or other USBE data, column names were inconsistent, and other data were missing. We rejected several additional files due to formatting, missing data, or other issues of quality. As such, the numbers reported here do not represent complete counts; rather, we counted program participants from the available data.

We counted 4,398 HQSRE participants in 2018 and 2,896 participants in 2019. We attribute this decline in annual participation counts to changes in data collection and management, rather than an actual decline in the number of participants. For 2018, we counted fewer than 150 participants who were students affected by IGP.

Table 10. Percentages of students who participated in the HQRSE program

School Year	Percent of student population who participated in the HQSRE program	Percent of HQRSE program participants who were IGP	Percent of IGP students who participated in the HQRSE program
2017-18	9%	2.8%	3.9%
2018-19	5.9%	2.6%	2.3%

Note: Due to substantial missing data, these percentages do not reflect total program participation. Since preschool is not mandatory in Utah, these percentages are estimates based on kindergarten enrollment for the following years. For example, we used the 2019 kindergarten cohort year to determine the number of students who were eligible for HQRSE in 2018.

The UPSTART program received funding through this grant structure, but we did not include UPSTART participants in our HQSRE counts because we conducted a separate analysis for UPSTART (see below).

- **Utah Preparing Students Today for a Rewarding Tomorrow (UPSTART):** The UPSTART program utilizes home-based educational technology to develop school readiness for preschool children. The program is designed to give Utah four-year-olds individualized reading, mathematics, and science instruction. Reading is the primary focus of the program. All Utah preschool age children are eligible to participate in the UPSTART program. However, priority is given to preschool children who reside within the boundaries of a qualifying school or who are enrolled in a qualifying preschool. Qualifying preschools serve children covered by childcare subsidies, participate in a federally assisted meal program, or are located within the boundaries of a qualifying school. UPSTART participants may obtain a computer and receive free internet service for the duration of participation if the participant is eligible to receive free or reduced lunch and participates in the program at home rather than through a school district or private preschool.

Four years of student-level participation data were available for UPSTART. We used the matched DWS and USBE file and matched that to UPSTART participation data and student enrollment data. For 2019, we counted 11,673 upstart participants, and just over 300 of those were students affected by IGP. Participation in UPSTART has increased each year for both groups.

Table 11. Percentages of students who participated in the UPSTART program

School Year	Percent of student population who participated in UPSTART	Percent of UPSTART participants who were IGP	Percent of IGP students who participated in UPSTART
2016	10.5%	3.5%	5.4%
2017	12.6%	3.8%	7.7%
2018	16.5%	3.0%	7.9%
2019	24.0%	2.6%	9.9%

* Since preschool is not mandatory in Utah, these percentages are estimates based on kindergarten enrollment for the following years. For example, we used the 2017 kindergarten cohort year to determine the number of students who were eligible for UPSTART in 2016.

Targeted Low-Income Programs

The following list of programs were specifically created to serve **low-income** students. Rather than enrolling or identifying students, some of these programs cast a wide net by providing funding at the LEA level. For example, Title I is a large and comprehensive federal funding structure that was established to support schools with high numbers of students who qualify for free and reduced lunch. Alternatively, some early learning and afterschool programs do enroll students. Six of the nine programs in this category had available participation data.

Targeted low-income programs with no available participation data

- **ESEA Title V-B Rural Low-Income Schools:** The purpose of this federally funded program is to help rural districts improve services for students attending rural schools that serve high numbers of students living in poverty.
- **ESEA Title IV-B 21st CCLC:** The 21st Century Community Learning Centers (CCLC) program is a competitive federal grant for LEAs and Community or Faith-Based Organizations (CFBOs) to serve students and their families attending schools with poverty levels of 40 percent or higher outside of regular school hours. This program focuses on providing academic supports, enrichment activities, and family engagement resources during the afterschool hours. Student-level participation data for this program are not currently collected in Utah.
- **Partnerships for Student Success:** The purpose of this state funded program is to improve educational outcomes for low-income students through cross-sector partnerships. This program currently serves 35 schools. Due to the nature of the partnerships and school-level implementation across many networked programs, student-level data are not available for this program.[7] The Utah Education Policy center has conducted two years of evaluation reports that are available on their website: https://uepc.utah.edu/.

[7] A dashboard of aggregated student outcomes is available online: https://public.tableau.com/profile/wynn.shooter#!/vizhome/PFSS_feedersandschools_2020_6_25a/MainPage

Targeted low-income programs with available participation data

- **ESEA Title I, Part A:** This federally funded program provides annual financial assistance for supplemental educational services and resources to LEAs and schools with high percentages of children from low-income families. Title I schools that serve high percentages of students from low-income families (40 percent or more) may use Title I funds, along with other Federal, State, and local funds, to operate a *schoolwide Title I program* to enhance the instructional program for the whole school. Title I schools with less than the 40 percent schoolwide low-income threshold or that choose not to operate a schoolwide program may offer a *targeted assistance Title I program* in which the school identifies students who are failing, or most at risk of failing, to meet the State's challenging academic achievement standards. Targeted assistance schools design an instructional program to meet the needs of those students. Title I programs must use evidence-based instructional strategies and implement parental involvement activities.

  Table 12 shows the percentages of students, among all students and among students identified as IGP, enrolled in a school that received Title I School-Wide Assistance. The Title I Part A participation statistics are out of students enrolled in K-12.

Table 12. Percentages of students served by Title I, Part A, School-Wide

School Year	Percent of students served by Title I, Part A, School Wide	Percent of students served by Title I, Part A, School Wide who were IGP	Percent of IGP students who were served by Title I, Part A, School Wide
2013	17.3%	8.7%	42.2%
2014	18.9%	9.1%	43.5%
2015	18.4%	9.7%	42.9%
2016	19.3%	9.8%	44.3%
2017	18.9%	9.8%	42.8%
2018	18.3%	9.7%	42.3%
2019	17.9%	9.6%	42.1%
2020	17.1%	9.6%	40.1%

Table 13. Percentages of students served by Title I, Part A, Targeted Assistance

School Year	Percent of students served by Title I, Part A, Targeted Assistance	Percent of students served by Title I, Part A, Targeted Assistance who were IGP	Percent of IGP students who were served by Title I, Part A, Targeted Assistance
2013	7.7%	2.6%	5.6%
2014	6.6%	2.8%	4.6%
2015	7.5%	3.0%	5.4%
2016	7.1%	3.5%	5.8%
2017	7.8%	3.9%	7.0%
2018	8.3%	4.0%	8.0%
2019	8.7%	4.0%	8.5%
2020	8.1%	4.3%	8.6%

- **ESEA Title VII-B McKinney-Vento Homeless Education:** This federally funded program is designated to address challenges that children and youth who are experiencing homelessness face in enrolling, attending, and succeeding in school. Twelve LEAs received McKinney-Vento funding during school

years 2014 through 2020. We counted 11,140 homeless students in McKinney-Vento funded schools in 2020, among those students, 1,823 were students affected by IGP.

Table 14. Percentages of students served by the McKinney-Vento Homeless Education Program

School Year	Percent of student population who attended M-V funded schools	Percent of homeless students in M-V funded LEAs	Percent of homeless students in M-V funded LEAs who were IGP	Percent of homeless IGP students who attend M-V funded LEAs
2014	61.26%	3.27%	15.52%	11.44%
2015	60.24%	3.40%	16.17%	11.96%
2016	59.63%	3.41%	17.01%	12.36%
2017	58.96%	3.40%	17.98%	12.94%
2018	58.61%	3.06%	18.01%	12.24%
2019	58.04%	3.03%	17.43%	12.19%
2020	58.02%	2.88%	16.36%	11.11%

- **Afterschool Program Quality Enhancement Grant (PQE):** This collaborative grant between USBE and DWS distributes $125,000 in General Funds to promote high quality afterschool programs.
- **IGP afterschool program grant:** This program appropriated $1,000,000 annually in state funds for educational programming outside the regular school day. It provides targeted academic and enrichment services for students affected by intergenerational poverty. The Utah Education Policy Center has conducted three years of annual evaluation reports and a longitudinal study, all of which are available on their website (https://uepc.utah.edu/).

The Afterschool Program Quality Enhancement Grant (PQE) and the IGP afterschool program grant both collected student-level data in 2019. That was the only year of available student data for these programs. We used the matched DWS and USBE file and matched that separately to the two student-level files of afterschool participation. Table 15 shows the numbers of students who were identified as affected by IGP and who participated in the afterschool programs.

There were 3,935 records in the IGP afterschool program participation file. However, the IGP afterschool program data included 66 records that did not identify students in one LEA. We did not count these records as participants, resulting in 3,869 participants. There were 1,367 records in the PQE afterschool program participation file. However, 135 did not identify students and 6 were duplicates. We did not count these records as participants, resulting in 1,226 participants.

Table 15. Percentages of students served by Afterschool Programs in 2018-19

Data Source	Percent of total student population who participated in the afterschool program	Percent of afterschool program participants who were IGP	Percent of IGP students who participated in the afterschool programs
IGP Afterschool Program grant	25.5%	2.0%	3.8%
Afterschool PQE Grant	Data not available*	1.5%	Data not available*

*Since the PQE grant funds third party providers as well as LEAs, there were no data available to calculate the number of students who could have participated in the program.

- **Kindergarten Supplemental Enrichment Program (KSEP):** This program provides funding to extend the amount of time students enrolled in high-poverty schools receive additional numeracy and literacy instruction. This program ended June 30, 2020. The KSEP participation statistics include only students enrolled in kindergarten and are available for school year 2018 - 2020.

Table 16. Percentages of students served by the Kindergarten Supplemental Enrichment Program

School Year	Percent of students who participated in the KSEP program	Percent of KSEP program participants who were IGP	Percent of IGP students who participated in the KSEP program
2018	5.8%	12.9%	11.7%
2019	6.8%	12.1%	13.2%
2020	7.3%	11.7%	13.4%

- **Effective teachers in high poverty schools (ETHPS):** This state program makes salary bonuses available to teachers in high poverty schools whose Mean Growth Percentiles (MGP) were greater than or equal to 70. This program requires LEAs to match state funds and not all LEAs participate.

  We used a list of teachers who received salary bonuses through this program to identify their students for three school years. In some cases, students moved between schools during the year and had different teachers in the same year. To account for this, we counted each student only once in a given year. In 2020, we counted 5,316 students who were in schools with teachers who received the salary bonuses; 652 of those were students affected by IGP.

Table 17. Percentages of students served by the Effective Teachers in High Poverty Schools Program

School Year	Number of teachers	Percent of student population with ETHPS	Percent of students who had ETHPS teachers and who were IGP	Percent of IGP students who had ETHPS teachers
2018	186	17.1%	10.4%	15.7%
2019	124	12.0%	10.2%	10.9%
2020	117	9.9%	12.3%	10.5%

In addition to the programs identified above, Child Nutrition Programs (CNP) offer extensive support through a variety of programs. See Appendix B for a table of programs and basic descriptions. There are no student-level data available for the CNP programs.

We offer the following (Table 18) as a summary of results. The percentages in Table 16 are sorted based on the highest percentage of participation among students affected by IGP.

Table 18. Summary of Results for Most Recent Year of Available Data

School Year	Program Name	Program Category	Percent of student population served by the Program	Percent of Participants who were identified as IGP	Percent of IGP students who participated in the program
2019-20	Early Literacy Program	student support	41.60%	7.90%	61.80%
2019-20	OEK	student support	27.50%	10.80%	46.40%
2019-20	Title I School Wide	targeted low-income	17.10%	9.60%	40.10%
2019-20	KSEP	targeted low-income	7.30%	11.70%	13.40%
2019-20	McKinney-Vento	targeted low-income	58.00%	16.36%	11.11%
2019-20	ETHPS	targeted low-income	9.90%	12.30%	10.50%
2018-19	UPSTART	student support	24.00%	2.60%	9.90%
2018-19	CTE (participants)	general program	73.43%	1.86%	8.84%
2019-20	Title I Targeted Assistance	targeted low-income	8.10%	4.30%	8.60%
2018-19	IGP Afterschool Program	targeted low-income	25.50%	2.00%	3.80%
2018-19	HQSRE	student support	5.90%	2.60%	2.30%
2018-19	CTE (concentrators)	general program	13.69%	1.75%	1.55%
2018-19	CTE (completers)	general program	8.59%	1.88%	1.04%
2019-20	Neglected and Delinquent	student support	0.04%	10.20%	0.11%
2018-19	Afterschool PQE Grant	targeted low-income	NA	1.50%	NA

Conclusions and Policy Considerations

Based on the results summary (Table 16), three programs stood out as serving the highest percentages of students affected by IGP. The Early Literacy program saw the highest percentages of participation among students affected by IGP. Similarly, the OEK program saw the second highest percentages of participation by students affected by IGP. Title I, school-wide showed the third highest participation percentages among students affected by IGP. Based on the literature review and presumed importance of early childhood programs, we consider the higher participation rates in two early childhood education programs as a positive finding, but also recognize that these percentages could be higher and better represented across programs. Overall, we found 6 programs administered by the USBE that were specifically designed to support early childhood education, three of which are pre-k programs.[8]

For other programs, the percentages of participants affected by IGP ranged from .11% to 13.4%. This suggests that in some cases, although programs and services were available, students affected by IGP may not be accessing them. Although challenging, recruiting efforts may be needed to overcome the relatively low participation of students affected by IGP. With 2% of eligible students affected by IGP participating in the IGP afterschool program, a clear need emerges to better target the student population of interest. In other cases, the low percentages my reflect a need for additional services. For example, in 2020, 11% of homeless students affected by IGP were attending McKenny-Vento funded schools.

There are several noteworthy limitations to this study. Working outside of the USBE data warehouse to access program data meant considerable missing and unusable data for some programs. In other cases, data were simply unavailable. As we counted students and calculated percentages, we realized that there were often several ways to count students and calculate percentages. For example, CTE participation is often calculated for graduating cohorts. Doing so would result in numbers that do not align with what we have presented in this report, as we chose to include career pathways for 9th through 12th grades. Similarly, we found ourselves on some occasions struggling to match other published participation numbers, but without clear business rules or information about how students may have been previously identified we were left to make our own decisions. We made every effort to be as accurate as possible with our calculations, but also recognized that we would likely adjust some counts if we were taking a focused look into a specific program. In sum, there were many options for considering these data in different ways given different goals.

The need for available and high-quality program data was evident. Data needs should be carefully considered and identified at the start of any grant program. We recommend that program specialists work with data experts to determine how data will be collected, stored, and utilized. This might be especially important for programs such as the 21st CCLC afterschool program, which is a good candidate for future study, but lacks the required participation data. It will be important not to overlook promising programs due to a lack of student-level participation data.

[8] To put Utah's pre-kindergarten programs in context, only Florida, Vermont, and the District of Columbia currently offer universal pre-k programs, which are available to all families (Parker, Diffey, Atchison, 2018). While not every state offers universal pre-k, most (44) states offer state-funded preschool programs of some sort and Utah is among those states.

Future studies should likely focus on identifying and strengthening programs that show evidence of closing the achievement gap. Based on findings from the literature review, early childhood education programs hold promise for helping students succeed throughout their academic careers, as well as later in life. The Early Literacy Program, OEK, and UPSTART all had participation counts that should support future studies. That said, the issue of selection bias will need to be resolved in order to reach definitive conclusions regarding program effects on academic outcomes. Along with the possibility of matched comparison groups, students' baseline scores should also be carefully considered.

Out-of-school-time programs help play a critical role in serving students from low-income families. In addition to offering academic support, these programs offer enrichment activities, and fill a critical need for working parents.[9] Periodic outcomes studies of afterschool programs may be beneficial, but between national and local studies, we now know that high-quality afterschool programs can have a positive effect on academic outcomes. Previous external research and evaluations have already shown consistent empirical support for afterschool programs in general (Durlak & Weissberg, 2007) and specifically for the IGP afterschool program (https://uepc.utah.edu/; Ni, Eddings, Shooter, Yan, & Nguyen, 2018). High quality afterschool programs present an opportunity to fund and support programs with evidence of effectiveness.

Diversity of program offerings is also evident in the results of the present study. Programs range from typical educational services to meal programs, afterschool programs, services for students experiencing homelessness, family engagement programs, mental health programs, and programs that promote career and postsecondary preparation. For some of these programs we had limited or no data from which to describe participation of students affected by IGP. However, such diverse support systems are well-aligned with literature regarding the needs of students who experience poverty. Similarly, although not directly addressed in the present study, increased collaboration across agencies would surely expand the web of support needed by students affected by IGP. Adequate training for educators and school staff regarding available resources would likely be important. Academic achievement should not be expected without ensuring that each student's basic needs are met, and that students and families have access to every available resource.

Finally, given the fundamental role of education in overcoming poverty and the critical importance of student achievement, it should be beneficial to invest in programs that seek to identify and address students' academic needs. Programs such as the Early Literacy program, which incorporate testing for the purpose of identifying and addressing literacy needs are likely of high value. Another example of such programs is the EARS program, which intends to improve academic achievement of all students who are at risk of academic failure. When the goal is serving low-income students, programs that identify academic needs and address them might be thought of as foundational education programs. Along with quality program implementation, the success of such programs will depend on the extent to which students' basic needs are met.

[9] https://utahafterschool.org/images/pdfs-doc/Utah_State_of_Afterschool_Report_.pdf

References

Bower, C. B., & Rossi, R. (2019). How do Promise Neighborhoods' strategies align with research evidence on poverty and education? *Education and Urban Society, 51*(9), 1172-1201.

Brooks-Gunn, J. & Duncan, G. J. (1997). The effects of poverty on children. *The Future of Children, 7*(2), 55-71.

Diffey, L. (2018). 50-State Comparison: State K-3 Policies. Policy brief by Education Commission of the States, Denver, CO.

Duncan, G. J., Brooks-Gunn, J., Yeung, W. J., & Smith, J. R. (1998). How much does childhood poverty affect the life chances of children? *American of Sociological Review, 63*(3), 406-423.

Durlak, R., & Weissberg, R. (2007). *The impact of after-school programs that promote personal and social skills*. Chicago: CASEL.

Eamon, M. K. (2001). The Effects of poverty on children's socioemotional development: An ecological systems analysis. *Social Work, 46*(3), 256-266.

Engle, P. L, & Black, M. M. (2008). The effect of poverty on child development and educational outcomes. *Annuls of New York Academy of Sciences, 1135*, 243-256.

Hango, D. (2007). Parental investment in childhood and educational qualifications: Can greater parental involvement mediate the effects of socioeconomic disadvantage? *Social Science Research, 36,* 1331-1390.

Harper, C., Marcus, R., & Moore, K. (2003). Enduring poverty and the conditions of childhood: Lifecourse and intergenerational poverty transmissions. *World Development, 31*(3), 535-554.

Kim, K., Lee, Y., & Lee, Y. (2010). A multilevel analysis of factors related to poverty in welfare states. *Social Indicators Research, 99*, 391-404.

Ladd, H. F. (2012). Presidential address: Education and poverty: Confronting the evidence. *Journal of Policy Analysis and Management, 31*(2), 203-227.

Mihai, M., Titan, E., & Manea, D. (2015). Emerging markets queries in finance and business: Education and poverty. *Procedia Economics and Finance, 32,* 588-860.

National Education Association (2006). Closing Achievement Gaps: An NEA Association Guide. National Education Association, Washington, DC.

Ni, Y., Eddings, S. K., Shooter, W., Yan, R., & Nguyen, H., (2018). *Intergenerational Poverty Interventions in Afterschool Grant Program Evaluation: Longitudinal Analyses of Student Outcomes.* Utah Education Policy Center: Salt Lake City, UT.

Parker, E., Diffey, L., Atchison, B. (2018). *How States Fund Pre-K: A Primer for Policy Makers*. Report by Education Commission of the States, Denver, CO.

Redd, Z., Boccanfuso, C., Walder, K., Princiotta, D., Knewstub, D., & Morre, K. (2012). Expanding time for learning goth inside and outside the classroom: A review of the evidence base. Report by the Wallace Foundation, NY, NY.

Sparling, J. & Meunier, K. (2019). Abecedarian: An early childhood education approach that has a rich history and a vibrant present. *International Journal of Early Childhood, 51*, 207–216.

Tilak, J. B. G. (2002). Education and poverty. *Journal of Human Development, 3*(2), 191-207

Utah State Board of Education (2020). Annual Report. Salt Lake City Utah. https://www.schools.utah.gov/file/f0b9b91e-1f56-419e-a0c3-e78b9b80dd15

Van Ryzin, M. J., Fishbein, D., & Biglan, A. (2018). The promise of prevention science for addressing intergenerational poverty. *Psychology, Public Policy, and Law, 24*(1), 128-143.

Wamba, N. G. (2010). Poverty and literacy: An introduction. *Reading and Writing Quarterly, 26*(3), 189 – 194.

Wilson, J. J. (2000). The High/Scope Perry preschool project. *Juvenile Justice Bulletin*, Office of Juvenile Justice and Delinquency Prevention, U.S. Department of Justice. Washington, DC.

Appendix A: Percentages of students affected by IGP for each grade level

School Year	K-12 IGP Percent	Kindergarten	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12
2013	3.6%	5.8%	5.2%	4.8%	4.4%	4.1%	3.6%	3.5%	3.0%	2.8%	2.5%	2.0%	1.7%	1.7%
2014	4.0%	6.7%	6.2%	5.5%	4.9%	4.6%	4.2%	3.7%	3.5%	3.0%	2.8%	2.4%	1.8%	1.1%
2015	4.2%	6.9%	6.4%	5.8%	5.4%	4.7%	4.4%	3.9%	3.6%	3.2%	2.8%	2.6%	2.2%	1.0%
2016	4.3%	6.7%	6.5%	6.0%	5.5%	4.9%	4.5%	4.2%	3.7%	3.3%	3.0%	2.7%	2.4%	1.3%
2017	4.3%	6.8%	6.4%	6.0%	5.6%	5.1%	4.6%	4.1%	3.9%	3.5%	3.1%	2.7%	2.4%	1.4%
2018	4.2%	6.3%	6.1%	5.8%	5.4%	4.9%	4.7%	4.1%	3.7%	3.5%	3.1%	2.7%	2.3%	1.2%
2019	4.1%	6.3%	5.8%	5.5%	5.2%	5.0%	4.5%	4.2%	3.7%	3.3%	3.1%	2.7%	2.2%	1.1%
2020	4.1%	6.4%	5.6%	5.3%	5.1%	4.7%	4.5%	4.0%	3.8%	3.3%	2.9%	2.7%	2.3%	2.2%

Appendix B: Child Nutrition Programs

National School Lunch Program (NSLP)	(Title 7 Code of Federal Regulations (CFR) Section 210) is a federally assisted meal program operating in public, non-profit private schools, and residential childcare institutions. It provides payment for nutritionally balanced, low-cost or free lunches to children each school day.
After School Snack Program (ASP)	(7CFR 210) participation in the ASP is an option to sponsors already participating in NSLP that offers reimbursement to help sponsors serve snacks to children in afterschool programs.
Fresh Fruit and Vegetable Program (FFVP)	(7 CFR 211) provides payment to sponsors for fresh fruits & vegetables offered to students in selected low-income elementary schools participating in NSLP. This program offers a healthy snack during the school day for children.
Seamless Summer Option (SSO)	This is a component of the NSLP and is an administratively streamlined version of the Summer Food Service Program (SFSP) for schools participating in the National School Lunch Program. Like the SFSP the purpose is to ensure that low-income children continue to receive nutritious meals when school is not in session.
School Breakfast Program (SBP)	(7CFR 220): like the NSLP, SBP is a federally assisted meal program that provides funds to states to operate nonprofit breakfast programs in public, non-profit private schools, and residential childcare institutions. It provides payment for nutritionally balanced, low-cost or free breakfasts to children each school day.
Child & Adult Care Food Program (CACFP)	(7 CFR 226) is a federally assisted meal program that provides funds to licensed child and adult care centers, Head Start/Early Start centers, schools and afterschool meal centers, family or group day care homes as well as emergency/homeless shelters for the provision of nutritious foods
Family Day Care Home (FDCH)	(7 CFR 226) is a component of the CACFP program. FDCH Sponsors receive a set administrative reimbursement based on the number or homes they sponsor.
At Risk, After School Meal Programs	(7 CFR 226) is a component of the Child and Adult Care Food Program and offers federal funding to afterschool programs that serve a meal and/or a snack to children in low-income areas.
Summer Food Service Program (SFSP)	(7 CFR 225) The SFSP was established to ensure that low-income children continue to receive nutritious meals when school is not in session. Free meals that meet Federal nutrition guidelines are provided to all children at approved SFSP sites in areas with significant concentrations of low-income children. A sponsoring organization must be a public or private non-profit.
Special Milk Program (SMP)	(7 CFR 215) provides payment for milk for children who do not have access to other meal programs. These programs may be offered by public or private, non-profit schools, or camps.
Food Distribution Program (FDP)	(7 CFR 250) The FDP program supports domestic nutrition programs and American agricultural producers through purchases of domestic agricultural products for use in schools and institutions participating on federal child nutrition programs.
The Emergency Food Assist Program (TEFAP)	(7 CFR 251) provides food assistance to needy Americans through the distribution of USDA commodities. Under TEFAP, USDA Foods are made available to states for distribution to households for use in preparing meals for home consumption, or to organizations that prepare and provide meals for needy people. Foods are distributed free, but recipients of food for home use must meet program eligibility criteria set by the state.
Farm to School	This is an unfunded USDA program that seeks to provide training and resources to child nutrition operators to increase the consumption of fresh, safe, and healthy, local foods.

	This program also emphasizes nutrition education regarding community foods systems.
Team Nutrition	This is an initiative of the USDA Food and Nutrition Service to support the Child Nutrition Programs through giving state agencies curriculum to provide training and technical assistance for foodservice, nutrition education for children and their caregivers, and school and community support for healthy eating and physical activity

Taken directly from: https://www.schools.utah.gov/file/eca2c2e3-8432-4e47-900f-c545b933287b