Your Question:
You asked two questions regarding the connection between early childhood education and substance abuse and crime. Specifically, you asked: (1) Is there a connection between early childhood education and substance abuse rates? And (2) How does early childhood education affect the school-to-prison pipeline?

Our Response:
Research in the study, *Early Childhood Education: The Long-Term Benefits*, indicated the years from birth to age 5 are viewed as a critical period for developing the foundations for thinking, behaving and emotional well-being. As a result, during these years children can develop linguistic, cognitive, social, emotional and regulatory skills that predict their later functioning in many domains. Thus, experts argue that meaningful improvements in student academic outcomes, increases in graduation rates, decreases in incarceration rates, increases in workforce participation, and the success of students later in life depend on improving the quality of the educational foundation provided by a quality early childhood education and specifically the preschool to third-grade (P-3) continuum.

A student’s ability to meet grade-level expectations in third grade can play a significant role in the likelihood of them graduating high school. Based on the Annie E. Casey Foundation’s report, *Double Jeopardy: How Third-Grade Reading Skills and Poverty Influence High School Graduation*, a third-grade student who reads proficiently is four times more likely to graduate from high school than a third grader reading below grade level. We also now know that third grade numeracy efficiency is as much a predictor of reading proficiency as teaching reading itself, which has implications for STEM and workforce development as well.

According to the Learning Policy Institute's brief, *The Building Blocks of High-Quality Early Childhood Education Programs*, high-quality preschool gives children a strong start on the path that leads to college or a career. The brief also stated research shows that all children benefit from high-quality preschool, with low-income children and English language learners benefiting the most. Following a high-quality pre-kindergarten (pre-K) experience, the K-3 years set the foundation upon which future learning builds and strengthening these years can create opportunities for all.

Below you will find reports that detail the impact of early childhood education as well as the success in academic development and reduction in future crime. Additional information is also provided on school discipline reform efforts and alternative strategies.

**Impacts of Early Childhood Education Programs**
While a number of studies point to positive long-term effects of early childhood programs, including in some cases a reduction in crime rates, we have not identified research that causally connects these programs and a reduction in substance abuse. The studies below highlight the advantages and disadvantages of early childhood education programs.

Studies of preschool attendance provide an area of research on the payoffs of early childhood education programs. In Boston, pre-kindergarten programs demonstrate positive impacts on children’s language, literacy, numeracy and mathematics skills, and small impacts on children’s executive functioning and a measure of emotion recognition.

Studies like the Chicago Child-Parent Centers (Chicago study) and the Perry Preschool Program Study (Perry study) followed children from preschool through adulthood and showed long-lasting effects. In the Chicago study, researchers followed the progress of 989 graduates of the Chicago Public School District’s Child-Parent Center Program, which provided intensive instruction in reading and math from preschool through third grade as part of a school reform model. The Chicago study found successful early childhood programs led participants to higher adult educational achievement, improved health outcomes as an adult, higher incomes, and lower rates of serious crime, incarceration, and depression than participants in other programs.

Furthermore, the Perry study identified both the short- and long-term effects of a high-quality preschool education program for young children living in poverty. The major conclusion of the midlife phase of the Perry Preschool Study is that high-quality preschool programs for young children living in poverty contribute to their intellectual and social development in childhood and their school success, economic performance, and reduced commission of crime in adulthood. The study presented evidence that the Perry Preschool Program played a significant role in reducing overall arrests and arrests for violent crimes as well as property and drug crimes and subsequent prison or jail sentences over study participants’ lifetimes up to age 40. (See pages 3-5, 10, and 16-17 for a detailed description on crime prevention.)

Additionally, The Effects of Universal Pre-K on Cognitive Development found pre-K programs can have positive impacts on the test scores of young children of differing ethnic and racial groups and from differing socioeconomic backgrounds. Specifically, for those students who participated in the school-based universal pre-K program, the program was found to have significantly positive effects on children’s performance on cognitive tests of prereading and reading skills, prewriting and spelling skills, and math reasoning and problem-solving abilities.

However, two studies challenge the assumptions on the benefits of pre-K. The first study, A Randomized Control Trial of a Statewide Voluntary Prekindergarten Program on Children’s Skills and Behaviors through Third Grade, found that any early gains from pre-K were short-lived. The study’s control group of children who did not participate in pre-K actually surpassed the pre-K group in achievement by second and third grade. The second study, Head Start Impact Study Final Report, found the early benefits gained in Head Start dissipate over the course of elementary education. Specifically, students in the program had a meaningful advantage over the control group at kindergarten entry in academic and social emotional skills – an advantage that evaporated by third grade.

The work at the National Association of Elementary School Principals, ECS and other national organizations have acknowledged that indeed fade out will occur if the K-3 system is not equipped to continue to build on the skills where a child enters kindergarten, i.e. it is not enough to have a high-quality pre-K program, rather there needs to be a high-quality P-3 experience – including the K-3 years.

**Early Childhood Education and the School-to-Prison Pipeline**

Suspensions and expulsions have long been employed in schools to discipline students for disruptive behavior and maintain a safe school environment. However, a growing body of research suggests that these types of disciplinary
Interventions negatively impact student achievement and increase both students’ risk of dropping out and their likelihood of future involvement with the criminal justice system.

The effects of these policies are more pronounced for students of color and students with disabilities, who have historically experienced higher rates of suspensions and expulsions. The U.S. Department of Education Office for Civil Rights released an issue brief, Civil Rights Data Collection Data Snapshot: School Discipline, in March of 2014. The data revealed that students of certain racial or ethnic groups and students with disabilities are disciplined at far higher rates than their peers, beginning in preschool. For instance, African-American children represent 18 percent of preschool enrollment, but 48 percent of children receiving more than one out-of-school suspension; in comparison, white students represent 43 percent of preschool enrollment, but 26 percent of preschool children receiving more than one out-of-school suspension.

According to an article from Education Next, discipline reform efforts are also underway at the state and school-district levels. As of May 2015, 22 states and the District of Columbia had revised their laws in order to require or encourage schools to: limit the use of exclusionary discipline practices; implement supportive (nonpunitive) discipline strategies that rely on behavioral interventions; and provide support services such as counseling, dropout prevention and guidance services for at-risk students. And as of the 2015–16 school year, 23 of the 100 largest school districts nationwide had implemented policy reforms requiring nonpunitive discipline strategies and/or limits to the use of suspensions. In an April 2014 survey of 500 district superintendents conducted by the School Superintendents Association, 84 percent of respondents reported that their districts had updated their code of conduct within the previous three years.

ECS notes in How Are States Shifting School Discipline Policies that many states are exploring alternatives to exclusionary and punitive discipline by leaning toward a more supportive discipline model. The Alternative School Discipline Strategies snapshot highlights trends in the use of restorative practices and positive behavioral supports and interventions across the country.