Improving Missouri's Bottom Line:

The Significant Economic Impact of Early Childhood Programs

The challenge to fund Missouri's state budget, with escalating costs and dwindling revenue, is daunting. Across party lines, the question is: how can Missouri improve the state's economic climate? The surprising answer is investing in high quality early childhood education.

As early childhood (EC) programs have become a community staple, leaders from an array of fields have joined with researchers and policymakers in recognizing that investments in EC education yield significant economic benefits.

Business: According to Nobel prize-winning economist Dr. James Heckman, the most cost-effective route to strengthening the workforce is to invest in early education, "A large body of empirical work at the interface of neuroscience and social science has

established that fundamental cognitive and non-cognitive skills are produced in the early years of childhood, long before children start kindergarten.... Later remediation [repeating grades in school, job training, GED] of early deficits is costly, and often prohibitively so."

Economics: Research from 50 states indicates the child care sector has a powerful economic multiplier effect since EC programs buy supplies/materials within their communities, employ a sizable workforce, and enable parents to pursue stable employment. This local linkage is as "equally strong or greater than retail and tourism and other social infrastructures such as hospitals, job training, elementary and secondary schools and universities."2 Further, this multiplier effect supports the growth of an ever-increasing infrastructure that increases tax revenue.

Education: Investments in EC education provide long-term dividends. This is especially true for children who are most at-risk for poor outcomes including children who reside in low-income families or rural communities. The research is compelling:

- o Children who attended high quality EC programs experienced a significantly more positive developmental trajectory through their school-age years and into adulthood when compared to children who did not attend high quality EC programs.3
- o Cost-benefit analyses show a return of \$3.78-\$12.90 return per \$1 invested. 4,5

A Summary of the Benefits of High Quality Early Childhood Programs			
Child Outcomes		Adult Outcomes	
	Completing high school Above average test scores Positive attitudes toward school among children and parents	Higher rate of:	 Stable employment Home & car ownership Family involvement Education attainment
Lower rate of:	 Remedial education Special education 	Lower rate of:	 Social service use Criminal involvement Substance abuse

Law Enforcement: Cost-benefit studies, using longitudinal data, indicate that children who attend high quality EC programs are less likely to later become involved in juvenile and/or adult criminal activity when compared to their peers who did not attend such programs. Two significant factors contribute to this lower rate of criminal activity. First, children who attend EC programs have an increased rate of high school graduation when compared to their peers who did not attend. Second, due to the higher graduation rate, this group also has a higher rate of stable employment and increased earnings. The lower rate of criminal activity results in reduced state expenditures related to law enforcement services. The net cost of crime, in 2004 dollars, is estimated to be over \$1.3 trillion per year or a per capita cost of \$4,818.6

Military: A former Chair of the Joint Chiefs of Staff recently stated, "Our men and women in uniform are the best in the world. But the sophistication of our military is increasing every year so we will soon need even better-qualified recruits. Unfortunately, the number of young Americans who have high-school degrees, are in good physical shape, and are without criminal records is declining. To keep our country strong and safe, we need to ensure all young Americans get the right start in life – we need more investments in high quality early education." (Henry "Hugh" Shelton, General, US Army, retired)

Missouri's \$6 Billion

Child Care Sector

A 2004 economic impact study of Missouri's regulated child care identified that this industry

- Employs 34,000 people
- Produces \$635 million in gross annual receipts
- Pays over \$400 million in wages
- · Purchases over \$83 million in consumables and utilities
- · Leverages \$255 million in federal funds

The study concludes that the total economic impact is over \$6 billion or 3% of all state output.8

Missouri Research:

EC Program Quality and Children's School Readiness

A 2009 study examined the relation between EC program quality and children's school readiness. The MO Quality Rating System was used to provide a comprehensive assessment of EC program quality. Children's school readiness was assessed across developmental domains. Key findings indicate:

- Low quality EC programs hurt all children's social and emotional skills.
- Children in poverty attending low quality EC programs gained significantly less vocabulary than those in high quality EC programs.
- Children in poverty who attend high quality EC programs made significant gains in early literacy skills and social-emotional development when compared to their peers who attend low quality EC programs.9

^{1.} Heckman, J. J., & Masterov, D. V. (2007). The productivity argument for investing in young children. Review of Agricultural Economics, 29(3), 446-493.

^{2.} Warner, M. (2009). Child care multipliers: Stimulus for the States. Retrieved February 24, 2009 from http://economicdevelopment.cce.cornell.eu

^{3.} Galinsky, E. (2006, February). The economic benefits of high-quality early childhood programs: What makes the difference? The Committee for Economic Development.

^{4.} Belfield, C. R., Nores, M., Barnett, S., & Schweinhart, L. (2006). The High/scope perry preschool program: Cost-benefit analysis using date from the age-40 followup. The Journal of Human Resources, 41, 162-190. 5. Lynch, R. G. (2004). Exceptional returns: Economic, fiscal, and social benefits of investments in early childhood development. Washington, D.C.: Economic Policy Institute.

^{6.} Heckman, J. J., & Masterov, D. V. (2007). The productivity argument for investing in young children. Review of Agricultural Economics, 29(3), 446-493. 7. Mission Readiness (2009). Ready, willing and unable to serve: 75 percent of young adults cannot joint the military; Early ed in Pennsylvania is needed to ensure national security. Harrisburg, PA: Author.

^{8.} Missouri Child Care Resource and Referral Network (July, 2005). Child care keeps Missouri working: The Missouri child care industry economic impact report. St. Louis, MO: Author.

^{9.} Thornburg, K. R., Mayfield, W. A., Hawks, J. S., & Fuger, K. L. (2009). The Missouri quality rating system school readiness study. Columbia, MO: Center for Family Policy & Research