Center for Family Policy and Research
University of Missouri

Strengthening Missouri's Economic Performance

The far-reaching impact of investments in early childhood programs

The current economic climate is challenging for the state of Missouri and its many industries and businesses. Everyone is seeking investments that will yield significant returns. One important, but frequently overlooked, economic sector is early childhood (EC) programs. Frequently referred to as "child care," this sector includes early childhood services provided to young children (birth – kindergarten entry). EC programs employ more than 34,000 Missourians in a variety of EC settings.[a] In view of the current economic climate, the question is: ***"What is the economic impact of investments in the EC program sector on...***

…strengthening the economy?

- The EC program sector has a multiplier effect equal to or greater than the retail, tourism, hospitals and job training sectors.[1] While these industries are frequently targeted for economic development initiatives, the EC program sector yields an equal or greater return on investment.

- Research indicates that on average nationwide, each new dollar spent in the EC program sector results in a broader statewide economic impact of two dollars.[1]
  In 2004, the EC program sector in Missouri was able to leverage $255 million in federal funds.[2]

…preparing tomorrow's workforce?

- EC programs give children an advantage in school readiness as they enter kindergarten, the "first link in a chain that produces the long-term school success and economic benefits." [2]

- Studies of state-funded pre-kindergarten programs indicate positive child outcomes. For example, in Oklahoma, children who participated in such programs had increased vocabulary, counting, addition and subtraction and letter recognition scores when compared to those who did not attend.[2]

Investments in high quality EC education yield significant returns

Higher economic multipliers are found in states that promote high quality EC programs. This indicates…

- State policies and regulations that promote high quality improve teacher-child ratios and teacher compensation.
- Higher subsidy reimbursement rates provide more access to EC programs, which increases demand for these services and yields a positive impact on the local economy.
- Providers purchase more materials and supplies from local vendors.

This suggests that not only do high-quality EC programs benefit children, but the higher the quality of the program, the stronger the economic linkage and multiplier effects.[1]

- When comparing the academic records of high school students who graduated with those students who did not graduate, researchers found the high school drop outs had *lower* scores in reading, writing, math and spelling when compared to the high school graduates. These differences were evident as early as kindergarten. Disparities between the two groups were evident at the beginning of the student's academic career (kindergarten) and the differences increased throughout their academic careers. [3]

…supporting business productivity?

- When children are enrolled in high quality EC programs, working parents are more productive. When surveyed by Cornell University researchers, almost 30 percent of employed parents experienced problems with their child care arrangements during the three months prior, and these disruptions in care were associated with absenteeism, tardiness and reduced concentration at the workplace.[3]

- Employee absences due to problems with child care arrangements cost American businesses an estimated $3 billion each year.[4]

- 54% of employers surveyed reported that consistent EC programming helped employees reduce the number of missed work days by as much as 20% to 30%.[4]

[a] EC programs may be offered as: school-based programs, for-profit or not-for-profit early childhood centers, family child care homes, or employer-based private centers.

…job creation and growth in the EC program sector?

- In 2004, more than 5,000 small businesses provided EC education services and employed more than 34,000 Missourians.[5]
- The EC program sector generated gross annual receipts of $635 million and paid out than $400 million in wages in 2004.[5]
- While occupations in manufacturing and sales are projected to decline, jobs in the EC education field are predicted to increase. New openings and replacement of current workers are predicted to create 10,112 jobs in Missouri between 2008 and 2018. It is projected that this sector will grow by 29.6% during this time period.[6]
- Of the 100 fasted growing occupations rated by MERIC, administrators of EC programs ranked No. 44. These jobs are out-pacing those that Missouri has depended on in past decades. For example, iron and steel mill manufacturing is expected to decline by 80% by 2018, and textile and fabric finishing jobs are expected to drop by more than 15% by 2018.[6]

Conclusion and Recommendations

Though often overlooked for its economic value, EC programs are one of the smartest investments Missourians can make to strengthen the economy, support business productivity, create jobs and equip tomorrow's workforce for success. Investments in EC programs pay for themselves many times over by stimulating purchases in the local economy, allowing parents to be more productive in the labor force and encouraging small business growth. Money fed into the economy through EC programs stays in the community and bolsters local industries. Research shows the high-quality education benefits not only children who receive services, but high quality is linked with higher economic multiplier effects that work to stimulate future growth. Based on this research, the following policy recommendations are advanced:

1. **Establish high quality, voluntary universal pre-K programs** in all Missouri communities.
2. **Increase child care subsidy assistance** so families of young children can access high quality EC programs.
3. **Provide more opportunities for targeted training and technical assistance** for EC programs with the aim of measurably increasing EC program quality throughout the state.

(Compiled by Sara Semelka and Jacqueline S. Hawks, June 2010)

The importance of EC programs in the words of economists …

Multipliers measure *linkage effects* on local economies, as demand in one industry spurs demand in another. Linkage and multiplier effects are tools useful in determining which industries would have the greatest effect on an economy with an increase in demand.

- Compared to other industries, the EC program sector purchases more of its supplies locally, and rather than leaking out, those expenditures circulate longer in a state's economy.[1]
- EC program multipliers are typically higher than median multipliers in agriculture, manufacturing and service industries.[1]
- Missouri has one of the highest Type II EC program output multipliers in the country. Of the surrounding eight states, seven have multipliers lower than Missouri's 2.12, with Kentucky ranking the lowest at 1.84 Only Illinois, at 2.13, ranks higher.[1]

Multiplier effects measure *backward linkages.* These linkages occur when increased demand and the subsequent purchases by one industry in a region necessitates an increase in purchasing from another industry in that region (this creates the multiplier effects).[1]

However, to fully grasp the impact of an EC program on the local economy, one must also consider the *forward linkages*.

To address both forward and backward linkages, economists use *hypothetical extraction* (the combined impact of forward and backward linkages). This measure incorporates household spending not included in multiplier measures. [7]

When extraction measures are used, the benefits of EC programs are amplified. In a study of New York state industries using extraction, the EC program sector advanced to nearly the top of the list of studied industries, higher than manufacturing, ranching and most transportation sectors. Thus, EC programs have a powerful impact on the economy as they create jobs, allow parents to work, and supplies are purchased locally.

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