Breaking the Poverty Cycle with Education and Jobs in Kalamazoo

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Breaking the Poverty Cycle with Education and Jobs in Kalamazoo

Presentation to:
KRESA
Board of Education

Randall W. Eberts
W.E. Upjohn Institute for Employment Research

November 21, 2013
Early Childhood

Meaningful Career

Postsecondary Education

Elementary

Middle School

High School

Education and good jobs can break the poverty cycle

Quality education can lead to meaningful jobs that in turn lift families and their children out of poverty. For this to happen: students must be successful in school; must have skills employers demand, and the community must create sufficient jobs.
“In the U.S., the odds of being low skilled are ten times higher for low-educated adults born to low-educated parents than for higher-educated adults born to higher-educated parents, *much greater than in other countries.*”

“Any socially disadvantaged group will tend to pass on their disadvantages to their children in the form of weaker skills, *and this effect is stronger in the U.S. than in other countries.*”

*From the analysis of the recently released international study and data on adult competencies: OECD, TIME FOR THE U.S. TO RESKILL? WHAT THE SURVEY OF ADULT SKILLS SAYS, 2013, p. 32*
Local Challenges

• Kalamazoo has fewer jobs than a decade ago (and since the recession), even with more people living in the area
• More difficult for low-skilled workers to find jobs
  – Fewer jobs for low-skilled workers
  – Employers demand greater skills
  – Young and low-skill workers living in Kalamazoo County have fewer options of working in the county
• Local poverty rate has nearly doubled
• Persistent gap in test scores of low-income students and higher income students
• Closing the gap by increasing the student outcomes of low-income students can help break the cycle of poverty
• Need to take a smart, more targeted approach to help close the gap
Jobs in the Kalamazoo Area
The Kalamazoo MSA lost nearly 10,000 jobs during the recession. A longer perspective shows that employment actually peaked in 2000 at 151,000. Employment today is closer to what it was in 1993, which is 14,400 below the 2000 peak.
Area employment is about 90% of its 2000 mark, slightly better than Michigan but worse than the US.

Source: BLS and Upjohn Institute.
But area manufacturing employment is only 60% of what it was in 2000 and unlike the state is not rebounding after the recession.

Manufacturing Employment Index
(100 = 2000 average)

U.S.  Michigan  Kalamazoo MSA

Source: BLS and Upjohn Institute.
Service sector employment growth has also been relatively stagnant since the recession, but a recent uptick may help return it to pre-recession levels.

Private Service-providing Employment Index
(100 = 2000 average)

Source: BLS and Upjohn Institute.
A smaller percentage of the Kalamazoo County population is working. Area population (16 and older) has grown 9.6% while employment has stayed even from 2000 to 2012. The percentage of the population employed has fallen from 64.4% to 58.6%, lower than the national rate.

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Population 16 and over</td>
<td>187,445</td>
<td>195,431</td>
<td>202,901</td>
<td>205,343</td>
</tr>
<tr>
<td>Total employment</td>
<td>120,740</td>
<td>118,072</td>
<td>116,582</td>
<td>120,229</td>
</tr>
<tr>
<td>Employment to population</td>
<td>64.4%</td>
<td>60.4%</td>
<td>57.5%</td>
<td>58.6%</td>
</tr>
</tbody>
</table>

Source: U.S. Census, American Community Survey
A lower percentage of the working age population holding jobs has led to an increase of 7.6 percentage points for children in poverty and 5.7 percentage points for individuals in poverty from 2000 to 2012.

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Children in poverty</td>
<td>12.8%</td>
<td>16.4%</td>
<td>26.7%</td>
<td>21.3%</td>
<td>20.4%</td>
</tr>
<tr>
<td>Individuals in poverty</td>
<td>12.0%</td>
<td>16.4%</td>
<td>20.5%</td>
<td>19.6%</td>
<td>17.7%</td>
</tr>
</tbody>
</table>

At least a third of those in poverty are working

- 36% of county residents in poverty are working
- 41% of City of Kalamazoo residents in poverty are working

Source: U.S. Census, American Community Survey
Students in Kalamazoo County
National trends in test score gap: the income gap is increasing, while the black-white gap fell in early years but has plateaued more recently.
In the county, there is a persistent gap along the continuum in READING and MATH test scores between students in the Free and Reduced Price Lunch Program (FRPL) and those not in the program (i.e., those in poverty and those not).

### 2012-13

<table>
<thead>
<tr>
<th></th>
<th>Beginning K DIBELS</th>
<th>3rd Grade Reading</th>
<th>6th Grade Reading</th>
<th>8th Grade Reading</th>
<th>11th Grade Reading ACT</th>
<th>Graduation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRPL</td>
<td>43.0%</td>
<td>54.0</td>
<td>50.7</td>
<td>47.8</td>
<td>37.3%</td>
<td>52.5%</td>
</tr>
<tr>
<td>nonFRPL</td>
<td>76.0%</td>
<td>85.3</td>
<td>80.9</td>
<td>80.8</td>
<td>68.2%</td>
<td>89.0%</td>
</tr>
<tr>
<td>Difference</td>
<td>33.0</td>
<td>31.3</td>
<td>30.2</td>
<td>33.0</td>
<td>30.9</td>
<td>36.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Beginning K DIBELS</th>
<th>3rd Grade Math</th>
<th>6th Grade Math</th>
<th>8th Grade Math</th>
<th>11th Grade Math ACT</th>
<th>Graduation Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRPL</td>
<td>43.0%</td>
<td>24.0%</td>
<td>19.0%</td>
<td>17.7%</td>
<td>13.5%</td>
<td>52.5%</td>
</tr>
<tr>
<td>nonFRPL</td>
<td>76.0%</td>
<td>60.2%</td>
<td>50.1%</td>
<td>53.3%</td>
<td>41.2%</td>
<td>89.0%</td>
</tr>
<tr>
<td>Difference</td>
<td>33.0</td>
<td>36.2</td>
<td>31.1</td>
<td>35.6</td>
<td>27.7</td>
<td>36.5</td>
</tr>
</tbody>
</table>

Source: State of Michigan, *Center For Educational Performance and Information*

Percentage of students who are considered proficient on MEAP reading and math MEAP tests and on the DIBELS composite score.
The achievement gap persists over time, but with a slight decrease.

Source: State of Michigan, Center For Educational Performance and Information
The persistence in the achievement gap is largely explained by the low probability of regaining proficiency once a student falls below it. Transition from grade to grade of the same student in consecutive grades, Math MEAP Tests, 2012-2013, illustrates this point.

<table>
<thead>
<tr>
<th>Beg K</th>
<th>End K</th>
<th>5th grade</th>
<th>6th grade</th>
<th>8th grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Prof</td>
<td>Prof</td>
<td>4th grade</td>
<td>Not Prof</td>
<td>Prof</td>
</tr>
<tr>
<td>Prof</td>
<td>6%</td>
<td>94%</td>
<td>Prof</td>
<td>14.7</td>
</tr>
<tr>
<td>Not Prof</td>
<td>37%</td>
<td>63%</td>
<td>Not Prof</td>
<td>87.8</td>
</tr>
</tbody>
</table>

Source: State of Michigan, *Center For Educational Performance and Information*

For students who are not proficient, it is difficult to attain proficiency the next year. Even harder for students on free and reduced price lunch. For those FRPL students entering kindergarten below proficiency, 58% are proficient at the end of kindergarten. The percentage is 77% for non-FRPL students.
Interventions

Possible interventions along the continuum to reduce achievement gap.

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Effect</th>
<th>Cost per student</th>
<th>Achievement effect by end of 3rd grade (std dev.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>Establish better learning habits and home environment</td>
<td>$5,900</td>
<td>0.25</td>
</tr>
<tr>
<td>Smaller classes K-3</td>
<td>Achieve grade level in reading and math by 3rd grade, better foundation for future grades</td>
<td>$13,100</td>
<td>0.20</td>
</tr>
<tr>
<td>Summer school</td>
<td>Bridge the gap in learning activities over the summer, so fewer fall below proficiency</td>
<td>$1,000</td>
<td>0.20</td>
</tr>
<tr>
<td>Total (Interventions through grade 3)</td>
<td></td>
<td>$20,000</td>
<td>0.65</td>
</tr>
</tbody>
</table>

Source: Bartik, 2013

Other interventions: mentoring, tutoring, and other afterschool activities.
Early Warning Systems

• For these to be cost effective, need to understand who needs them and when
• Some school districts are using longitudinal student files to develop early warning systems
• Montgomery County, MD targets attendance, suspensions, and grades as early indicators of potential 9th grade dropouts
  – First graders who miss class nine or more days are twice as likely to drop out of HS
  – First graders suspended one or more times can be five times as likely to drop out
  – First graders below grade level in reading are twice as likely to drop out
• Need a longitudinal file of students and proper analysis to customize critical points for each district
• We have the resources to do something like this in our county