Education and Local Economic Development: Why Skills Matter, How We’re Doing, and Leverage Points for Change

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Skill Increases Have Large Local Spillover Benefits

Effect on metro average wages of 1% increase in percentage college grads

<table>
<thead>
<tr>
<th>Category</th>
<th>Effect on Wages</th>
</tr>
</thead>
<tbody>
<tr>
<td>On average wages</td>
<td>1.9%</td>
</tr>
<tr>
<td>On average wages due to effects on those educated (=80% college wage premium times 1% of population who becomes college grads)</td>
<td>0.8%</td>
</tr>
<tr>
<td>On average wages of others</td>
<td>1.1%</td>
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<tr>
<td>On non-college grads</td>
<td>1.4%</td>
</tr>
<tr>
<td>On college grads (other than new grads)</td>
<td>0.3%</td>
</tr>
</tbody>
</table>
Proportion of 4-year-olds and 14-year-olds staying in same metro area, PSID data

Other data suggests staying proportion fairly constant from ages 30-35 to age 65.
Long-run and short-run effects of skills on economic growth

• 10 percentage point increase in college grads in a metro area increases 10-year employment growth by 5%

• Increase in 3rd grade test scores by one-half grade level increases local property values by 5%, which is equivalent to effects of 10% increase in metro population
How are we doing on skills? MEAP test scores up moderately over last 6 years

Increase in MEAP test scores, 2005-2011, in grade-level equivalents, Kalamazoo/Calhoun average

- 3rd grade reading: 0.4 (4 months)
- 8th grade math: 1.2 (1 year, 2 months)
How are we doing? High school graduation rates stagnant and disappointing

- Graduation rate, 73%
- Other rate, 14%
- Drop-out rate, 12%

- Graduation rate, 80%
- Other rate, 3%
- Drop-out rate, 17%

4 years after 9th grade
6 years after 9th grade
How are we doing? Graduates’ skills are stagnant and disappointing

ACT: Percentage whose 11th grade scores predict 75% chance of C or better in college class in that subject area, Kalamazoo/Calhoun average

- English: 51%
- Reading (social sciences): 40%
- Math: 29%
- Science: 22%
What reforms have high leverage? Extra early learning time

Half-day pre-K for one school year:
- Increases test scores at kindergarten entrance by 10 percentiles
- Lowers special ed. assignment rates by 40%
- Reduces high school dropout rates by 25%
- Reduces crime rates by 25%
- Increases adult earnings by 5 to 10%
- Increases present value of adult earnings by about 4 times costs

Mandatory summer school in early elementary grades:
- Students learn about twice as fast as average student pace
- Increases present value of future adult earnings by about 8 times costs
What has high leverage? More career-oriented education for high school students

High school career academies:

- Small learning communities with career focus, career orientation
- Increase present value of future earnings by 11 times costs
What can businesses do?

1. **Advocacy** for better public policy
   - Michigan pre-K: 1/3rd less per cap. than national average
   - No summer school funding from state
   - CTE enrollment down

2. **Financial support**
   - Scholarships for pre-K, summer school
   - Support for career education

3. **Involvement with career/technical education**
   - Help with curriculum, internships for teachers
   - Job shadowing/internships for students
   - Sites

4. **Volunteer resources**
   - Allow/pay volunteers for pre-K, after school, and summer school support or tutoring; also for CTE