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Showing that Early Childhood Education Works: Lessons from Italy, China, and the USA

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Showing That Early Childhood Education Works
Carolyn Pope Edwards, EdD
Willa Cather Professor
Professor of Psychology and Family and Consumer Sciences

Lessons from around the world
Student Research Conference
Creativity

Why the controversy about public support for early childhood education?
- Changing society, changing families
- Competing needs – limited funds
- Profusion of choices: family day care homes, center-based programs, for-profit, non-profit, part-day, full-day, many curricula (High/Scope, Creative Curriculum, Montessori, Reggio Emilia)
- How do we decide what works in early education?

What process or system should be used to determine what works in early education? Can the same process be used to improve services?

What is the role of government?
1. Consumers in a free market should determine ...
2. Objective science should determine ...
3. Any other ideas? (Lessons from other countries)

Let’s examine these alternatives
- See the pros and cons of each
- They aren’t mutually exclusive – they can exist side by side
- Consider some examples of research related to each. You will learn about research that goes on in the early childhood field and that you students participate in at UNL

1. Consumers should determine...
(What happens when private choices drive the market for early childhood services?)

Midwest Child Care Research Consortium was initiated in 2000 by researchers and state program partners to Iowa, Kansas, Missouri, and Nebraska (UNL researchers are: Helen Raikes, Julia Torquati, Brian Wilcox, students, & me)

Record Data: State files of licensed child care and subsidy-supported child care (N = 48,000+)
Survey Data: 12.5 minute phone calls by Gallup Organization; randomized, stratified N = 2022 in 4 states, good response
Observation Data: State of the art environmental rating instruments used by teams of trained observers; random selection of 365 providers for 2-3 hour observations
Parent Survey Data: Follow-up interviews of 1325 parents in the 365 programs that had been observed

Observed quality of care in four Midwestern states

Nebraska Iowa Kansas Missouri
Good Quality Minimal Quality Poor Quality

0% 20% 40% 60% 80% 100%
2. Objective science should determine...

- Assumption: Empirical research provides valid information about what systems, programs, and/or curricula have highest efficacy in achieving outcomes
- What is required: Longitudinal research; valid measures of inputs & outputs
- Role of government: Fund research, then find ways to increase the desired inputs and measure child outcomes

Parent data: "All things considered, how would you grade the quality of the care your child is receiving from his/her current caregiver?"

<table>
<thead>
<tr>
<th>Rating</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+ Excellent</td>
<td>57%</td>
</tr>
<tr>
<td>A Good</td>
<td>28%</td>
</tr>
<tr>
<td>B Poor</td>
<td>11%</td>
</tr>
<tr>
<td>Below</td>
<td>3%</td>
</tr>
<tr>
<td>Far Below</td>
<td>2%</td>
</tr>
</tbody>
</table>

Therefore

Findings indicate that the preponderance of care in the marketplace is of minimal quality, but that parents rate it highly. They don't want to believe their child is not in an optimal situation; the costs seem high to them, they don't know what to look for.

Midwest study show the drawbacks of the free market as the road to good services for children.

Role of government

- State government enacts licensing standards and inspections to enforce basic standards of health and safety (Minimal quality).
- New proposal: state governments should support voluntary accreditation or rating systems to alert consumers to levels of quality.

What is a Quality Rating System?

The National Child Care Information Center defines it as a strategy to improve the quality of early education and care by providing "star ratings" like those for hotels and restaurants. The star ratings serve as a:
1. Consumer guide
2. Benchmark for program improvement

Ten states have implemented statewide systems (e.g., Colorado, Kentucky, Oklahoma, North Carolina)

Focus on dimensions of learning environment, teacher education/training, salaries and benefits, parent involvement, and, administration.
Midwest CCRC is working with policy makers and practitioners to pilot test 5-star ratings that fit the needs and policy contexts of states.
Poster: "Quality Rating System," by Delle A. Howell & Bruce Silverstad

Findings

We are still seeking answers to whether Nebraska and other states would benefit from Quality Rating Systems to:
- Increase the prices that parents are willing to pay for high-quality services
- Help providers improve their quality

Getting Ready Project

- A partnership of UNL researchers and community agencies
- Goal is to improve school readiness of low income children by strengthening parent confidence and competence

Long Term Effects of Lincoln's Head Start Programs

- Comparison Attendance Data from LPS 1999-2003
- Reading Recovery
- Drop Out Rates
- Mobility Data of 1992-94 Head Start Classes

Findings: Drop Out Rates

<table>
<thead>
<tr>
<th>School Year</th>
<th>All First Graders</th>
<th>Former Head Start Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-97</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>1997-98</td>
<td>19%</td>
<td>17%</td>
</tr>
<tr>
<td>1998-99</td>
<td>19%</td>
<td>20%</td>
</tr>
<tr>
<td>1999-2000</td>
<td>18%</td>
<td>21%</td>
</tr>
<tr>
<td>2000-2001</td>
<td>19%</td>
<td>18%</td>
</tr>
<tr>
<td>2001-2002</td>
<td>20%</td>
<td>19%</td>
</tr>
</tbody>
</table>

Findings: Mobility

<table>
<thead>
<tr>
<th>School Year</th>
<th>All LPS High School Students</th>
<th>Former Head Start Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>1998-2002</td>
<td>19%</td>
<td>13%</td>
</tr>
<tr>
<td>1999-2000</td>
<td>19%</td>
<td>13%</td>
</tr>
<tr>
<td>2000-2001</td>
<td>19%</td>
<td>14%</td>
</tr>
<tr>
<td>2001-2002</td>
<td>19%</td>
<td>14%</td>
</tr>
<tr>
<td>2002-2003</td>
<td>19%</td>
<td>14%</td>
</tr>
</tbody>
</table>

Findings: Attendance

<table>
<thead>
<tr>
<th>School Year</th>
<th>Attendance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997-98</td>
<td>90%</td>
</tr>
<tr>
<td>1998-99</td>
<td>90%</td>
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<tr>
<td>1999-2000</td>
<td>90%</td>
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<tr>
<td>2000-2001</td>
<td>90%</td>
</tr>
<tr>
<td>2001-2002</td>
<td>90%</td>
</tr>
<tr>
<td>2002-2003</td>
<td>90%</td>
</tr>
</tbody>
</table>

Conclusions

- The Head Start students who were still in the LPS were more likely than the former Head Start students to drop out. Future research should be calculated as the percentage of students who student's participation in the program.
- The Head Start students were more likely than the rest of the LPS high school population?
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Firm findings from empirical research

- On average, low-income and vulnerable children are about 10-15 points behind average children at school entry. Many of these differences are seen at age 2.
- Good quality early education and care promote human capital – "7 to 1 return."
- Good quality early education and care enhance school readiness (language and cognitive development). Poor quality harms them. Effect sizes are largest for low-income children.

Therefore

- Systematic research works well as a system to deal with efficacy questions and helps resolve thorny issues like bilingual education, teaching of reading, optimal class size
- Drawbacks: Research is expensive and consumes time and resources. It may be difficult to draw conclusions because of the complexity of findings. There is no guarantee that policymakers will respond to findings.

3. Something else is needed ...

- We have seen the two major models for making decisions and determining what works in the United States
- What do other countries do?

"The best preschool systems in the world" depend on a continuous improvement process that is not based on quantitative data about child outcomes. Instead, improvement relies on reflective practice supported over time. Educators, parents, and citizens have time and resources to observe and respond to observations and records about what happens inside the daily life of the schools. Government provides funding for reflective practice.

This creates a culture of professional development inside schools and a culture of advocacy in the community:

- Teacher reflection (action research, co-study) is a dynamic part of teaching and learning
- Social climate and quality of group experience are emphasized. American observers are surprised by levels of child collaboration, self-control, and prosocial behavior.
- Children's readiness for primary school isn't assessed (why not an issue?)

The Study Group Experience

- Will this trip give me a better understanding of my student teaching?
- How do the schools build so much community involvement?
- How are the city and educational system "put the story" into it?
- How can I become a better teacher?
- Can I find ways to increase parent involvement?
- How are the city and educational system achieving "innovative" development inside schools and a culture of professional development supported over time?
- How do the city and educational system make decisions and determine what works in the United States?
- How will we all change ourselves these schools we have read about?
- How are the city and educational system making decisions and determining what works in the United States?
- What will it be like to see for the first time?

Reflections Back Home

We learned about the importance of community and relationships with physical spaces and materials. We made discoveries about how to tell others about what we observed. We were organized, the color schemes, sorting & categorizing, freedom to explore, trust of materials & space. We developed our understanding of how the schools we have read about are achieving "innovative" development inside schools and a culture of professional development supported over time.

What's New In Reggio Emilia

- ReMida ("King Midas") Recycling Center
- International Center Loris Malaguzzi
- Malaguzzi International Center
Some differences between Italian and American models

<table>
<thead>
<tr>
<th>Italian: The &quot;now child&quot;</th>
<th>US: The &quot;investment child&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child well-being and quality of life now</td>
<td>Gains in developmental and learning outcomes</td>
</tr>
<tr>
<td>Sensory quality, design, organization</td>
<td>Inventory of toys, books, materials, equipment</td>
</tr>
<tr>
<td>Human relationships and continuity over time</td>
<td>Language input and adult attention here and now</td>
</tr>
<tr>
<td>Professional dignity &amp; working conditions</td>
<td>Controlling costs and maximizing private choice</td>
</tr>
</tbody>
</table>

www.halfthesky.org

Child-centered education

Cross-cultural research opens the window to new ways of understanding early education and care quality.

- Improving quality is not simply a technical problem of setting up objective, measurable standards and controlling a product.
- Instead, it is also a creative, dynamic process where educators, parents, and the public engage in critical reflection about what is happening as children learn and play.

Teacher action research (and documentation) from a Reggio-inspired preschool in South Korea by Misuk Kim

Children played with small rocks and made flowers, crab, etc.

Child: Let's collect small rocks and make a mountain with those.
Child: I have seen this kind of thing at Gumho mountain.

The children planned to construct a tower out of rocks. First, they piled up rocks in a triangle and drew to reflect on what they had made.

Child: We can pile them up higher if we collaborate.
Child: God, please help us to pile them up higher!
The children went to Gumho mountain, where there are different shapes of towers. They explored the size, shape, and density of one of the towers.

Child: There is something like a rectangle in the middle of it.
Child: Right, a rectangle! It changes into a triangle as it becomes higher.
Child: Ah! There is another rock inside the rock tower.

Back in the classroom, the children represented the rock tower, using straws and string.

Child: Oh, the height is shorter than the length of the side.
Child: Both the length of the base and the side area are 24 cm, but its height is 21 cm.
Child: If we construct a tower with a side of 90 cm, how tall will it be?

The children drew a diagram to reflect on representing the tower with straws and string.

Child: The longer the string is, the higher the tower is.
Child: There is a small rectangle in the long rectangle, and another smaller one inside it.

Outside, the children measured the base area for constructing their tower, using ruler and rocks.

Child: It's too short. We should make it larger.
Child: It should be larger than 30 cm.
Child: Oh, this is appropriate length.
Child: It's 90 cm.

Children came back to the classroom and re-represented what they had measured outdoors.

Child: Let’s turn a pencil connected with a ruler around the rectangle and make a circle inside it.
Child: That’s right. Just dig in a circle like this outdoors.
Child: The rocks will not fall down if we make a frame for the triangle [pyramid] (Then, they made it as indicated in the third picture.)

Outside again, the children collaborated to pile up rocks in the pyramid frame they made.

Child: We want to paint the tower blue.
Child: Yes, and yellow!

**Teacher Action Research at the Ruth Staples CDL**

- Weekly Reflection Meetings
- Observations
- Portfolio pages
- Project books

**Can we now answer our opening questions?**

- What process or system should be used to determine what is best for young children?
- Can the same process be used to improve the quality of services?
Conclusions

• The free market does not work well to determine quality in early education and care
  • Licensing, accreditation, and quality rating systems can help improve the market
  • Empirical research is useful for measuring what works
  • Teacher action research (reflective practice) is necessary for fostering continuous quality improvement