How the Early Childhood Resource Center Helps Maintain Stark County’s Investment in the Early Years

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Stark Education Partnership, Inc.
May 2012
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Executive Summary

In direct benefits, The Early Childhood Resource Center (The Center) conservatively returns nearly $1,000,000 a year in value to The Stark County early childhood community.

These estimated values of these benefits are as follows:

- Circulated materials in collaboration with the Stark County District Library $180,000
- Training $396,300
- Materials (Production Lab) $31,230
- Staff Consultation Time $19,320
- Scholarships and Grants $353,000

Beyond these direct benefits are indirect benefits and positive externalities produced by The Center contributing to what this report calls system efficiencies. While it is beyond The scope of The report to quantify The full impact of The Center on these efficiencies, there is little doubt that it is a major player and contributor.
The Early Childhood Resource Center (The Center) was established by The Sisters of Charity Foundation of Canton in March 2000. It was at that time, and still is today, one of the most comprehensive and few such locally based centers in the country.

While there are other centers, such as The Early Childhood Resource Center of The Kansas Inservice Training System\(^1\) or the five centers based in Massachusetts public libraries\(^2\) few offer the breadth of services found at The Center. In other instances, the distribution of resources and training is embedded within early childhood programs themselves and it is the “program” that is evaluated.

Also, no center appears to have been launched as part of a comprehensive community approach to strengthen the quality of early childhood care and education as happened with the Sisters of Charity Foundation of Canton. Also, to the best of this researcher’s knowledge, no center has ever been the subject of a comprehensive evaluation. The Massachusetts Centers supported by their Department of Early Education and Care offers an example. Christin LaRocque Supervisor, Youth and Outreach Services/Mason Square Branch of the Springfield City Library notes:

> For measuring impact, the DEEC requires us to submit two reports a year. Reports include circulation statistics, as well as any direct feedback we get from providers who call or come in to borrow things or attend our workshops. The narrative is a big part of the report. Our center serves all of western Massachusetts, which includes a million little towns with small libraries. Not everyone has consistent access to the Internet, so we send approximately 1600 newsletters to all providers in our area, as well as to the libraries. To measure the impact of the newsletters, we use interlibrary loan statistics, as well as noticing who called to sign up for our workshops.\(^3\)

This report will focus in part on circulation statistics and workshops as well. Like some conventional centers, The Center impacts parents, programs, practitioners and providers, who in turn impact children. It is, to borrow a military term, a “force multiplier”. No one assesses this aspect of centers.

Yet, there is even a broader context. The Center is not only a resource center, it is a community intervention. It is a powerful and visible symbol of the ongoing commitment of the Sisters of Charity Foundation of Canton and others to better conditions for children in Stark County. It has value that transcends mere circulation and training statistics.

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1 See: [http://www.kskits.org/The Center/](http://www.kskits.org/The Center/)
3 e-mail response to this researcher dated, March 4, 2011
Consequently, this report will be treading on new ground as it attempts to assign value to the purpose and activities of The Center.
I. Direct Benefits

In direct benefits, we look at the cost of goods and services that would have to be obtained externally if The Center did not exist.

I.1 The Value of Circulated Materials

The Stark County District Library displays a Year to Date circulation of The Center’s materials. Through November of 2011 circulation was 10,382 materials.

Extrapolating from these figures, a yearly circulation of 12,000 items might be inferred. Assigning value is often problematic.

Circulated materials can take many different forms. Standard materials are usually hardcover books or paperbacks, though DVDs and electronic media are growing. In this age of Kindles, Nooks, and used books on sites such as Amazon, the argument that each loan represents the full value of an article no longer holds.

However, Michigan’s Lakeland Library Collaborative\(^4\) has published an average book price listing for 2011 that shows average children’s titles at $21.55, trade paperbacks at $14.52, mass market paperbacks at $7.77 and nonfiction reference at $74.35. The New York Times has placed the average cost of e-books, both fiction and non-fiction, at between $12.99 to $14.99.\(^5\)

When calculating the value of its circulated materials rather than assigning full costs the Charlotte Mecklenburg Library\(^6\) took a conservative approach due to these considerations and a further concern “willingness to pay”. This presumes that many individuals will check out materials because of convenience though if not otherwise available, they would not purchase.

Following this methodology, a value of $15 is assigned to The Center materials. Therefore, **The estimated annual return to the community is: $180,000.**

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I.2 The Value of Training

Training for early childhood providers is diverse and varied and ranges from “how to” sessions to meeting Step Up to Quality (SUTQ) qualifications and Child Development Associate (CDA) credentials.

Additionally, professional development opportunities are often state or funder supported and offered at little, or no cost. State sponsored scholarships, such as the T.E.A.C.H. scholarship are also often available.

Costs also vary widely. Meeting the qualifications for a CDA can cost as much as $1500 at a two year college. Continuing education is also required to retain or renew certification at several levels. Early Childhood workshops offered by private providers such as Kaplan can range from $150 to $300 with application for Continuing Education Units (CEUs) at another $25. Specialty early childhood workshops of 12 hours in length can cost nearly $5,000 for up to 40 attendees.

<table>
<thead>
<tr>
<th>Training (through November) 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Sessions</td>
</tr>
<tr>
<td>181</td>
</tr>
</tbody>
</table>

In 2011, The Center provided 424 training hours in 181 classes for 2,642 participants. The average length of a training session can be calculated at approximately three hours. This study will adopt a training rate of $50 per hour per participant. The formula will be 2642 x 3 x $50 or $396,300.

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7 See Child Development at: [http://www.acc.commnet.edu/academicprograms/ChildDevelopmentAssociate.htm](http://www.acc.commnet.edu/academicprograms/ChildDevelopmentAssociate.htm)
8 See: Devereux Early Childhood Initiative at [http://www.kaplanco.com/ProfessionalDevelopment/Registration_Devereux.asp](http://www.kaplanco.com/ProfessionalDevelopment/Registration_Devereux.asp)
1.3 The Value of Materials (Production Lab)

The Center Production Lab Visits

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits</td>
<td>2,431</td>
<td>1,930</td>
<td>1,895</td>
<td>1,879</td>
<td>2,104</td>
<td>2,340</td>
<td>2,082</td>
</tr>
</tbody>
</table>

While the exact nature of materials produced by visitors to the production lab is not tracked, the specific use of production machines and materials has been inventoried. The extensive use of the Ellison Machine, that can cut letters and shapes, indicates that primary use may be for letters, games, or bulletin boards. While visitors can produce multiple products in a visit, this study will consider each visit as producing a “set” of materials.

Assigning a fair value requires looking at comparable costs.

Pre-manufactured materials of this nature (sets) can cost between $3.99 to as high as $25.10. Comparable custom made materials range between $10 to $20. Materials produced at the Production Lab are custom.

There is also the issue of the added value of convenience. A Google search on the value of convenience will return over one million results for the two words are overworked in advertising as products cite both as selling points. Yet, there are very few models that actually assign a value to convenience.

Use of the Production Lab is convenient. It can arguably save time and shipping and handling costs.

This study will assign a conservative value of $10 to produced sets, plus $5 for convenience. The value returned is \# visits x $15 or $31,230 per year.

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11 See Cat’s Creations at: [http://steveandcat.net/c4/other_items.htm](http://steveandcat.net/c4/other_items.htm)
1.4 The Value of Consultation Time

Expert advice and information dissemination have an inherent value that cannot be easily calculated. Suppose, for instance, a fifteen minute phone conversation result in a new preschool instructional approach that better prepares a group of students for kindergarten? How, then, to measure that value?

What can be measured is what expert consultation would cost a center if they would seek or contract for such services external to the county. There are a growing number of private early childhood consultants who serve to do this and though fees vary widely, a rate of $350 per day is not unusual. Levin, Driscoll & Fleeter (2006) calculated librarian time in answering standard reference questions at $50 per hour. Such a calculation as used in their study excluded casual inquiries and questions, as we will do here. Yet, answers or consultations requiring specialized knowledge more closely approximate charges such as the National Network of Libraries of Medicine calculate at between $70 to $150 per hour. the key question is, “Did the person benefit from the professional training and experience of the Center staff member?”

**Number of Staff Consultations**

<table>
<thead>
<tr>
<th>Month</th>
<th>Technical Assistance</th>
<th>Consulting/Mentoring</th>
<th>ECE Curriculum/Content</th>
<th>Admin/Operations</th>
<th>Professional Development</th>
</tr>
</thead>
<tbody>
<tr>
<td>August</td>
<td>41</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>40</td>
</tr>
</tbody>
</table>

The above consultations added up to 780 minutes. Added to this is another 600 minutes of consultation “in the field” at center sites for a total of 1380 minutes or 23 hours. Operating on the assumption that August is an average month, The Center staff spends 276 hours a year in consultation. A conservative rate of $70 per hour is also assumed. **Value of consultation time is: $19,320.**

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1.5 The Value of Grants and Other Funding

The Center acts as a community focal point for securing early childhood grants.

Since 2007 The Center has secured $1,821,881 in grants to support training, scholarships, operations, capital fund and other activities.

While this total includes funds from the Sisters of Charity Foundation of Canton and other local groups, grants from outside the county bring yet additional resources to Stark.

Grants to the Center from Outside Stark County 2010-11

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Campaign</td>
<td>$200,000</td>
</tr>
<tr>
<td>Other</td>
<td>$153,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$353,000</strong></td>
</tr>
</tbody>
</table>

To date The Center has seen 53 out of 96 grant applications approved. This better than 50% approval rate and the amount of dollars secured by staff in the tight philanthropic economic environment of 2010-11 attests to the value of the concepts supported by The Center.
II. Indirect Benefits: The Quandary of Measuring “Positive Externalities”

*Economists measure externalities the same way they measure everything else: according to human beings’ willingness to pay.* – Bryan Caplan, Economics Professor at George Mason University

An externality in economics is a “spill-over” or side effect and not a direct result of a product or service being offered. Externalities can be either positive or negative. For example, the concept of “fast food” has not only resulted in convenience but has also spawned a whole industry employing thousands of persons. However, there are those who would argue that fast food has a “spill-over” effect and is a major contributing factor to childhood obesity.

Using this example, the problems of measurement become apparent. While production and employment at a fast food chain of restaurants can easily be quantified, the benefits of convenience are more difficult to measure. Insofar as childhood obesity is concerned, is “fast food” a major factor or even a factor at all? If we assume that it is, then how do we attach a value to this negative externality? Here things become complex. Can we attribute causality? Who is affected and to what extent? What is the probability that they will stay obese? Do we attach a financial value to loss of income due to resulting diseases and perhaps shortened life?

In the field of early childhood, some researchers have turned to cost benefit analysis as a means of assessing positive externalities. Reynolds, Temple, Robertson, and Mann (2001) used this method to look at benefits resulting from the Title I Chicago Child-Parent Center Program in the first such study of a federal program.

This study tracked students who had participated in the preschool program through age 21, compared to a control group who had not participated.

The assumption here was that benefits (positive externalities) might accrue in (1) reductions in expenditures for the school remedial services of grade retention and special education, (2) reductions in criminal justice system expenditures for both juvenile and adult arrest and treatment, (3) reductions in child welfare system expenditures associated with child abuse and neglect, (4) averted tangible costs to crime victims, and (5) increases in adult earnings and tax revenues projected for increases in educational attainment.

In all of this, the preschool program was seen as a direct intervention into the lives of participants that resulted in positive behaviors engendering all of the above. The conclusion of the researchers was that the financial value of these outcomes exceeded the cost of the program.

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16 An Executive Summary of their study can be found at: [http://www.waisman.wisc.edu/clscbaexecsum4.html](http://www.waisman.wisc.edu/clscbaexecsum4.html)

17 Benefits reprinted from The Executive Summary
While studies like Chicago are encouraging, there is a distinct difference where The Center is concerned. The Center is not a child care program. It is not a direct provider. It primarily impacts those who deliver services in a variety of settings and programs, whether they are parents, educators or the staff of centers.

Hence, a different model is required.

Impact Evaluation is a way of assessing program effectiveness and importance by answering the question, “How would things be different if we did not exist?” Widely used by the *World Bank* and others, Impact Evaluation uses a counterfactual. In other words, it is concerned not only with what happened but with a comparison between what actually happened and what would have happened if the policy or program had not been in place.

While the counterfactual can no longer be observed (the program is in place and it has caused change) it can be estimated. Most often, this is done with a comparison or a comparison group and Impact Evaluation can become very sophisticated utilizing both experimental and quasi-experimental designs. Such an analysis is expensive and time-consuming. Community agencies generally have neither the money nor personnel to conduct such studies. Further, we are dealing with relatively small numbers on a local basis. For all these reasons, such evaluations are seldom done on a local basis.

Yet, the Operations Evaluation Department of the *World Bank* notes that there are several methods or models of Impact Evaluation. One seems suited for the purposes of community agencies given these realities.

*Rapid assessment or review, conducted ex post. This method can encompass a range of approaches to endeavor to assess impact, such as participatory methods, interviews, focus groups, case studies, an analysis of beneficiaries affected by the project, and available secondary data...*  

Late in 2010, we began this process. The staff of The Center was asked, “What is different in Stark County because of The Center?” These were their responses:

- There is more information about early childhood education and care distributed
- Childcare workers have more training and more workers have received their Child Development Associate credential
- There are more accredited Family Child Care Homes
- There are more people in college receiving a degree in early education
- There are more networking opportunities

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• There is more parental involvement in childcare centers
• There is more of a sense of professionalism for childcare workers
• There is more classroom curriculum being implemented
• There is more career pathway consultation
• There are higher wages for the workforce
• There are more centers in Step Up to Quality, the state’s voluntary quality improvement system.
• There is more public awareness

Using secondary data, what evidence can be found to support the staff’s assessment? What is presented in the next section should be considered the beginning of a journey to seek that evidence, not the destination. Communities are complex ecosystems and comparisons between any two communities are seldom exact.
III. Indirect Benefits

The following sections will look at global attributes within the context of the Stark County community by way of providing supporting evidence. Presence or lack thereof, of these attributes cannot be attributed directly to the presence of The Center alone. The Center is part of a convergence of multiple factors promoting change within the context of a community. More properly, The Center is a support for parents, educators and agencies seeking to establish a quality system of early education and care in Stark County. Likewise, multiple factors, such as rising poverty rates and unemployment, also mitigate against change. If there is no positive change, or even a regression, one must ask, “How much worse would things be?”

This section will focus on the bullet points suggested by The Center staff.

There is more information about early childhood education and care distributed

In examining this prospect, it is necessary to think of The Center as a centralized “management information system”. In this regard, The Center enables early childhood directors and staff to more efficiently access information to effectively do their jobs. Such a concept is not new in the field of computing20 and other fields. A. Ramesh Babu, Y. P. Singh, and R.K. Sachdeva (1997) underscore the difference.

Data refers to raw, unevaluated facts, figures, symbols, objects, events, etc. Data may be a collection of facts lying in storage, like a telephone directory or census records.

Information is data that have been put into a meaningful and useful context and communicated to a recipient who uses it to make decisions. Information involves the communication and reception of intelligence or knowledge. It appraises and notifies, surprises and stimulates, reduces uncertainty, reveals additional alternatives or helps eliminate irrelevant or poor ones, and influences individuals and stimulates them to action.21

Can a value be assigned? In theory, the value would be the gain in revenue, savings or enhancements to quality of care over and above that which may have been achieved due enhanced decision-making because of the additional information.

Yet, there is another dimension of information sharing and that is with parents.

Childcare workers have more training and more workers received their Child Development Associate credential

The Child Development Associate (CDA) credential is awarded to those child care workers who have completed a list of requirements specified by the Council for Professional Recognition\textsuperscript{22} that includes 120 hours of training. The CDA is an entry level credential that is recognized in all 50 states and the number of workers receiving the credential contributes to overall center and system quality. Between 2001-10 over 230 professionals received CDA mentoring services and 726 classes providing over 2,180 hours of training were provided by The Center.

The Center played an important role in 2003 as one of two pilot sites in Ohio for T.E.A.C.H. (Teacher Education And Compensation Helps) scholarships. T.E.A.C.H. scholarships provide support to early childhood educators to pursue a CDA or degree. One hundred and forty-seven scholarships, the third largest number in any county, have been awarded in Stark.

Comparison of the number of Stark County trained CDAs to a state total is limited as no county by county list is published. However, Ohio lists a total of 3,483 persons as having obtained the CDA through its state agencies and post secondary institutions.\textsuperscript{23} Given these numbers, The Center serves as a major source of training and support.

There are more accredited Family Child Care homes

Between 2006 and 2009, capacity in Family Child Care (FCC) Homes fell in the state of Ohio, but increased in Stark County.\textsuperscript{24} There are 30 accredited FCC homes in Ohio. Stark County has five, accounting for 17%.

<table>
<thead>
<tr>
<th></th>
<th>2006</th>
<th>2009</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ohio</td>
<td>Stark</td>
</tr>
<tr>
<td>Children Under Age 6 with All Parents in the Labor Force**</td>
<td>540,476</td>
<td>17,329</td>
</tr>
<tr>
<td>Family Child Care Homes (FCC) Capacity***</td>
<td>43,010</td>
<td>414</td>
</tr>
</tbody>
</table>

Source: **Data Set: Census 2000 Summary File 3 (SF 3) ***CCR&R data - Dec 2006

There are more people in college receiving a degree in early education

During the 2009-10 academic year, Stark State College awarded 55 Associate Degrees in Early Childhood Education. According to the Ohio Board of Regents, only 200 such degrees were awarded by two year institutions in the entire state that year. The year The Center began, only

\textsuperscript{22} See The Council for Professional Recognition at: \url{http://www.cdacouncil.org/}

\textsuperscript{23} This figure is based on OCCRRRA calculations as reflected in The state’s successful 2011 Race to The Top Early Learning application (VI) (A) (1) 33. These figures are based on awards through state agencies and postsecondary institutions and do not reflect all holders of The credential.

\textsuperscript{24} Source: Ohio CCR&C Child Care Supply and Demand Reports, 2006 & 2009. available at: \url{www.occrra.org}
seven such degrees were awarded. The growth of The Center has paralleled the growth in Early Childhood Education at Stark State.

Interestingly, all Stark County’s colleges combined award more early childhood degrees or credentials than nearly all the state’s major institutions. This may be an added indicator that the local demand has grown.

**Postsecondary Institutions that Lead the State in the Award of Early Childhood Degrees or Credentials in 2010**

<table>
<thead>
<tr>
<th>Institution</th>
<th>Credentials or Degrees Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stark State College</td>
<td>55</td>
</tr>
<tr>
<td>Walsh University</td>
<td>77</td>
</tr>
<tr>
<td>Malone University</td>
<td>29</td>
</tr>
<tr>
<td>University of Mount Union</td>
<td>51</td>
</tr>
<tr>
<td><strong>Total Stark</strong></td>
<td><strong>212</strong></td>
</tr>
<tr>
<td>Ohio University</td>
<td>218</td>
</tr>
<tr>
<td>Miami University</td>
<td>207</td>
</tr>
<tr>
<td>University of Cincinnati</td>
<td>190</td>
</tr>
<tr>
<td>Bowling Green University</td>
<td>175</td>
</tr>
<tr>
<td>University of Akron</td>
<td>151</td>
</tr>
<tr>
<td>Kent State University</td>
<td>122</td>
</tr>
</tbody>
</table>

**There are more networking opportunities**

This is substantiated by the number of training and consultation sessions conducted by The Center staff.

**There is more parental involvement in child care centers**

The Center has Parents as Partners (PAP) mentoring program that works with centers to strengthen family relationships.

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25 Data Source is The state of Ohio 2011 Race to The Top Early Learning application VI(A)(1) 38-40.
There is more of a sense of professionalism for child care workers

This might be considered the summative result of the resources, networking, consultation and professional development opportunities supplied by The Center. A recent thesis by Jacinda Watts (2009) shed new light on professionalism among early childhood care and education workers:

Data were analyzed using three overarching themes that emerged in the literature: defining the profession, action and advocacy in the profession, and self-perceptions of early childhood educators. The data revealed that these three themes have significant inconsistencies that contribute to a state of disequilibrium and dissonance experienced among early childhood educators, creating obstacles to the move toward greater professionalism in the field of early childhood education.26

Ms. Watts found that this dissonance was offset by professional development activities that helped affirm early childhood staff’s unique experiences in working with children and families, something that takes place through The Center.

Examples of The Center’s support for building a sense of professionalism within the workforce include:

- an annual “Caring for the Caregiver” event which celebrates early childhood practitioners
- collaboration with the Canton Area Association for the Education of Young Children (CAAEYC), a local affiliate of the national organization (NAEYC)
- participation in an annual, local conference through the Early Childhood Educators Consortium (ECEC); members include Malone University, CAAEYC, and Child & Adolescent Behavioral Health
- opportunities for networking with professionals in different settings, i.e. family child care, center-based, church-sponsored, public preschool, etc.

There is more classroom curriculum being implemented.

The Center has supported implementation of quality research based curricula for early childhood classrooms and supporting materials that assist in management. These include

- *The Creative Curriculum® for Preschool*
- *The Creative Curriculum® for Infants and Toddlers*
- HighScope
- Program Administration Scale and the Business Administration Scale; and
- Environmental Rating Scales: *ECERS, ITERS, FCCER*

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26 Watts, J. (2009). Professionalism in Early Childhood Education. A Thesis Presented to The Faculty of Humboldt State University In Partial Fulfillment of The Requirements for The Degree Master of Arts In Education. Available at: http://humboldt-dspace.calstate.edu/xmlui/bitstream/handle/2148/493/Professionalism%20in%20ECE.pdf?sequence=1
There is more career pathway consultation

Research has linked early learning and development with the educational qualifications of teachers. To this end, The Center has made supporting individual career pathway advancement a priority. In 2009 programs and services reached nearly 80% of ODJFS licensed child care programs in Stark County. These included

- Mentoring of Child Development Associate (CDA) Credential candidates;
- Coaching of first time, non-traditional college students;
- Scholarships for CDA, associate and bachelor degree students; and
- Accreditation facilitation projects.

There are higher wages for workforce

Stark ranks ninth out of 16 metropolitan areas in the state of Ohio and above all non-metropolitan areas in salaries for childcare (non-home based) workers. It should be noted that the national average wage is $21,110 or $10.15 per hour.

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<table>
<thead>
<tr>
<th>Area name</th>
<th>Employment(1)</th>
<th>Hourly mean wage</th>
<th>Annual mean wage(2)</th>
<th>Hourly median wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aknewn, OH</td>
<td>2090</td>
<td>10.87</td>
<td>22600</td>
<td>10.67</td>
</tr>
<tr>
<td>Canton-Massoillon OH</td>
<td>1120</td>
<td>9.87</td>
<td>20540</td>
<td>9.26</td>
</tr>
<tr>
<td>Cincinnati-Middletown OH-KY-IN</td>
<td>4270</td>
<td>10.29</td>
<td>21400</td>
<td>9.78</td>
</tr>
<tr>
<td>Cleveland-Elyria-Mentor OH</td>
<td>4240</td>
<td>11</td>
<td>22880</td>
<td>10.45</td>
</tr>
<tr>
<td>Columbus OH</td>
<td>3790</td>
<td>11.49</td>
<td>23890</td>
<td>10.81</td>
</tr>
<tr>
<td>Dayton OH</td>
<td>1460</td>
<td>8.96</td>
<td>18630</td>
<td>8.47</td>
</tr>
<tr>
<td>Huntington-Ashland WV-KY-OH</td>
<td>610</td>
<td>8.83</td>
<td>18360</td>
<td>8.52</td>
</tr>
<tr>
<td>Lima OH</td>
<td>110</td>
<td>9.7</td>
<td>20180</td>
<td>8.95</td>
</tr>
<tr>
<td>Mansfield OH</td>
<td>150</td>
<td>8.91</td>
<td>18530</td>
<td>8.54</td>
</tr>
<tr>
<td>Parkersburg-Marietta-Vienna WV-OH</td>
<td>320</td>
<td>8.42</td>
<td>17520</td>
<td>7.85</td>
</tr>
<tr>
<td>Sandusky OH</td>
<td>60</td>
<td>8.67</td>
<td>18040</td>
<td>8.49</td>
</tr>
<tr>
<td>Springfield OH</td>
<td>210</td>
<td>11.57</td>
<td>24060</td>
<td>11.52</td>
</tr>
<tr>
<td>Steubenville-Weirton OH-WV</td>
<td>100</td>
<td>9.73</td>
<td>20230</td>
<td>8.89</td>
</tr>
<tr>
<td>Toledo OH</td>
<td>1560</td>
<td>10.7</td>
<td>22260</td>
<td>9.62</td>
</tr>
<tr>
<td>Wheeling WV-OH</td>
<td>160</td>
<td>8.9</td>
<td>18510</td>
<td>8.23</td>
</tr>
<tr>
<td>Youngstown-Warren-Boardman OH-PA</td>
<td>1190</td>
<td>10.36</td>
<td>21540</td>
<td>9.84</td>
</tr>
<tr>
<td>West Northwestern Ohio nonmetropolitan area</td>
<td>590</td>
<td>9.62</td>
<td>20000</td>
<td>8.79</td>
</tr>
<tr>
<td>Other Ohio nonmetropolitan area</td>
<td>1120</td>
<td>10.19</td>
<td>21200</td>
<td>9.88</td>
</tr>
<tr>
<td>Eastern Ohio nonmetropolitan area</td>
<td>280</td>
<td>9.45</td>
<td>19650</td>
<td>8.85</td>
</tr>
<tr>
<td>Southern Ohio nonmetropolitan area</td>
<td>550</td>
<td>8.53</td>
<td>17750</td>
<td>8.4</td>
</tr>
</tbody>
</table>

Source: U.S. Department of Labor, Bureau of Labor Statistics
The supposition here is that wages would be lower for child care workers without the presence of The Center, its training and resources. How valid is this? There are several factors to consider. The first is that research has supported the notion that as more highly educated workers enter a community, the salary of all workers in that sector regardless of education will increase. Therefore, The Center does not have to train all workers for this to happen.

The second factor is cost of living. It might be assumed that salaries would be higher in higher cost of living communities such as the Columbus Metro. the Pew Charitable Trust lists Canton, Dayton and Youngstown as low cost of living metros. By this comparison and based on the relative size of the workforce (market condition), the Canton Metro is in the middle.

There are more centers in Step Up To Quality, the state’s voluntary quality improvement system

Stark County has more Step Up to Quality Star Rated Centers than Lorain and Butler, the two counties closest in age 0-9 child population.

<table>
<thead>
<tr>
<th>County</th>
<th>Population 0-9 Years</th>
<th>% Total Population</th>
<th>Star Centers</th>
<th>Star Centers by Child Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butler</td>
<td>53,082</td>
<td>14.4%</td>
<td>20</td>
<td>2,654</td>
</tr>
<tr>
<td>Stark</td>
<td>45,789</td>
<td>12.2%</td>
<td>40</td>
<td>1,144</td>
</tr>
<tr>
<td>Lorain</td>
<td>40,093</td>
<td>13.3%</td>
<td>31</td>
<td>1,293</td>
</tr>
</tbody>
</table>

Sources: Ohio Department of Jobs and Family Services, US Census Bureau

There is more public awareness

Organizations and buildings can both stand as a community’s ongoing commitment to education and care and specifically in the case of The Center, the care and education of young children. Extensive polling is not within the purview of this study, but would be supportive of this role.

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28 Data sources: 2010 U.S. Census, Ohio Department of Job and Family Services
IV. Corresponding System Impacts

Small-scale early childhood development programs for at-risk children have been shown to work, but can their success be reproduced on a much larger scale? There are reasons to be skeptical; some recent attempts at scaling up early childhood development programs have been disappointing. However, it’s our view that those new programs failed in large part because they were based on old models that were ill-suited to get results. Rolnick & Grunewald -29

When the Sisters of Charity Foundation of Canton established The Center in 2000, it was part of a new model that not only envisioned effective child development programs, such as what emerged with SPARK, but also a system of support.

While The Center acts to support early childhood efforts, providers and services in Stark County, it would be fair to ask what additional evidence exists that a quality system is emerging? While global comparisons entail a certain amount of risk and “cause and effect” relationships are difficult to determine and substantiate, the expectation is that the overall system would be more, rather than less efficient.

The system is strengthening. Availability of Child Care is one concern. Here Stark has the capacity to serve the needs of 51% of children under 6 with both parents in the workforce, while the state average is 50.8%. Earlier in 2006, Stark could only accommodate 47.5% while the state capacity was at 50.5%. Stark’s capacity is growing faster than the state.30

Child Care Availability 2009

<table>
<thead>
<tr>
<th></th>
<th>Stark</th>
<th>Ohio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children under 6 with all parents in the labor force</td>
<td>17,329</td>
<td>540,476</td>
</tr>
<tr>
<td>Child Care Centers-Full Day Capacity</td>
<td>8,382</td>
<td>243,345</td>
</tr>
<tr>
<td>Family Child Care (FCC) Home Capacity</td>
<td>450</td>
<td>31,215</td>
</tr>
<tr>
<td>Total Capacity, Formal Full Time Programs</td>
<td>8,832</td>
<td>274,560</td>
</tr>
<tr>
<td>Difference</td>
<td>8,497</td>
<td>265,916</td>
</tr>
<tr>
<td>% Difference</td>
<td>49.0%</td>
<td>49.2%</td>
</tr>
</tbody>
</table>

Are Stark County children better prepared for school? While there are many ways to look at The state’s Kindergarten Readiness Assessment Literacy (KRAL) scores, perhaps the most compelling is to view the results for economically disadvantaged children. The tag “Y” below lists economic disadvantage. Yellow highlights indicate where Stark County scores exceed the state average.

KRAL scores are improving in Stark County for both impoverished and non-impoverished students. In 2005-06, there were twenty-one instances of exceeding the state average among the districts in both categories; in 2010-11, twenty-five instances. Four districts were below the state average for impoverished students in 2005-06 and three in 2010-11.

Advances have been made despite the fact that relative poverty has increased in many locations. In 2009, for instance, 48.3% of all Canton families with children age 5 and under were in poverty.\textsuperscript{31}

Without question, \textbf{most KRAL scores across the county remain consistently above state averages}. However, in urban areas such as Canton and Massillon, extra-urban districts such as Plain and Canton Local and a low wealth rural districts, Minerva, averages are under the state for the current year.

A variety of factors can contribute to lower than average scores and not every child has access to quality early education and care. What is significant is that the county in general exceeds the state in both low and high wealth categories.

\textsuperscript{31} US Census Bureau 2005-09 American Community Survey results for Canton, Ohio
# Stark County KRAL Scores 2005-06 and 2010-11

State of Ohio averages were 16.9 for economic flag, 21.2 no flag for 2005-06; 17.7 economic flag and 22.1 no flag for 2010-11.

<table>
<thead>
<tr>
<th>County District</th>
<th>Economic Disadvantage Flag</th>
<th>School Year Metrics</th>
<th>2010-2011 School Year Students Tested</th>
<th>2010-2011 School Year KRAL Score Average</th>
<th>2005-2006 School Year Students Tested</th>
<th>2005-2006 School Year KRAL Score Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>043497 Alliance City</td>
<td>N</td>
<td></td>
<td>34</td>
<td>23.7</td>
<td>67</td>
<td>21.8</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>199</td>
<td>20.3</td>
<td>201</td>
<td>19.0</td>
</tr>
<tr>
<td>043711 Canton City</td>
<td>N</td>
<td></td>
<td>177</td>
<td>19.7</td>
<td>217</td>
<td>20.2</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>636</td>
<td>15.8</td>
<td>726</td>
<td>16.3</td>
</tr>
<tr>
<td>049833 Canton Local</td>
<td>N</td>
<td></td>
<td>44</td>
<td>21.9</td>
<td>82</td>
<td>21.2</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>77</td>
<td>18.6</td>
<td>76</td>
<td>20.3</td>
</tr>
<tr>
<td>049841 Fairless Local</td>
<td>N</td>
<td></td>
<td>50</td>
<td>24.5</td>
<td>78</td>
<td>22.4</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>69</td>
<td>19.1</td>
<td>37</td>
<td>19.7</td>
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<tr>
<td>049858 Jackson Local</td>
<td>N</td>
<td></td>
<td>310</td>
<td>23.5</td>
<td>343</td>
<td>22.9</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>65</td>
<td>18.0</td>
<td>43</td>
<td>18.4</td>
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<tr>
<td>049866 Lake Local</td>
<td>N</td>
<td></td>
<td>178</td>
<td>23.3</td>
<td>231</td>
<td>22.5</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>47</td>
<td>18.6</td>
<td>23</td>
<td>17.7</td>
</tr>
<tr>
<td>049874 Louisville City</td>
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<td>134</td>
<td>23.4</td>
<td>174</td>
<td>21.8</td>
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<tr>
<td></td>
<td>Y</td>
<td></td>
<td>78</td>
<td>20.9</td>
<td>77</td>
<td>18.3</td>
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<tr>
<td>049882 Marlinton Local</td>
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<td>86</td>
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<td>135</td>
<td>20.9</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>81</td>
<td>18.3</td>
<td>39</td>
<td>15.2</td>
</tr>
<tr>
<td>Stark</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>044354 Massillon City</td>
<td>N</td>
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<td>251</td>
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<td>167</td>
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</tr>
<tr>
<td></td>
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<td></td>
<td>54</td>
<td>16.3</td>
<td>154</td>
<td>17.3</td>
</tr>
<tr>
<td>049890 Minerva Local</td>
<td>N</td>
<td></td>
<td>122</td>
<td>20.1</td>
<td>89</td>
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</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>76</td>
<td>18.3</td>
<td>60</td>
<td>17.8</td>
</tr>
<tr>
<td>044503 North Canton City</td>
<td>N</td>
<td></td>
<td>240</td>
<td>22.8</td>
<td>303</td>
<td>22.0</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>29</td>
<td>21.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>049908 Northwest Local</td>
<td>N</td>
<td></td>
<td>98</td>
<td>22.3</td>
<td>197</td>
<td>21.6</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>36</td>
<td>19.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>049916 Osnaburg Local</td>
<td>N</td>
<td></td>
<td>39</td>
<td>22.4</td>
<td>64</td>
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<tr>
<td></td>
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<td></td>
<td>21</td>
<td>17.8</td>
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<td></td>
</tr>
<tr>
<td>049924 Perry Local</td>
<td>N</td>
<td></td>
<td>203</td>
<td>23.2</td>
<td>252</td>
<td>22.2</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>107</td>
<td>18.9</td>
<td>63</td>
<td>19.0</td>
</tr>
<tr>
<td>049932 Plain Local</td>
<td>N</td>
<td></td>
<td>237</td>
<td>22.1</td>
<td>291</td>
<td>22.0</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>183</td>
<td>17.5</td>
<td>110</td>
<td>16.0</td>
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<tr>
<td>049940 Sandy Valley Local</td>
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<td></td>
<td>54</td>
<td>22.3</td>
<td>60</td>
<td>20.9</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>41</td>
<td>18.6</td>
<td>46</td>
<td>18.4</td>
</tr>
<tr>
<td>049957 Tuslaw Local</td>
<td>N</td>
<td></td>
<td>54</td>
<td>22.9</td>
<td>74</td>
<td>19.8</td>
</tr>
<tr>
<td></td>
<td>Y</td>
<td></td>
<td>17</td>
<td>20.2</td>
<td>25</td>
<td>16.8</td>
</tr>
</tbody>
</table>
V. Further Research

While there are numerous early childhood programs, there are relatively few early childhood resource centers that exist independent of a specific program or practice. Those that do exist, such as in Massachusetts, are often library or university-based. None, to the best of this researcher’s knowledge, are as comprehensive in scope as The Center.

Consequently, the effectiveness of such centers is often measured by the number of items circulated or number of people served. None have been viewed in terms of monetary value returned to a community or in the larger context of serving as a nexus to strengthen an entire system of early childhood education and care.

This study, though nearly a year in progress, remains preliminary—even experimental. A dollar value can be assigned with some certainty to services provided by The Center, though these figures might err on the conservative side.

Comparison to state data is used, whenever available. Early childhood education and care suffers from the same limitations as other areas in social services and education. These are primarily the lack of real-time data and gaps in the data. For instance, while the CDA is a critical entry level credential in the field, tracking data is not available. What is more difficult to measure are “positive externalities”.

While a great deal of research exists on symbolism within organizations, little exists on the symbolic significance of organizations and even buildings like The Center to demonstrate ongoing philanthropic and community commitment to a value like early childhood.

A good deal of the data here could be augmented by focus groups and surveys to more fully support suppositions and findings. In this regard, what has emerged from the current study is grounded theory—literally a theory that emerges from the data, rather than data testing a theory.

In this context, the next section will contain several hypotheses for future study.
VI. Conclusions

Despite cut backs in state supported early education and care, there is a growing strength, efficiency and resiliency in The early childhood system in Stark County.

In 2008, the economic downturn impacted both Stark County and the state. County capacity in all programs dropped from 8,718 in 2007 to 8,259; the impact came slightly later statewide with a drop from 282,379 in 2008 to 274,560 in 2009. Stark, however, regained its loss and increased capacity to 8,832.32

Quality, as well as capacity, is increasing. The number of Step Up to Quality Star-Rated Centers and certified FCC homes has continued to rise. Further, in 25 out of 34 instances (economic disadvantage and non-economic disadvantage flags) young children in Stark County scored above the state average in Kindergarten readiness (KRAL).

Stark County’s emergent system of quality early childhood education and care owes its existence to a convergence of common interest, dedication and support. First and foremost have been the efforts of the Sisters of Charity Foundation of Canton. The foundation’s focus on quality, formation of The Center and SPARK has been critical and the Sisters of Charity Foundation, very importantly, has provided ongoing long-term support. They have not been alone as the Deuble, Hoover, H.W. Hoover, Paul and Carol David, Silk, Stark Community, and Timken Foundations have likewise supported elements. Broader community support by Aultman, Diebold, the United Way of Greater Stark County and others has been added.

Not to be minimized is the dedication of early childhood directors, center staff and others who work within the system.

Yet as Fed Economists Rolnick and Grunwald33 point out, the problem has never been in obtaining results with small programs. The problem has been in scale-up.

Returning to grounded theory, what accounts for this system quality? The literature is clear on certain factors. Professionalism and ongoing training and support are major considerations. The first hypothesis to emerge is that The Center is the ongoing support mechanism that helps insure quality in Stark County's system of early childhood education and care.

The second hypothesis is that The Center is the visible manifestation of the community's ongoing commitment to early childhood education and care.

Grants, state and federal funding come and go. While representing much needed resources, they are finite dollars with specific time spans. The Center has been present for more than a decade.

What value can be attributed to this? There are organizations that supply services, such as the American Red Cross, that act as ongoing focal points for commitment and whose brand value transcends the actual dollar value of those services. In this case, that someone will be there in time of need. Services supplied by organizations like the American Red Cross also are multipliers whose dollar value is difficult to calculate. What value a life saved by CPR?

Given these two hypotheses about The Center, a return is warranted to the Stark County system itself. The Center cannot be viewed separate from the system and its players and constituents. Something aside from market conditions reflecting cost of living, The Centers and FCC homes themselves is adding value. The third hypothesis is that The Center is a major support to the system quality through positive externalities that it produces.

How much this quality is due to The Center is difficult, perhaps impossible, to determine. That The Center has a major impact is certain given the literature.

System resilience is another aspect. Resilience is literally the capacity of a system to adapt and grow, even in the face of unexpected and sometimes damaging changes. The Center for Resilience at the Ohio State University offers this insight.

A resilient enterprise continues to grow and evolve in order to meet the needs and expectations of its shareholders and stakeholders. It adapts successfully to disruptive changes by anticipating risks, recognizing opportunities, and designing robust products and processes. It follows that resilience requires both a focus on internal process excellence and an awareness of emerging patterns in externally coupled systems, including regulatory, socio-economic, and environmental changes.34

In the final analysis, this is perhaps where the greatest value of The Center lays. Resources, particularly the mobilization of economically viable resources, remains critical to system growth and resiliency. The Center helps supply those resources.

34 See Enterprise Resilience at: http://resilience.osu.edu/CFR-site/enterpriseresilience.htm