The Effects of Preschool Attendance on Kindergarten Success

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The Effects of Preschool Attendance

on Kindergarten Success

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St. Catherine University

St. Paul, Minnesota

Teresa Ripple        July 10, 2014
The Effects of Preschool Attendance on Kindergarten Success

An Action Research Report by Amy Zwiefel

St. Catherine University
Abstract

The goal of this research was to inform and educate parents on the positive effects of preschool. This study was conducted with nine kindergarten students and their parents in a public elementary school. The data collected involved parent surveys, kindergarten checklists, kindergarten behavior logs, and meeting notes from parent conferences. The results were taken from the same nine kindergarten students whose parents returned the parental letter giving permission to be part of this study. The results showed students who had attended preschool had more positive behavior marks, mastered more skills on the kindergarten checklist, and were more socially advanced than those who did not attend preschool. Results from the parent surveys and conferencing showed that parents were open to hearing the pros and cons of preschool attendance, and eight of the nine parents said they would send their children to preschool after hearing the data.
Early childhood programs help children attain academic success. Extensive research by educators, policy makers and developmental scientists make this connection. Nationwide, approximately 14% of 4-year-olds are enrolled in school-based general education prekindergarten programs (Smith, Kleiner, Parsad, Farris, & Green, 2003).

Quality preschool programming is defined as having teachers with proper qualifications and training, small class size, stimulating curriculum, and parent involvement (Conway, 2010). There are many quality preschool programs and studies have shown a rise in the percentage of children who are attending preschool in the last ten years. Head start, preschool, nursery schools, and day care centers are all different programs offered for 3 and 4-year-old children prior to entering kindergarten. Children in center-based preschool programs in the year prior to school entry have better reading and math skills, and this advantage persists to the spring of first grade (Magnusen, Meyers, Ruhm, and Waldfogel, 2004).

The extent to which new expectations, new relationships, and new competencies are formed in the transition to school has been linked to lasting effects on children's later development (Clark & Zygmunt, 2008). Diamond, Reagan & Bandyk (2000) wrote, “readiness for learning emphasizes the developmental processes that form the basis for learning a particular subject matter or content. Readiness for school, on the other hand, implies that each child must attain a specific set of skills before he or she is ready to enter kindergarten” (p. 27). Developing a better understanding of how the key elements of school-
readiness relate to each other will guide teachers to develop comprehensive strategies to prepare children for the first grade transition (Pagani, 2012). DiBello and Neuharth-Pritchett (2008) have identified "Five Domains of School Readiness" that they believe must be measured and addressed when discussing school readiness: physical well-being and motor development, social and emotional development, approaches to learning, language development and, cognition and general knowledge (p. 257). Findings revealed 4-year-old children significantly increased their standard scores in cognitive, receptive vocabulary and social-emotional development based on their preschool attendance (Goldstein, 2013). Taylor found that when students attend preschool, they demonstrated statistically higher overall school readiness, higher physical scores, and higher personal scores than students who did not attend preschool (2000).

The definition of readiness is fluid and local context may determine how detailed a definition may or may not be in different areas of the world (DiBello & Neuharth-Pritchett, 2008). Readiness generally means that in order for a child to be successful in their first years of school they must have a certain level of mastery of pre-academic skill. As with every topic, there are always opposing viewpoints. Kim, Murdock and Choi (2005) state that readiness to learn really focuses on children's developmental stages. According to this perspective, it is not important to know about children's learning prior to entering kindergarten, but rather their natural or biological growth, which will presumably determine their ability to learn in school (Kim et al., 2005). Both definitions can be useful to teachers.
The kindergarten year symbolizes entrance into formal schooling and is a critical juncture for young children, although more and more children across the United States are entering formal schooling during pre-kindergarten (Clark & Zygmunt, 2008). Children need to enter kindergarten socially, emotionally, and behaviorally ready to be successful learners. According to Ladd and Price (1987), early school transitions are particularly important because the attitudes and reputations that may be established follow children through their many years of schooling. Children's relationships to their parents and other caregivers, including those outside the home, play a critical role in strengthening nearly every aspect of their development by providing stable, nurturing, and secure attachments upon which exploration, learning, and self-regulation are based (Bates, Mastrianni, Mintzer & Nicholas, 2006). With the help of preschool programs and parents, the transition to kindergarten is statistically shown to be easier on the child. They help provide children with a successful start to their academic lives. Every child should be given the benefit of a well-designed early childhood education to prepare them for the formal education they will receive in the following ten to fifteen years (Karabulut, 2013).

After considering the data, I saw the need to initiate an in-depth study on the preschool/kindergarten ages in my area because I want my all my students to be successful and come to school ready to learn. The study was conducted in a small town in southern Minnesota. There were 18 participants involved and all were kindergarteners. The study took place over a period of two weeks. The students were part of my kindergarten class. There was a mixture of boys and
girls who were all of the Caucasian ethnicity, none of whom were English language learners or had an Individualized Educational Plans.

**Description of Research Project**

To begin my research, I sent home a parental notification letter to my entire kindergarten students’ parents (see Appendix A). This notification letter explained exactly what my research entailed and gave parents the opportunity to participate. Once the deadline approached for the return of the study notification letter, those who agreed to participate were sent the first survey to complete (see appendix B). After the first survey was completed, I set up a time to conference with the parents for approximately one hour. During these meetings, I learned more about parents’ decision making around early childhood and was able to communicate with them about long and short-term benefits of enrollment in early childhood programs. After conferencing and discussing their decisions, I showed them videos of a morning meeting, choice time, and transition times in my kindergarten class. We discussed what kindergarten readiness looks like, how to help their younger children be successful in kindergarten, and the importance of preschool attendance for children. We also went over the literature review data I collected on this topic and talked about the long term benefits identified in the existing research on this topic. In addition, I reviewed an observation checklist I conducted with my students (see appendix C) and examples of students’ checklists (see appendix D), comparing those students who attended preschool and those who did not. We looked at the data from students in the class who had attended preschool the previous year and the data from students that had not and
compared them. Their checklists were taken from the beginning of the year. Each quarter, children were assessed in a different color pen so the data would easily show at what point the students mastered their goals. After our meeting, parents were then asked to complete a second online survey, which asked demographic questions about their income, native language, etc. This information was gathered because it may be helpful in terms of planning future communications and outreach around this topic in our community.

**Data Analysis**

Some of the data that was collected from the two parent surveys included: what is your name, what is your child’s name, what is your child’s gender, etc. The following questions focused on parent’s feelings and background knowledge of preschool.

One of the first questions that provided the most valuable data was from the pre-survey. The question was: What positive things come to mind when you think about preschool? Some of the most popular answers were that preschool is a great way for children to learn structure and to have exposure to what school will be like, they begin their social network, they have exposure to and interaction with different adults and curriculum, it's a good transition period into kindergarten, and it makes it easier for kids to go to school all day long.

The second question that supplied a lot of informative data was: What negative things come to mind when you think of preschool? There were a few parents that said they loved preschool so much that they couldn’t think of anything they didn’t like about it. Popular answers among the rest of the surveyed
The Effects of Preschool Attendance

group were: cost, transportation and timing. Preschools tend to cost more than parents are willing to pay. The participants did note that some of them were not able to send a child to preschool because they did not have transportation. Parents work during the day, so when their child is at daycare, there is no way for the child to get to preschool. As for the time preschool is offered, the three answers from parents were:

1. The time it is open is really hard to do with our work schedules. It is offered in the evening when we value our "family time" or the kids are busy with other activities. The other option is during the day. However, with both my wife and I holding full time jobs it is difficult to find a way to get them from daycare to preschool.

2. Opportunities for working families are reduced due to timing of preschool classes. The one night a week option didn't work either due to the time window (6:45pm-7:45pm).

3. The juggling of work schedule and finding daycare to accommodate the preschool schedule.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8</td>
</tr>
</tbody>
</table>

Figure 1
Do you have a child in preschool currently?

![Bar graph showing the number of subjects who have a child in preschool currently.]

Figure 2

FROM SURVEY #1: Do you plan on sending your child to preschool next year?

![Bar graph showing the number of subjects who plan to send their child to preschool next year.]

Figure 3

Have you had kids in preschool before?

![Bar graph showing the number of subjects who have had kids in preschool before.]

Figure 4

After analyzing the three bar graphs above, it is evident that the majority of the participants in my research have experience with preschool. The subjects
involved in the above graphs were parents of those who did not have a child in preschool previously. Eight of the nine parents stated in the first survey that they planned on sending their child to preschool the following year. After the meetings and discussing the pros and cons of preschool according to other research, and my own research, when I asked the parents the same question in the second survey, all nine of the nine parents said they planned on sending their child to preschool the next year.

\[
\text{What is your approximate average household income?}
\]

<table>
<thead>
<tr>
<th>Number of Subjects</th>
<th>$0-$24,999</th>
<th>$25,000-$49,999</th>
<th>$50,000-$74,999</th>
<th>$75,000-$99,999</th>
<th>$100,000-$124,999</th>
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<tr>
<td>9</td>
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<td></td>
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<tr>
<td>8</td>
<td></td>
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<td>7</td>
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<td>6</td>
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<td>5</td>
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<td></td>
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<tr>
<td>3</td>
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<td></td>
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<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td></td>
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</tr>
</tbody>
</table>

As is evident from the above graph, the approximate average household income is $75,000-$99,000. It was interesting to see the amount of money families make, as the data showed that many families did not send their children to preschool because of cost. This factor is correlated to the fact that the majority of the families made over $75,000 a year and still thought preschool was expensive.
The observations made on the behavior logs were made over a two-week time period. Each of the subjects received a behavior log and I would comment on the student’s behavior during social, transitional and academic times. Analyzing all the observations, it became evident that those students that attended preschool received more positive attributes than those who did not. Some of those positive attributes consisted of: raising hands, working quietly for a long time, ability to figure out problems on their own, respectful to classmates and teachers, helpful, and follows rules and routines.

The following data is based off the kindergarten checklists. Seven of the nine students attended preschool previously. This data was taken from the nine students involved in this study when they came into kindergarten in September 2013:

![Graph showing number of subjects and whether they mastered all kindergarten skills on their checklist.]

Figure 6

After analyzing the data on the checklists, eight of the nine students who had attended preschool mastered all their topics on the kindergarten checklist at the end of the year. However, the students who did not attend preschool took a
longer time to master the concepts than those that did attend preschool. The students who attended preschool were able to not only master their concepts but they were able to extend their knowledge by learning the concepts so quickly.

**Action Plan**

I hope this research will impact the way teachers teach, and the way learners learn in the future. Perhaps the most important way I hope this will impact parents, teachers and learners is by informing parents of the importance of preschool, therefore leading more parents to enroll their children in preschool. I will have a bound copy of this report for parents to look through at conferences and at any other time. Conferences are the main time I will discuss my findings with parents in regard to their own child’s growth and experiences. Enrolling children in preschool will allow children to have “school like experiences” and start learning letters and numbers so there is less time teaching elementary school children the “basics” and more time spent digging into the curriculum and learning. By attending preschool, children are able to work on social, emotional and educational skills before they enter kindergarten. There is much time spent teaching children how to do basic tasks in kindergarten (how to use the bathroom properly, how to walk in a line, how to transition, how to go through the lunch line, etc).

The results of this research will also allow me to work with preschools on those issues that concern parents. I will set up meetings with the different preschools in my area and share my findings with their staff. If more students
attend preschool, I believe there will be less of an achievement gap in kindergarten. As a kindergarten teacher for five years, I know how big the gap is between students in kindergarten. Informing parents in my area and outside of my area of the results found in this study will hopefully help parents make the decisions that will allow their children to be successful in kindergarten and the rest of their years in school. I will reach out to preschools and community education to set up ways to be a resource for parents who have questions or issues.

As with any study, there is further potential research that could be done. More research should be conducted on following children from kindergarten through second grade. There is a need to look closely at making connections between where the students are academically at each grade (for example: how does a struggling kindergartener do when they reach second grade). To provide more random results, this study could be done again, with more participants. There could have been some bias in this study because the participants were parents of my students, so they might have said what I wanted to hear, and not their true inclinations. More research using random participants would eliminate bias. I would also like to follow up with families in the study to see if they did enroll their child in preschool or if they did not.
References


Dear Parents,

As you may recall from recent conversations at your child’s conferences, I am a St. Catherine University student pursuing a Masters of Education degree. An important part of my program is the Action Research project.

As a kindergarten teacher of five years, I have learned how important preschool attendance is, and I want to better understand how parents in our community are making choices around preschool. To do so, I hope to gather some data from my kindergarten students and from you. Some of the data I will gather includes using your child’s kindergarten checklist and observing student outcomes on a variety of kindergarten measures. I would also really benefit from learning from you. I have two short surveys I’d like you to complete. Also, if you are interested I would like to talk to you about your choice to use or not use preschool.

If you agree to help me, I might include your ideas shared during our conversations, the information you submit in the surveys, and information from your child’s kindergarten observations for my research. I am working with a faculty member at St. Kate’s and an advisor to complete this particular project.

I will be summarizing the information I get from this research, however none of the writing that I do will include your name, your child’s name, the school or communities name, or any references that would make it possible to identify a particular person participating in the study. Other people will not know if you or your child is involved my study.

When I am done, my work will be electronically available online at the St. Kate’s library in a system called Sophia, which holds published reports written by faculty and graduate students at St. Kate’s. The goal of sharing my final research study report is to help other teachers who are also trying to improve the effectiveness of their teaching.

As with any research, there are possible risks and benefits to every study. For instance, some people might feel that talking to me about their pre-school decisions is an invasion of privacy. The benefits of this survey are that any data collected will be used in a professional manner to try and improve school success of children in our community. Another benefit would be that you are taking part of a study that will help to inform other people about different factors that go into deciding to sign a child up for preschool or not. Your participation and your child’s participation in this project are completely voluntary. You have the right to participate or not.

If you decide you want your child’s data (observations based on kindergarten measures already used in our school district) to be in my study I would need you to sign the form at
the bottom of this sheet. If you decide you are willing to also share your own perspectives on early childhood with me I would need you to complete the surveys that I share and/or participate in a conversation with me about this topic.

If you decide you do NOT want your data or your child’s data included in my study, you would not need to do anything at this time. Also, you can withdraw your participation at any time up until April 15, 2014. There is no penalty for not being involved in the study. If at any time you decide you do not what your child’s data to be included in the study, I will remove included data to the best of my ability.

If you have any questions, please feel free to contact me, 952-923-9053. You may ask questions now, or if you have any additional questions later, you can ask me or my advisor Teresa Ripple at tmripple@stkate.edu who will be happy to answer them. If you have other questions or concerns regarding the study and would like to talk to someone other than the researcher(s), you may also contact Dr. John Schmitt, Chair of the St. Catherine University Institutional Review Board, at (651) 690-7739.

You may keep a copy of this form for your records.

_____I am willing to have my child’s data included in this study.

_____I am NOT willing to have my child’s data included in this study.

My child did/did not attend pre-school? Did Did Not

Amount of time in preschool approximately: ____________________

Also, I am willing to complete a survey or have a conversation with you about preschool.

You can email me or call me at Azwiefel@np.k12.mn.us or 952-923-9053.

Link to survey: https://www.surveymonkey.com/s/N2ZMPDV

Best time to reach me: 11:45am-1:40pm, and anytime after 4:00pm.

I might help in your study, I need to know more:

________________________________________________________________________

Name of Child

Date

________________________________________________________________________

Signature of Parent

Date

________________________________________________________________________

Amy Zwiefel

Date
Appendix B

Preschool Survey #1

Thank you for taking time to take this survey! Your answers will help me to better understand your initial thoughts and experiences with preschool.

1. What is your name?
2. Have you had kids in preschool before? Yes  No
3. Do you have a child in preschool currently? Yes  No
4. What positive things come to mind when you think about preschool?
5. What negative things come to mind when you think of preschool?
6. Do you plan on sending your child to preschool next year? Yes  No
7. What is your child's gender? Female  Male
8. What are some of the issues you see when it comes to enrolling your child in preschool (Ex: cost, transportation, time commitment, etc.)?
9. Are you willing to commit one hour of your time to be part of this study? Yes  No
Appendix C
Observation List

<table>
<thead>
<tr>
<th>Positive Behavior</th>
<th>Negative Behavior</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Circle one:

Attended Preschool       Did Not Attend Preschool
Appendix D

Kindergarten Progress Checklist

Name ___________________________ Birthday __________________

Identified crossed out letters and sounds of circled letters K301, K302

A a  B b  C c  D d  E e  F f  G g  H h  I i  J j  K k  L l  M m
N n  O o  P p  Q q  R r  Ss  T t  U u  V v  W w  X x  Y y  Z z

Knows the circled high frequency words K303

a  is  as  it  at  I
if  the  had  his  by  my
and  in  on  can  or  from
no  am  for  put  come  go  look
here  what  to  he  be  see  we
she  me  like  with  this  that  said

Can READ circled color words
brown  green  yellow  orange  black  red  purple  blue

Identified colors
red  orange  yellow  green  blue  purple  brown  black

Identified shapes K311, K313

_____ Knows the days of the week
_____ Knows the months of the year

<table>
<thead>
<tr>
<th>Counting forward</th>
<th>1 to 30</th>
<th>1 to 60</th>
<th>1 to 100</th>
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<tbody>
<tr>
<td>Counting backward</td>
<td>12 to 0</td>
<td>15 to 0</td>
<td>20 to 0</td>
</tr>
<tr>
<td>Counting Objects</td>
<td>10 rearrange</td>
<td>15 rearrange</td>
<td>20 rearrange</td>
</tr>
<tr>
<td>Skill</td>
<td>P</td>
<td>N</td>
<td>D</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>----</td>
<td>----</td>
<td>----</td>
</tr>
<tr>
<td>Recognizes money</td>
<td>0-10</td>
<td>0-50</td>
<td>0-100</td>
</tr>
<tr>
<td>Number Writing K112</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skip counting K112</td>
<td>10’s to 100</td>
<td>5’s to 100</td>
<td>2’s to 30</td>
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<tr>
<td>Telling time</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Recognizes numbers K111-2</td>
<td>0 to 31</td>
<td>0 to 60</td>
<td>0 to 120</td>
</tr>
<tr>
<td>One more/one less K112-3</td>
<td>+1 (10)</td>
<td>-1 (31)</td>
<td>+1 (20)</td>
</tr>
<tr>
<td>Sequence numbers K115</td>
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<tr>
<td>Add/Subtract K121, K122</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Recognizing shapes K311, K313</td>
<td>Recognize 2D</td>
<td>Recognize 3D</td>
<td>Real world</td>
</tr>
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<td>Sorting K312, K321, K322</td>
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<td>No</td>
<td></td>
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<tr>
<td>Patterns K211</td>
<td>Recognize</td>
<td>Extend</td>
<td>Create</td>
</tr>
<tr>
<td>Word Problems K121</td>
<td></td>
<td>Addition</td>
<td>Subtraction</td>
</tr>
<tr>
<td>Identify Symbols K121</td>
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<td>+ - =</td>
<td></td>
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<tr>
<td>Graph K112</td>
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<td>Number Sense K112</td>
<td></td>
<td>Yes No</td>
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<td>Positional language K323</td>
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<td>Compose/Decompose Using objects K121, K122</td>
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<tr>
<td>Object Comparison K322</td>
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Identified Numbers

1  2  3  4  5  6  7  8  9  10  11
12 13 14 15 16 17 18 19 20 21 22
23 24 25 26 27 28 29 30 31 42 51
67 73 85 94 100 101 110 115
Appendix E

Preschool Survey #2

Thank you for taking time to take this survey! Your answers will help me to better understand your thoughts and experiences with preschool after being part of my study!

1. Do you plan on sending your child to preschool next year?
   Yes  No

2. What is your approximate average household income?
   $0-$24,999
   $25,000-$49,999
   $50,000-$74,999
   $75,000-$99,999
   $100,000-$124,999
   $125,000-$149,999
   $150,000-$174,999
   $175,000-$199,999
   $200,000 and up
   Other (please specify)

3. What language do you mainly speak at home?
   English
   Spanish
   Chinese
   Russian
   Vietnamese
   Other (please specify)

4. What is the highest level of education you have completed?

5. What is your child's gender?
   Female  Male

6. What are some of the issues you see when it comes to enrolling your child in preschool (Ex: cost, transportation, time commitment, etc.)?

7. What is something new you learned about preschool?

8. Describe your feelings about being part of this study.

9. Is there anything that you would have liked to be changed about this study?