An evaluation determined the impact on participants of pilot intergenerational programs in the Central Greene, Quaker Valley, and Titusville school districts in western Pennsylvania. It examined how participation in project activities changed students' attitudes about older adults and aging. A four-part questionnaire consisted of the following: questions to gather demographic information; a semantic differential scale of items that used bipolar adjectives that reflected a continuum between extremes; an attitude endorsement scale that stressed social, physical, and behavioral factors associated with aging; and a mixture of likert-type free-format, and open-ended questions to gather outcome information. Responses were received from 81 elementary, junior high, and high school students who completed both an initial survey and one following participation in intergenerational activities. Also, more limited information about how the project affected the older adult participants was gathered through a survey of 23 women and 4 men. The project had the following effects: it made a significant and positive change in the way they perceived older adults; it improved significantly junior and senior high school students' enjoyment of time spent with older adults; and it increased students' perception of what age is "old." Changes in student attitudes appeared to result from the project and not from previous relationships with older adults. Over the course of the project, students' perceptions of older persons' wisdom became a much better predictor of how much the students enjoyed being with the older adults. Following participation in intergenerational activities, students rated older adults as more active, stronger, friendlier, and less boring than they did prior to the activities. As a result of their participation in the project the elders gained improved images of schools and students. They also voiced more hope for the future. (Appendixes include 14 tables and questionnaires.) (YLB)
HUMAN DEVELOPMENT ACROSS THE LIFESPAN

A Pilot Intergenerational Project in
Three Pennsylvania School Districts

FINAL EVALUATION

Funded by:
Carl D. Perkins
Vocational and Applied Technology Education Act
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1995-1996

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Project Director,
James M. McCrea, M.P.W.

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Acknowledgements

Generations Together would like to thank the principals, teachers, staff, students and volunteers of the three participating school districts. We would especially like to thank the following persons for their hard work and dedication to this project:

Pleasaneville Elementary School—Deborah Forker and Judy McKinney
Quaker Valley Junior High School—Joan Leja and Deb Rego
Waynesburg High School—Joyce Winters and Berbice Fox.

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HUMAN DEVELOPMENT ACROSS THE LIFESPAN

A Pilot Intergenerational Project in
Three Pennsylvania School Districts

FINAL EVALUATION
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Introduction

From January to June 1996, Generations Together, an Intergenerational Studies Program at the University of Pittsburgh, developed and implemented pilot intergenerational programs in the Central Greene, Quaker Valley, and Titusville school districts in western Pennsylvania. The programs introduced intergenerational experiences into the Family and Consumer Science curriculum to help meet state and district performance outcomes.

The Human Development Across the Lifespan Project sought to enable participating students to:
- Recognize the concept of life-long learning
- Improve interpersonal relationships
- Prepare for adult roles in families and communities.

As part of the Family and Consumer Sciences/Generations Together partnership, Generations Together evaluated the impact of the project on the participants in the three districts. The evaluation sought to learn how participation in the project’s intergenerational activities changed students’ attitudes about older adults and aging.

We chose to focus on these types of changes for three reasons. First, student interaction with older adults was a consistent element across all the activities in the three districts. Second, changes in students’ attitudes about older persons and aging are necessary to achieve all three goals. Students must understand that older persons can be teachers and learners, that younger persons can have satisfying relationships with older persons, and that understanding aging and the elderly is part of an adult role in society.

Finally, young people’s attitudes about older adults and aging -- and how to improve them -- has been a regular concern for several decades among educators and intergenerational professionals in Pennsylvania. Understanding how the Human Development Across the Lifespan Project impacted student attitudes would give some sense of its significance at a pilot project.

Generations Together also gathered more limited information about how the project affected the older adult participants.

The authors wish to thank Marci Kramer, James McCrea, and Sally Newman for their comments on drafts of the evaluation.
Student Survey

Procedures for the Student Evaluation

The Generations Together evaluator developed a four-part questionnaire (Attached -- See Appendix) for the evaluation based on instruments used in other, similar intergenerational projects. Several Generations Together staff members and persons attending two of the district organizational meetings for the project reviewed a draft version of the questionnaire. Their suggestions were used to complete the final version of the instrument.

The questionnaire had four parts. Part I consisted of questions to gather demographic information, including age and school district. It also included questions about the number of living grandparents and other elders with whom the students had close relationships. Part II consisted of a 20-item semantic differential scale consisting of items that use bipolar adjectives that reflect a continuum between extremes. These items were selected from several similar scales in current use (Aday, R. H., Sims, C. R., and Evans, E., 1995). Part III consisted of an attitude endorsement scale that contained 20 items and stressed the social, physical, and behavioral factors normally associated with the aging process. A Likert-type scale was used on which the students recorded the strength of their agreement or disagreement with each statement (Aday, R. H., Sims, C. R., Evans, E., 1995). Part IV included a mixture of likert-type, free-format and open-ended questions intended to gather outcome information not asked in the previous sections.

A cover sheet explained the purpose of the evaluation, as did the written instructions sent to the teachers who distributed the questionnaires. The instructions indicated that completion of the questionnaires was voluntary and not required for participation in the intergenerational activities.

Generations Together, with the help of personnel from the three districts, administered questionnaires in the spring of 1996 to students in all three schools prior to and following their participation in the intergenerational activities. Ninety-five students completed the initial survey. Eighty-one completed both the initial and final surveys. The students who completed the surveys are reflected in the following table:

Table 1: Demographic Data

<table>
<thead>
<tr>
<th>Grade</th>
<th>Waynesburg</th>
<th>Pleasantville</th>
<th>Quaker Valley</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>M</td>
<td>M</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>F</td>
<td>F</td>
<td>F</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>Total</td>
<td>Total</td>
<td>81</td>
</tr>
<tr>
<td>Elem.</td>
<td>2</td>
<td>34</td>
<td>3</td>
<td>52</td>
</tr>
<tr>
<td>Jr. High</td>
<td>17</td>
<td>1</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Sr. High</td>
<td>19</td>
<td></td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Total</td>
<td>19</td>
<td></td>
<td></td>
<td>81</td>
</tr>
</tbody>
</table>

Total Students = 81
Once the completed questionnaires were received at Generations Together, the scaled ratings were transformed to numerical values and the responses to open-ended questions were grouped and coded into categories. Survey scale data was entered along with demographic information into a data file in SPSS (Statistical Package for the Social Sciences). Descriptive summaries and inferential analyses were conducted using the same software (SPSS).

**Student Evaluation Results**

**Overall Effects on Students of Project Participation**

The intergenerational project was successful in improving student attitudes toward older adults and changing their basic understanding of older persons and aging:

- The project made a significant and positive change in the way the students perceived older adults.
- The project significantly improved junior and senior high school students' enjoyment of the time spent with older adults.
- The project significantly increased the students' perception of what age is "old."

We summed the ratings on Part II and on Part III of the survey to obtain measures of general attitude toward elders. Part II consisted of a semantic differential scale which asked students to rate elders on polarized qualities (i.e. happy vs. sad). There was a significant improvement of attitudes toward older adults based on Part II (see Table 2).

Part III consisted of general statements about older adults with which the students were asked to rate the strength of their agreement or disagreement. There was no change in overall attitude as measured by a total score on Part III over the course of the project (see Table 5), but there were some significant changes in specific attitudes addressed by the Part in scale (see Table 13).

The students' estimates of what age was "old" changed significantly between the first administration of the survey prior to the intergenerational activities and the second, following the activities. It increased from a mean age of 68.11 years to 76.69 years (see Table 10).

**Effects of Students' Other Relationships with Older Adults**

The changes in student attitudes appear to be the result of the project, not of students' previous relationships (or lack of such relationships) with older adults.

- The number of grandparents students had did not affect how much they enjoyed being with older adults (see Table 14).
- The number of elders with whom students had good relationships did not affect how much they enjoyed being with older adults (see Table 14).
We were concerned that the evaluation could be affected by students’ existing relationships with grandparents and other older adults. To learn if these relationships had an effect, we asked several questions about students’ grandparents and relationships with other older adults in Part I of the questionnaire. We analyzed the responses to these questions with the results for the “enjoyment” question in Part IV, assuming that enjoyment would be a good comprehensive measure of student attitudes toward elders. The number of grandparents students had that were living or the number of elders they were close to did not have any effect on their enjoyment of elders.

**Specific Effects of Project Participation on Students**

Participation in the intergenerational activities changed students’ attitudes about older adults in specific ways:

- Over the course of the intergenerational project, students’ perceptions of older persons’ wisdom became a much better predictor of how much the students enjoyed being with the older adults.

On the questionnaire given prior to the activities, the students’ judgment of how boring, good, and calm elders are were the best predictors (using multiple regression analysis) of how much they enjoyed being with older adults. After the project, the best predictor (using multiple regression analysis) of how much students reported enjoying being with older adults was their rating of older adults’ wisdom.

These results suggest that the intergenerational activities had an important effect in changing students’ attitudes about why they enjoy being with older adults. Prior to the activities, students made judgements about whether or not they would enjoy being with older adults based primarily on issues such as “Are older adults boring, or not? “Are older people good, or not?” The project, which put older adults together with the students as teachers or sources of knowledge, changed students’ basis for making judgements about older persons. Following the activities, students’ basis for deciding whether or not they enjoyed being with older persons had become older adults’ wisdom.

Results from other sections of the questionnaire confirm that the project not only changed students’ views about older adults, but did so in a way that highlighted older adults’ wisdom and role as persons with important knowledge. In Part III of the survey, where students are asked to endorse specific statements about elders, the two statements receiving the highest rating prior to the project were “Old people don’t like to be with children” and “Old people don’t talk very much.” Following the project, the two highest rated statements on Part III of the survey were, respectively, “Old people are sweet” and “Old people can teach me new things” (see Table 13).

Following participation in the intergenerational activities, students rated older adults as more active, stronger, friendlier, and less boring than they did prior to the activities. They also rated them as poorer (economically) than they did prior to the project (see Tables 12 and 13).

Specific questions on the survey were likely to show differential responses based on the gender and the age of the students:

- Male students had more positive attitudes (both before and after the activities) about older adults than did female students (see Tables 4 and 7).
6th graders had more positive attitudes (before the activities) about older adults than did high school or junior high school students. The attitudes toward elders of 6th graders fell slightly and both junior high and high school students' attitudes improved following the activities (see Tables 3 and 6).

In Part II (semantic differential scale) of the survey, sixth graders reported more positive attitudes toward elders than did older high school students both before and after their projects. Because the students in sixth grade and high school also came from two different school districts and communities, it is difficult to interpret these results as solely a condition of the difference in age. However, as a practical matter the results indicate that student age differences need to be taken into account when planning intergenerational programs that focus on attitude change.

Male students appeared to have more positive attitudes toward elders than female students as measured by BOTH part II and Part III of the survey. Both male and female students experienced a significant improvement in their attitude toward elders after their projects, although the gender difference remained (see Tables 4 and 7).

### Student Replies to Open-Ended Questions

When asked how well they enjoyed having older adults in class, students gave nearly universally positive replies. They included pictures of happy faces and other symbols.

When asked on the initial survey what five adjectives they would use to describe older adults, the students used words like sweet, kind, and generous as well as more negative descriptions like loose-skinned, grey-haired, and sick. On the final survey they wrote more positive descriptions such as that older adults were intelligent and friendly.

In the free response section, the students wrote many positive comments such as the following:

**Pleasantville:**
- "Fun! Neat! Exciting!"
- "Really cool 'cause I learned so much about bird-house building."

**Quaker Valley:**
- "A good experience considering not all of us are around old people all the time."
- "A very exciting experience, you should do it again next year."

**Waynesburg:**
- "A great experience that needed to be done."
- "Very interesting and exciting."
- "Fun and something all people should do."
- "A great experience, kids should be around old people more often. It's easier to understand them."
Older Adult Survey

Generations Together created a questionnaire and distributed it at the end of the project to the older adult participants. There were 35 adult participants, 29 women and 6 men in the project (See Table 9), including several married couples. Twenty-seven completed the survey, 23 women and 4 men.

Table 9: 

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaker Valley</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Pleasantville</td>
<td>5</td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Waynesburg</td>
<td>1</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
<td><strong>29</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

Their responses showed that as a result of their participation in the project the elders gained improved images of schools and of students. They also voiced more hope for the future.

- More than 96 percent of the elders completing the questionnaire indicated they had a higher opinion of public schools than they had before they began participating in the project.
- All of the elders who completed the questionnaire said they had a higher opinion of youth after the project than they did before they participated in the intergenerational activities.

In the free response section of the adult survey, several elders reported having more hope for the future after spending time with youth in school, and a desire to participate in more projects of this type. Their comments included:

Waynesburg:

- "They [the students] were splendid and very friendly. I enjoyed them a lot, sorry we can’t have them more.”

Quaker Valley:

- "The behavior of students is often seen in a negative way when they are hanging out on the streets with a group of friends. I got to know these students as individuals and I saw their great potential."

- "This project was valuable to me as an educator in the Pittsburgh Public Schools. My faith was restored! Both ‘sides’ were open and honest and even expressed their fears. Better understanding of the two groups was achieved by thorough, open discussions, demonstrations, and participation in a field trip.”
Pleasantville:

- "My attitude toward young people has changed during these past few weeks. It has restored my faith in the young generation. They are after all the hope of the future!"

- "Make it (the project) a requirement....every child should have the opportunity to relate to the lost generation."
Tables
### Tables

#### Table 1
Student Demographic Data

<table>
<thead>
<tr>
<th>Grade</th>
<th>Waynesburg</th>
<th>Pleasantville</th>
<th>Quaker Valley</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Elem.</td>
<td>M</td>
<td>M</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Jr. High</td>
<td>F</td>
<td>F</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>Sr. High</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Waynesburg

<table>
<thead>
<tr>
<th>Grade</th>
<th>M</th>
<th>F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elem.</td>
<td>2</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Jr. High</td>
<td>34</td>
<td>18</td>
<td>52</td>
</tr>
<tr>
<td>Sr. High</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

Pleasantville

<table>
<thead>
<tr>
<th>Grade</th>
<th>M</th>
<th>F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elem.</td>
<td>34</td>
<td>18</td>
<td>52</td>
</tr>
<tr>
<td>Jr. High</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

Quaker Valley

<table>
<thead>
<tr>
<th>Grade</th>
<th>M</th>
<th>F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elem.</td>
<td>2</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td>Jr. High</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Sr. High</td>
<td>3</td>
<td>7</td>
<td>10</td>
</tr>
</tbody>
</table>

#### Table 2
Summary of Student Attitude Scores and Attitude Changes
Survey Part II Average Total Scores

<table>
<thead>
<tr>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>55.1</td>
<td>51.5</td>
</tr>
</tbody>
</table>

Note: Scale II ranged from 1 (positive) to 7 (negative) for each of 20 items. The lowest possible (most positive toward older adults) total score was 20. The highest possible (most negative toward older adults) score was 140.
Table 3
Summary of Student Attitude Scores and Attitude Changes from indicators selected for predictive validity
Survey Part II by Grade

<table>
<thead>
<tr>
<th></th>
<th>Elementary</th>
<th></th>
<th></th>
<th>Junior High</th>
<th></th>
<th>Senior High</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
<td></td>
</tr>
<tr>
<td>Average Total Scores:</td>
<td>50.0</td>
<td>48.2</td>
<td>66.7</td>
<td>59.7</td>
<td>62.8</td>
<td>56.4</td>
<td></td>
</tr>
<tr>
<td>Selected Items:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>4.06</td>
<td>3.44</td>
<td>5.0</td>
<td>4.9</td>
<td>4.31</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>Happy</td>
<td>2.50</td>
<td>2.19</td>
<td>3.33</td>
<td>2.30</td>
<td>3.57</td>
<td>2.84</td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td>3.44</td>
<td>2.42</td>
<td>3.83</td>
<td>3.60</td>
<td>3.73</td>
<td>2.84</td>
<td></td>
</tr>
<tr>
<td>Friendly</td>
<td>1.77</td>
<td>1.59</td>
<td>3.08</td>
<td>2.20</td>
<td>3.10</td>
<td>1.95</td>
<td></td>
</tr>
<tr>
<td>Rich</td>
<td>2.98</td>
<td>3.59</td>
<td>3.25</td>
<td>4.20</td>
<td>3.73</td>
<td>3.95</td>
<td></td>
</tr>
</tbody>
</table>

Note: Scale II ranged from 1 (positive) to 7 (negative) for each of 20 items. The lowest possible (positive toward older adults) total score was 20. The highest possible (most negative toward older adults) score was 140.

Table 4
Summary of Student Attitude Scores and Attitude Changes
Survey Part II Average Total Scores by Gender

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th></th>
<th>Female</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Average Total Scores:</td>
<td>49.25</td>
<td>47.05</td>
<td>60.52</td>
<td>56.16</td>
</tr>
<tr>
<td>Selected Items:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>4.17</td>
<td>3.56</td>
<td>4.28</td>
<td>3.76</td>
</tr>
<tr>
<td>Happy</td>
<td>2.31</td>
<td>1.97</td>
<td>3.31</td>
<td>2.71</td>
</tr>
<tr>
<td>Active</td>
<td>3.17</td>
<td>2.51</td>
<td>3.89</td>
<td>2.92</td>
</tr>
<tr>
<td>Friendly</td>
<td>1.63</td>
<td>1.51</td>
<td>2.73</td>
<td>1.97</td>
</tr>
<tr>
<td>Rich</td>
<td>2.78</td>
<td>3.61</td>
<td>3.53</td>
<td>3.88</td>
</tr>
</tbody>
</table>
Table 5
Summary of Student Attitude Scores and Attitude Changes
Survey Part III Average Total Scores

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erg</td>
<td>76.9</td>
<td>76.05</td>
</tr>
</tbody>
</table>

Note: Scale III ranged from 1 (strongly agree) to 5 (strongly disagree). A higher score connotes a positive attitude toward elders. The lowest possible score was 20, the highest possible score was 100.

Table 6
Summary of Student Attitude Scores and Attitude changes
Survey Part III Average total Scores by Grade

<table>
<thead>
<tr>
<th></th>
<th>Elementary</th>
<th>Junior High</th>
<th>High School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
<td>Pre</td>
</tr>
<tr>
<td>Erg</td>
<td>80.6</td>
<td>76.9</td>
<td>65.7</td>
</tr>
</tbody>
</table>

Table 7
Summary of Student Attitude Scores and Attitude Changes
Survey Part III by Average Total Score by Gender

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Erg</td>
<td>79.16</td>
<td>75.36</td>
</tr>
</tbody>
</table>
Table 8
Specific Student Attitude Changes
Survey Part III
Selected Items

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Old people don't like children&quot;</td>
<td>4.32</td>
<td>4.08</td>
</tr>
<tr>
<td>&quot;Old people are sweet&quot;</td>
<td>3.91</td>
<td>4.75</td>
</tr>
<tr>
<td>&quot;Old people can teach me new things&quot;</td>
<td>4.21</td>
<td>4.31</td>
</tr>
</tbody>
</table>

Table 9
Adult Demographic Data

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>Females</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quaker Valley</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Pleasantville</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Waynesburg</td>
<td>1</td>
<td>14</td>
<td>15</td>
</tr>
</tbody>
</table>

Total: 4 males, 23 females, 27 total

Table 10
Student Responses to
"What age do you consider old?"

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>68.11</td>
<td>76.69 *</td>
</tr>
</tbody>
</table>

* change was statistically significant
Table 11
Student Responses
Mean rating for enjoying the company of elders

<table>
<thead>
<tr>
<th></th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.40</td>
<td>2.23 *</td>
</tr>
</tbody>
</table>

* change was statistically significant

Table 12
Average Student ratings
Survey Part II
All Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISE</td>
<td>2.10</td>
<td>2.06</td>
</tr>
<tr>
<td>KIND</td>
<td>2.23</td>
<td>2.08</td>
</tr>
<tr>
<td>STRONG</td>
<td>4.16</td>
<td>3.67 *</td>
</tr>
<tr>
<td>HAPPY</td>
<td>2.84</td>
<td>2.36 *</td>
</tr>
<tr>
<td>WRONG</td>
<td>2.78</td>
<td>2.80</td>
</tr>
<tr>
<td>SELFISH</td>
<td>2.00</td>
<td>1.81</td>
</tr>
<tr>
<td>INACTIVE</td>
<td>3.44</td>
<td>2.73 *</td>
</tr>
<tr>
<td>NEAT</td>
<td>2.27</td>
<td>1.93</td>
</tr>
<tr>
<td>FRIENDLY</td>
<td>2.25</td>
<td>1.75 *</td>
</tr>
<tr>
<td>BORING</td>
<td>2.90</td>
<td>2.25</td>
</tr>
<tr>
<td>PRODUCTIVE</td>
<td>2.88</td>
<td>2.55</td>
</tr>
<tr>
<td>SICK</td>
<td>3.26</td>
<td>2.99</td>
</tr>
<tr>
<td>GOOD</td>
<td>2.27</td>
<td>1.99</td>
</tr>
<tr>
<td>POOR</td>
<td>3.12</td>
<td>3.75 *</td>
</tr>
<tr>
<td>DEPENDENT</td>
<td>3.75</td>
<td>4.03</td>
</tr>
<tr>
<td>CALM</td>
<td>3.14</td>
<td>2.96</td>
</tr>
<tr>
<td>PRETTY</td>
<td>3.57</td>
<td>3.51</td>
</tr>
<tr>
<td>HELPS</td>
<td>2.02</td>
<td>2.00</td>
</tr>
<tr>
<td>CLEAN</td>
<td>1.90</td>
<td>1.77</td>
</tr>
<tr>
<td>SENSITIVE</td>
<td>2.21</td>
<td>2.20</td>
</tr>
</tbody>
</table>

Total 55.10 51.55

* change in item rating was statistically significant

Note: Scale II ranged from 1 (positive) to 7 (negative) for each item. The lowest possible or “best” total score was 20. The highest possible or “worst” score was 140.
<table>
<thead>
<tr>
<th>Item</th>
<th>Pre</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>I like visiting old people.</td>
<td>3.99</td>
<td>3.85</td>
</tr>
<tr>
<td>I never want to grow old.</td>
<td>2.74</td>
<td>3.48</td>
</tr>
<tr>
<td>Old people get mad easily.</td>
<td>3.47</td>
<td>4.15</td>
</tr>
<tr>
<td>Old people are friendly.</td>
<td>4.16</td>
<td>4.01</td>
</tr>
<tr>
<td>It is fun to talk with old people.</td>
<td>3.91</td>
<td>4.07</td>
</tr>
<tr>
<td>Old people don't like to be with children.</td>
<td>4.26</td>
<td>3.54</td>
</tr>
<tr>
<td>Old people have a happy life.</td>
<td>3.54</td>
<td>4.00</td>
</tr>
<tr>
<td>Old people are mean.</td>
<td>4.01</td>
<td>4.14</td>
</tr>
<tr>
<td>Old people are not very smart.</td>
<td>4.23</td>
<td>4.30</td>
</tr>
<tr>
<td>Old people can teach me new things.</td>
<td>4.21</td>
<td>4.30</td>
</tr>
<tr>
<td>Old people like to boss everybody.</td>
<td>3.80</td>
<td>3.47</td>
</tr>
<tr>
<td>Old people don't do much.</td>
<td>4.01</td>
<td>3.86</td>
</tr>
<tr>
<td>Old people are stubborn.</td>
<td>3.57</td>
<td>3.62</td>
</tr>
<tr>
<td>Old people don't talk very much.</td>
<td>4.30</td>
<td>4.06</td>
</tr>
<tr>
<td>I think old people are fun.</td>
<td>3.95</td>
<td>3.75</td>
</tr>
<tr>
<td>Old people are sick all the time.</td>
<td>4.07</td>
<td>3.91</td>
</tr>
<tr>
<td>I am afraid to ride with an old driver.</td>
<td>3.47</td>
<td>3.30</td>
</tr>
<tr>
<td>Old people are sweet.</td>
<td>3.94</td>
<td>4.75</td>
</tr>
<tr>
<td>Old people are full of energy.</td>
<td>3.33</td>
<td>3.30</td>
</tr>
<tr>
<td>Old people laugh a lot.</td>
<td>3.88</td>
<td>3.72</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>76.86</td>
<td>76.05</td>
</tr>
</tbody>
</table>

* change in rating was statistically significant

Note: Scale III ranged from 1 (strongly agree) to 5 (strongly disagree). A higher score connotes a more positive attitude. The lowest possible score was a 20, the highest possible score was a 100.
Table 14
Effect of Students’ Relationships with Grandparents and other Elders

<table>
<thead>
<tr>
<th>Group</th>
<th>Average Rating of Enjoyment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Close relationships with elders other than Grandparents</td>
<td>2.25</td>
</tr>
<tr>
<td>No close relationships with elders other than Grandparents</td>
<td>2.73</td>
</tr>
<tr>
<td>No living Grandparents</td>
<td>3.60 *</td>
</tr>
<tr>
<td>One or two living Grandparents</td>
<td>2.80</td>
</tr>
<tr>
<td>Three or four living Grandparents</td>
<td>2.25</td>
</tr>
<tr>
<td>Five or six living Grandparents</td>
<td>1.95</td>
</tr>
<tr>
<td>Seven or eight living Grandparents</td>
<td>2.5</td>
</tr>
<tr>
<td>Average rating</td>
<td>2.40</td>
</tr>
</tbody>
</table>

* There is no statistically significant difference in ratings between these groups, although the rating for those with no grandparents was higher. This group is comprised of only three students. The vast majority of students surveyed have between one and four grandparents.

Reference

Questionnaires
Final Student Questionnaire

Instructions:

This is a survey of students who have taken part in intergenerational projects in their schools. The purpose of the survey is to better understand students’ views on older adults and aging.

All the information you provide will be held in confidence. Your name will not be associated publicly with any answers you give.

Your views are very important to us. We would like you to answer all the questions as completely as possible. Please note, however, that this survey is voluntary. You do not need to complete it to participate in the intergenerational project at your school.

If you do not understand a question, please ask the person administering the survey.

Please print:

Name: ________________________________

Today’s Date: Month_____ Day____ Year ______

Your School: __________________________

Thank you for your help!

Christopher R. Ward, PhD
Generations Together
121 University Place #312
University of Pittsburgh
Pittsburgh, PA 15260
412-648-7150
PART I

Directions: Please answer all questions. Continue on to PART II.

1. What grade are you in? __________________________

2. Are you:
   Male? __________
   Female? __________

3. Your age: ___ years

4. What is the total number of living grandparents, great-grandparents, or step-grandparents that you have? (check one)
   None ______
   1 - 2 ______
   3 - 4 ______
   5 - 6 ______
   7 or more _____

5. With how many of them do you have a close relationship? (check one)
   None ______
   Some ______
   Most ______
   All ______

6. Are there any other older people (besides grandparents or great-grandparents) with whom you have a close relationship?
   Yes ______
   No ______

   If yes, how many? ________
**PART II**

Directions: For each pair of words, please circle the dot (1 through 7) which best represents the meaning you associate with people over 65.

|   | Wise   | Foolish
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Kind</td>
<td>Unkind</td>
</tr>
<tr>
<td>3</td>
<td>Strong</td>
<td>Weak</td>
</tr>
<tr>
<td>4</td>
<td>Happy</td>
<td>Sad</td>
</tr>
<tr>
<td>5</td>
<td>Wrong</td>
<td>Right</td>
</tr>
<tr>
<td>6</td>
<td>Selfish</td>
<td>Generous</td>
</tr>
<tr>
<td>7</td>
<td>Inactive</td>
<td>Active</td>
</tr>
<tr>
<td>8</td>
<td>Neat</td>
<td>Untidy</td>
</tr>
<tr>
<td>9</td>
<td>Friendly</td>
<td>Unfriendly</td>
</tr>
<tr>
<td>10</td>
<td>Boring</td>
<td>Interesting</td>
</tr>
<tr>
<td>11</td>
<td>Productive</td>
<td>Unproductive</td>
</tr>
<tr>
<td>12</td>
<td>Sick</td>
<td>Healthy</td>
</tr>
<tr>
<td>13</td>
<td>Good</td>
<td>Bad</td>
</tr>
<tr>
<td>14</td>
<td>Poor</td>
<td>Rich</td>
</tr>
<tr>
<td>15</td>
<td>Dependent</td>
<td>Independent</td>
</tr>
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<td>Calm</td>
<td>Anxious</td>
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<td>Pretty</td>
<td>Ugly</td>
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<td>18</td>
<td>Helpful</td>
<td>Harmful</td>
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<td>19</td>
<td>Clean</td>
<td>Dirty</td>
</tr>
<tr>
<td>20</td>
<td>Sensitive</td>
<td>Insensitive</td>
</tr>
</tbody>
</table>

<p>| | | | | | | | |</p>
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<td>8</td>
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<td>9</td>
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<td>11</td>
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<tr>
<td>12</td>
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<td>15</td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>19</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>20</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PART III

Directions: The following are some statements about older people. There are no right or wrong answers. Please circle the response that best tells your opinion.

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SA = Strongly Agree</td>
<td>N = Neutral</td>
<td>D = Disagree</td>
<td>SD = Strongly Disagree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A = Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. I like visiting old people.          SA  A  N  D  SD
2. I never want to grow old.           SA  A  N  D  SD
3. Old people get mad easily.          SA  A  N  D  SD
4. Old people are friendly.            SA  A  N  D  SD
5. It is fun to talk with old people.  SA  A  N  D  SD
6. Old people don't like to be with children.  SA  A  N  D  SD
7. Old people have a happy life.       SA  A  N  D  SD
8. Old people are mean.                SA  A  N  D  SD
9. Old people are not very smart.      SA  A  N  D  SD
10. Old people can teach me new things. SA  A  N  D  SD
11. Old people like to boss everybody.  SA  A  N  D  SD
12. Old people don't do much.          SA  A  N  D  SD
13. Old people are stubborn.           SA  A  N  D  SD
14. Old people don't talk very much.   SA  A  N  D  SD
15. I think old people are fun.         SA  A  N  D  SD
16. Old people are sick all the time.  SA  A  N  D  SD
17. I am afraid to ride with an old driver.  SA  A  N  D  SD
18. Old people are sweet.              SA  A  N  D  SD
19. Old people are full of energy.     SA  A  N  D  SD
20. Old people laugh a lot.            SA  A  N  D  SD
PART IV

1. What age do you consider old? ____ years.

2. In general, along a scale ranging from “enjoy it very much” to “dislike it very much,” how much would you say you enjoy being with older people? (Circle the appropriate number.)

   1  2  3  4  5  6  7

   enjoy it  neutral  dislike it
   very much  neutral  very much

3. How do you feel about growing old?

4. What do you think you will be doing when you are old?
5. Write five adjectives you would use to describe an old person.

1) 

2) 

3) 

4) 

5) 

6. Please complete the following sentence: "I think that having older people as part of this class is . . . ."
Adult Questionnaire

Instructions:

- This is a survey of adults who took part in intergenerational projects in schools in the Spring of 1996. The purpose of the survey is to better understand your views about the project.

- All the information you provide will be held in confidence. Your name will not be associated publicly with any answers you give.

- Your views are very important to us. We would like you to answer all the questions as completely as possible. Please note, however, that this survey is voluntary.

- If you do not understand a question, please ask the person administering the survey.

Please print:

Name: ____________________________

Today’s Date: Month _______ Day ____ Year

School You Served In: ______________________

How old are you? ___ Years

Are you
- Female? ______
- Male? ______

Thank you for your help!

Christopher R. Ward, PhD
Generations Together
121 University Place #312
University of Pittsburgh
Pittsburgh, PA 15260
412-648-7150
Adult Questionnaire

Directions: Consider how much you agree or disagree with the statement. Check the answer that best matches your opinion.

1. The project was well organized.
   _ Strongly Agree
   _ Agree
   _ Disagree
   _ Strongly Disagree

   Comments:

2. The goals of the project were made clear to me.
   _ Strongly Agree
   _ Agree
   _ Disagree
   _ Strongly Disagree

   Comments:

3. My responsibilities in the project were made clear to me.
   _ Strongly Agree
   _ Agree
   _ Disagree
   _ Strongly Disagree

   Comments:

4. Participating in the project was personally rewarding to me.
   _ Strongly Agree
   _ Agree
   _ Disagree
   _ Strongly Disagree
Comments:

5. I would volunteer again in a similar project at the school.
   - Strongly Agree
   - Agree
   - Disagree
   - Strongly Disagree

   Comments:

6. Did participating in the project change your opinion about the public schools in your community?
   - Yes
   - No

   If Yes, has the change been for the
   - Better?
   - Worse?

   Please explain:

7. Did participating in the project change your opinion about young people in your community?
   - Yes
   - No

   If Yes, has the change been for the
   - Better?
   - Worse?

   Please explain:

8. Do you have any additional comments or suggestions about the project?
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