A Model of Intergenerativity: How the Intergenerational School is Bringing the Generations Together to Foster Collective Wisdom and Community Health

Daniel George PhD a, Catherine Whitehouse PhD b & Peter Whitehouse MDPhD c

a Penn State College of Medicine, Hershey, Pennsylvania
b The Intergenerational School, Cleveland, Ohio
c Case Western Reserve University, Cleveland, Ohio

Available online: 12 Dec 2011

To cite this article: Daniel George PhD, Catherine Whitehouse PhD & Peter Whitehouse MDPhD (2011): A Model of Intergenerativity: How the Intergenerational School is Bringing the Generations Together to Foster Collective Wisdom and Community Health, Journal of Intergenerational Relationships, 9:4, 389-404

To link to this article: http://dx.doi.org/10.1080/15350770.2011.619922

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.tandfonline.com/page/terms-and-conditions

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.
A Model of Intergenerativity: How the Intergenerational School is Bringing the Generations Together to Foster Collective Wisdom and Community Health

DANIEL GEORGE, PhD
Penn State College of Medicine, Hershey, Pennsylvania

CATHERINE WHITEHOUSE, PhD
The Intergenerational School, Cleveland, Ohio

PETER WHITEHOUSE, MD, PhD
Case Western Reserve University, Cleveland, Ohio

Our world is presently facing formidable challenges requiring intergenerational, interdisciplinary, and interprofessional solutions that encourage local learning and action. This article articulates the concept of “intergenerativity,” a theoretical and practical framework that can build the collective wisdom and inspire the informed local action that a world addled with complex challenges so desperately needs. Intergenerativity is defined and contextualized within the shared site programs of the Intergenerational School, a charter school in Cleveland, Ohio, that aims to foster creative exchange between the generations. The rationale and design of past, present, and future research initiatives is shared, demonstrating how multiage partnerships are already beginning to play a role in fostering learning around urgently important 21st century challenges such as climate change and population health. Ultimately, it is argued that, by virtue of their intergenerative nature, intergenerational partnerships can be a powerful means of nurturing social, civic, and environmental responsibility and helping current and future generations address social and ecological challenges.

Address correspondence to Daniel George, Penn State, Hershey Medical Center, 500 University Drive, H 134, Hershey, PA 17033. E-mail: dgeorge2844@gmail.com
KEYWORDS intergenerational, intergenerativity, Alzheimer's disease, dementia, multigenerational programming, quality of life, sustainability

INTRODUCTION

Human beings have never faced challenges of the scope that exist today. Powerful weapons continue to present opportunities for our species to destroy itself. Global climate change and the resulting alterations in weather patterns threaten to cause greater destruction, death, and disease in decades to come. Each year, millions of children die for lack of clean water and environmental degradation. As the world population both grows and ages, the threats to human populations will magnify. Differences between the economic haves and have-nots will increase as global capitalism fails to arrest irresponsible use of natural resources.

How can we learn more deeply about how to change our behaviors so that future generations will survive and thrive? It seems likely that our success will depend on how our society organizes learning, integrates knowledge, and promotes collective wisdom and action through the generations. We, therefore, believe that a major dimension of the solution to the big problems facing our species should be the creation of local, intergenerational learning communities that connect and collectively educate individuals of any age while nurturing social, civic, and environmental responsibility and encouraging informed action. Schools are powerful organizations in every community that can facilitate shared learning environments but are often limited by age-segregated classrooms and the ideology that learning is the province of the young. As others have noted, such learning environments may provide youth with limited perspectives and, in some cases, even be detrimental to positive youth development (Kaplan & Liu, 2004). In this article, the story of the Intergenerational School (TIS), a community charter school in Cleveland, Ohio, is shared. The school is a shared site that aims to provide an educational experience embracing persons of all ages and fostering greater wisdom about the major problems facing our species in the 21st century. For over a decade, the school has been committed to the following:

- Lifespan-oriented programs for children and adults, even those with dementia
- Intergenerational learning about complex issues of environmental sustainability and community health
- The broad belief that learning itself is always a generative exercise that rewire individual brains by building new synaptic connections

Whether it occurs in isolation or among one’s peers, the latter of which is normally the case at traditional schools, learning is a powerful,
physiological event that can be enriching to individual brains and, thus, generative for the larger communities in which individuals reside. Indeed, when the age-segregated barriers are removed from educational environments so that learning may take place not just with one’s peers but with students of all ages from various backgrounds who have different points of view, it can produce an effect of even more profound import, which we refer to here as “intergenerativity.” This concept describes the meaningful fusion of ideas and emotions that emerge from conversations and experiences shared between the generations and inspires actions that benefit individual minds, social lives, and the natural world that sustains and connects persons of all generations, past, present, and future. By drawing on the strengths of participants of all ages and focusing learning on issues that are vitally meaningful to all human beings, intergenerativity can build the collective wisdom and inspire the informed action that a 21st century world addled with myriad challenges so desperately needs.

In this article, we first describe the origin of the neologism “intergenerativity,” followed by a brief discussion of the history, philosophy, and design of TIS and an overview of the key shared-site intergenerational partnerships that have been most generative. The rationale and design of past and present research initiatives undertaken at the school are shared, followed by a discussion of future programming and evaluation that aim at fostering and measuring intergenerativity in learners both young and old. Ultimately, it is argued that shared-site intergenerational partnerships can not only promote the wellness of all participants but also help address the social, political, and ecological challenges facing our world.

**INTERGENERATIVITY**

One may fairly ask why the world needs a new term to characterize the creative energy of human beings. As far as we are aware, the term “intergenerativity” was first introduced as part of our paper presented at the World Appreciative Inquiry Conference in Nepal in November 2009. The title of the presentation was “Intergenerativity: Learning ‘Between’ to Create the Sustainable ‘Beyond’” (Whitehouse, Ritchey, Schiller, & Willoughby, 2009). The paper began with a Sufi proverb: “You think that because you understand one you understand two, because one and one make two. But you must understand AND.” The word was inspired by collective reflection on how to enhance the concept of “generativity.” In the paper, we wrote, “The word *intergenerativity* brings emphasis to the ‘between and among’ (through the root meaning of the prefix ‘inter’) to move ‘generativity’ metaphorically and practically into an even more positive, imagined future.” As Ken Gergen has expressed, generativity can provide a theoretical base to challenge the status quo and open new repertoires for thinking and acting (Gergen, 1994).
Intergenerativity does not merely imply collaboration across organizations, however. It can be used to characterize conversations among any domains of discourse; for example, interdisciplinary, interprofessional, intergenerational, and even international. Within any of these domains, one can characterize “generativity” in terms of the creation of new internal ideas and behaviors while “intergenerativity” raises the stakes to sharing change across boundaries that normally separate discourse and represents the energy that can be achieved by connecting otherwise divergent fields of human endeavor.

An intergenerative philosophy has evolved in the school to inform our multiage practices and organizational partnership development. In a paper published before the actual launch of the school (Whitehouse, Fallcreek, & Whitehouse, 2000), we wrote:

We believe that the intergenerational concept can address a variety of societal needs ranging from specific issues related to curriculum such as empowering serious thought and effective action about the environment and personal health to addressing the economic well-being of the communities that the school serves. However, we also believe that such a concept can go far to addressing more ineffable social needs to enhance meaning in individual and community life. . . . We believe that intergenerational community schools represent a small but significant contribution to ensuring the viability of life on this planet.

Having established an intergenerative organizational framework for TIS, school leadership has, in recent years, sought to develop concrete programming around the concept and design strategies for measuring the efficacy of this programming in meeting organizational goals.

THE INTERGENERATIONAL SCHOOL

Since its inception in 2000, TIS has become a high performing K–8 charter school that serves 224 inner-city students in multiage classrooms and is structured around the ideology that people of all ages can learn alongside one another throughout the lifespan. Students are placed in multiage classrooms based on individual learning needs where they learn in their own ways and at their own paces, moving along five developmental stages and advancing to the next learning stage once they demonstrate mastery of the stage benchmarks. The school’s founders, the second author (a child psychologist) and the third author (a geriatric neurologist), shared a conviction that educational environments should not be institutions of age segregation but places of age integration where rich lessons from our elders’ past combine with youthful imaginings about the future. They believed that the process of learning was not categorically different for children and adults and schools could be places where persons of all ages learn alongside one another.
Thus, the ideological commitment to multiage intergenerative learning has extended from youth to older persons in the local community, from high school and college students to adults and seniors who are all invited to serve as mentors to students. Over the school’s 10-year history, local college students have explored the nature of wisdom through service learning projects, management students have participated in the school’s sustainability efforts, graduate students in the social sciences have measured the impact of the school on elders (as will be described), and nursing and medical students have codeveloped public education initiatives concerning lead poisoning. On a daily basis, dozens of volunteers of all ages share their joy of reading with younger students through the school’s successful reading mentorship program and even sit in on lessons with older students and accompany classes on educational field trips. The benefits of constant intergenerational dialogue within a public school setting are manifold. In a time when public schools are often places of recalcitrance, the regular presence of many adults and older adults within the hallways of TIS helps produce a palpable atmosphere of calm and respectful behavior. Children who live in poverty may lack stable, supportive home environments, but at TIS they experience the caring and influence of many older adults (in addition to the classroom teacher) who take interest in their daily school experiences.

Additionally, the school is the first known educational institution in the world to create a formal mentorship role for persons with dementia—individuals who are traditionally marginalized within Western societies (Whitehouse & George, 2008). All 14 classrooms make routine visits to local assisted living homes as well as joint intergenerational trips to local nature reserves, botanical gardens, museums, and arts centers. On these trips, students interact with older persons through art, song, literature, and storytelling. Elder mentors, some with dementia, are even woven into classroom curriculum. For instance, during Black History Month in 2009, a dozen older persons (many of whom were transported from assisted living homes) participated in a program called “Through the Eyes of Our Elders.” Students and staff learned about the African-American experience before and during the civil rights movement through conversations with persons in their community who had lived the history. Elders spoke about participating in the civil rights movement, the challenges that they faced growing up in a segregated country, and the elation they felt in watching Barack Obama transcend race and rise to the presidency. Through these intergenerative conversations, these mentors nurtured in TIS students a greater appreciation for the sacrifices that had been made to ensure that future generations could grow up in a more equitable world.

Indeed, while many elder partners have impairments in short-term memory, they can still tell stories from their own lives and engage in discussing children’s literature as well as other arts or nature-based programming. In many cases, relationships build throughout the year in class and on
service-learning trips, as multiage participants better understand their relationships not only with one another but also in the context of larger social environments. Moreover, students demonstrate increasing tolerance for the physical, behavioral, and cognitive challenges their older mentors face and often show greater agency in proactively and compassionately assisting older volunteers who have ambulatory and other difficulties. Such intergenerative values will be much needed in an aging society soon to be populated by a large number of persons both elderly and disabled.

However, at TIS, intergenerative learning goes both ways, and students are often asked to serve as mentors to elders regarding issues that may challenge older persons. For instance, students aged 10–14 have held weekly workshops with elders 55 years and older who were seeking to enter or reenter the workforce but who lacked basic computer skills. During these workshops, students sat between and among their elders in the TIS computer lab, teaching older partners how to search the Internet, craft a resume, and create basic word processing documents and PowerPoint presentations while in turn learning important lessons from elders about the job-search process and the skills required to be employable. Students have also mentored elders from an assisted living home who traveled to a local brain health lab (located in the same building as the school) to use cognitive training software programs as well as brain fitness games on the Nintendo Wii. Such intergenerative learning aims to create generational solidarity while also guiding younger and older participants toward better personal and community health, as will be elaborated.

The school has been rated “excellent” by the Ohio Department of Education based on standardized test scores for six out of seven years it was eligible to be assessed. It has received local, regional, national, and international recognition and awards as a high performing urban school providing a high quality learning experiences for children. However, while the beneficial effects for students have been manifest for many years in the aforementioned results, the intergenerative benefit for elders had yet to be formally measured until recently.

RESEARCH AT THE INTERGENERATIONAL SCHOOL

Background

A small corpus of studies has shown a range of biopsychosocial benefits for older adults who form relationships with children through intergenerational volunteering programs, including increased engagement and increased interactions (Camp, Cohen-Mansfield, & Capezuti, 2002), improvements in health status and well-being (de Souza, 2003), generational closeness, comfort and empathy (Hayes, 2003), increased activity, strength and cognitive ability (Fried et al, 2004), mutually supportive interactions and the creation
of meaningful relationships (Gigliotti et al., 2005), positive affect, confidence and enhanced self-esteem supporting personhood (Jarrot & Bruno, 2003, 2007), lower levels of negative forms of engagement (Lee, Camp & Malone, 2007), increased social capital (de Souza & Grundy, 2007), and better psychological functioning (Chung, 2009).

However, most existing data have been derived from cross-sectional and retrospective observational studies, and only a few intergenerational volunteering programs have been evaluated using randomized models. Given this dearth of data, researchers have been encouraged to bring innovative methodologies to bear in assessing shared-site intergenerational interventions; however, employing rigorous research designs has been considered challenging, time consuming, complicated, and expensive. There are few studies that make use of randomized designs to measure the effects of intergenerational programs (de Souza, 2003), and no known studies that assess the effects of such programs on the quality of life of persons with dementia, an intergenerative variable that could potentially demonstrate clear and enduring value for elders. Therefore, the authors combined to design a five month, mixed methods intervention study to quantitatively and qualitatively evaluate whether the intergenerative nature of a structured intergenerational volunteering program could enhance the quality of life of persons with mild to moderate dementia. Results have been reported elsewhere (George & Singer, 2011; George & Whitehouse, 2010).

Study Design

Research was undertaken in partnership with TIS and Judson Park (JP), an assisted living facility in Cleveland, Ohio, located one mile from the school. Due to their close proximity and shared belief in the synergistic value of intergenerational partnerships, the two organizations have partnered together on a variety of shared-site intergenerational collaborations since 2002, including the “Through the Eyes of Our Elders” event described previously. Two classes at TIS were selected as host sites for the shared-site intervention: a class with children aged 5–8 and a class with children aged 11–14. Each classroom contained 16 students. Previous to the intervention, the researcher convened separate meetings with all participating elders and children as well as with the teachers of the two host classrooms to explain the study design and field questions from all participants. These meetings provided participants and staff with an opportunity to explore feelings and apprehensions about the pending interactions, identify the existence of common stereotypes, and ascertain factual information about the study.

Fifteen participants were recruited from JP based on institutional review board approved inclusion criteria (over 50 years old, diagnosis of mild to moderate dementia, basic literacy, willingness to read children’s books, ambulatory or can be easily transported) and exclusion criteria (severe
depression or anxiety, problems working with children, agoraphobia) and randomized into intervention (n = 8) and control groups (n = 7) using a random number generator. Baseline data on cognitive functioning (Mini-Mental State Exam, MMSE), stress (Beck Anxiety Inventory, BAI), depression (Beck Depression Inventory, BDI), and sense of purpose and sense of usefulness (single-item questionnaire) was collected in November and December 2007.

Intervention
From January 2008 to May 2008, eight intervention participants visited TIS each Wednesday afternoon and were involved in direct volunteering experiences with children aged 5–14 years. Across the weeks, participants alternated between hourlong visits with the younger primary classroom during which they interacted with children by engaging in singing and small-group reading and writing activities and an older elementary classroom where they broke into smaller groups with two to three students and participated in intergenerational, life-history reminiscence sessions and guided conversations about politics, the environment, and other salient issues. All activities involved an intergenerational exchange of narrative, whether through the sharing of personal stories, books, songs, or collaborative craft-making. Based on the growing literature on intergenerational activities alluded to previously, it was believed that narrative-based activities would best enable the formation of intergenerative relationships between elders and students.

The control group met eight times at JP for a peer education seminar called “Successful Aging: Reclaiming Elderhood” for a total of approximately 12 hours. Workshops facilitated by JP staff focused on the following themes: learning, wellness, love, creativity, spirituality, life options, ethics, and beauty and life quality. Control group participants completed eight homework assignments between each session that were intended to take one hour each; ultimately, the output of volunteer hours for the JP group was equal to the intervention group at TIS. Participation in both groups remained strong throughout the study, and no individual missed more than one session.

Postintervention data were collected at the end of the study. Throughout the duration of the study, ethnographic observation took place. All participants in the control and intervention groups took part in formal and informal interviews and participated in respective focus groups. Approximately equal amounts of time were spent visiting the homes of persons in both the intervention and control groups, and equal time was spent conducting structured and unstructured interviews with all participants.

Statistical Analysis
Data collected during the administration of the five psychometric tests at baseline and posttesting were coded and analyzed with the Statistical
Package for the Social Sciences (SPSS Version 12.0.1). Change scores between baseline and posttest data in the intervention and control groups were computed for all five variables. Additionally, the data set contained demographic information on gender, age, education, and marital status. In keeping with the conventions of biomedical data analysis, \( p = 0.05 \) was regarded as the limit of significance in all analyses. Due to the small sample size, all statistical analyses employed nonparametric methods. Continuous variables for change scores on cognitive functioning, stress, depression, sense of purpose, and usefulness were summarized with means and standard deviations and compared between the intervention and control group. Comparisons were done in two ways. First, a Mann-Whitney U-test was done using the change scores directly. Second, new dichotomous variables were created (e.g., decline versus no decline or improvement), and two-tailed Fisher’s Exact Probability tests were run.

Qualitative Analysis

A modified grounded theory approach (Strauss, 1987) was employed in the analysis of final qualitative data. Transcripts of all narrative interviews and focus groups were typed into two separate Word documents, and a third document was created from ethnographic field notes written throughout the 10-month study. These transcripts were read multiple times and coded at the end of the study using the data analysis software NVivo. The coding framework drew on preliminary pilot data, the aforementioned existing research on intergenerational volunteering and QOL, and emergent themes and structure that developed as the research progressed. Codes from the three documents were merged into a single file.

To better understand the relationship between the themes that emerged from the three data sets, one-page summary analyses were prepared for all major codes, which involved reading through each section, noting the range of conceptual issues raised by the coded extracts, and looking for thematic interactions and overlaps between codes. Axial coding was performed on the data, and codes were manually grouped under broader, more sophisticated thematic categories based on perceived relationships and causality. In seeking analytic depth in the process of writing up the theoretical conclusions drawn from axial coding, the literature on intergenerational interventions was revisited. Once a final analysis was drafted, data were discussed with colleagues from other disciplinary backgrounds who tested and challenged emergent findings.

Quantitative Results

Table 1 shows the results of the statistical analysis. A mean decline in stress from baseline to posttesting was observed in the intervention group, which
TABLE 1 Summary Results of Statistical Analysis

<table>
<thead>
<tr>
<th>Variable</th>
<th>Intervention (n = 8)</th>
<th>Control (n = 7)</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stress change, mean ± SD</td>
<td>−2.50 ± 1.41</td>
<td>+3.14 ± 6.46</td>
<td>0.01</td>
</tr>
<tr>
<td>Cognitive functioning change, mean ± SD</td>
<td>−0.75 ± 2.86</td>
<td>−2.14 ± 1.34</td>
<td>0.12</td>
</tr>
<tr>
<td>Sense of purpose change, mean ± SD</td>
<td>0.00 ± 0.535</td>
<td>−0.43 ± 0.535</td>
<td>0.28</td>
</tr>
<tr>
<td>Depression change, mean ± SD</td>
<td>+0.50 ± 1.41</td>
<td>−2.57 ± 10.5</td>
<td>0.31</td>
</tr>
<tr>
<td>Sense of usefulness Change, mean ± SD</td>
<td>0.00 ± 0.926</td>
<td>−0.29 ± 0.756</td>
<td>0.61</td>
</tr>
</tbody>
</table>

SD = standard deviation.
*Fischer’s exact probability test.

decreased by 2.50 points on the BAI (SD = 1.41), while a mean increase in stress of 3.14 (SD = 6.46) was observed in the control group during that same interval.

This difference was statistically significant using the Mann-Whitney U-test with exact p-values (S statistics = 73.0, p = .0485). Comparison of the dichotomous variable for decline in stress was done using a two-sided Fisher’s exact test and was also significant (Fisher’s exact probability p = 0.0070), indicating that people in the intervention group were more likely to experience a decline in stress relative to baseline. On measures of cognitive functioning, the intervention group showed no significant difference in decline relative to the control group, with the mean score decreasing by 0.75 points from baseline to posttesting on the MMSE (SD = 2.87) versus the control group, whose mean score dropped 2.14 points during the same interval (SD = 1.35). The intervention group showed no significant difference in decline in depression relative to the control group, experiencing a slight mean increase of 0.50 points on the BDI (SD = 1.41), while the mean control group score dropped 2.57 points (SD = 10.5). The intervention group showed no significant increase in sense of purpose relative to the control group, experiencing no mean decline in sense of purpose (0.00 points) (SD = .535), while the mean score of the control group declined but not significantly so by 0.43 points (SD = .535). The intervention group showed no significant increase in sense of usefulness relative to the control group, experiencing no mean decline, (0.00 points) (SD = .926), while the control group declined but not significantly so (0.29 points)(SD = .756). See Figure 1.

Effect sizes were calculated using the bias-corrected Hedges-g statistic. The size was large for stress (1.18), the one outcome that had a statistically significant effect. Medium effect sizes were found for cognitive functioning (.57) and sense of purpose (.76), suggesting the lack of statistical significance for these outcomes may be due to the small sample. There was a small negative effect size for depression (−.41) and a small positive effect size for sense of usefulness (0.34).
Qualitative Result

Qualitative data from formal narrative interviews, focus groups, and ethnographic field notes were pooled, and 30 themes were coded during initial analysis. The 15 major themes that emerged from initial pilot data were also present in the pooled study data, which yielded an additional 15 themes. As shown in Table 2, secondary analysis and axial coding condensed these 30 total themes into 11 larger themes that clustered around three broader conceptual meta-categories representing the main biopsychosocial pathways through which intergenerational volunteering affected QOL.

Specifically, participants expressed that their quality of life was elevated through (a) perceived health benefits derived from the interaction such as

<table>
<thead>
<tr>
<th>Quality of life: Main themes</th>
<th>Subthemes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived health benefits</td>
<td>Reduced stress and depression</td>
</tr>
<tr>
<td></td>
<td>Youthful energy</td>
</tr>
<tr>
<td></td>
<td>Cognitive stimulation</td>
</tr>
<tr>
<td>Sense of purpose and sense of usefulness</td>
<td>Role continuation</td>
</tr>
<tr>
<td></td>
<td>Reminiscence</td>
</tr>
<tr>
<td></td>
<td>Joy of teaching children</td>
</tr>
<tr>
<td>Relationships</td>
<td>Physical touch</td>
</tr>
<tr>
<td></td>
<td>Proxy grandchildren</td>
</tr>
<tr>
<td></td>
<td>Racial reconciliation</td>
</tr>
<tr>
<td></td>
<td>Acceptance</td>
</tr>
<tr>
<td></td>
<td>Reciprocity</td>
</tr>
</tbody>
</table>
cognitive stimulation and improvement in mood, (b) an elevation in sense of purpose and sense of usefulness from contributing to the educational process, and (c) the development of meaningful and enduring relationships with students.

NEXT STEPS

A Nature-Based Intergenerational Curriculum

Having established that intergenerative programming at TIS measurably benefits younger and older learners (at least those with dementia), school leadership has sought to expand its inquiry by evaluating whether intergenerative activities can be used to strengthen learning around priority areas of the school’s progressive curriculum. Specifically, current research is exploring whether structuring aspects of the science curriculum around intergenerational learning can better prepare students to be stewards of the world they will inherit. As mentioned at the outset of this piece, TIS leadership is particularly concerned by environmental threats associated with global climate change, threats that will assuredly affect both present and future generations. The school believes that sustainability is an intergenerational concept and that an ethic must be grounded in a basic appreciation for our responsibilities to one another and for future generations as well as other species. The school also shares the belief expressed by others that a sustainable society is one that can persist over generations and is far-seeing, flexible, and wise enough not to undermine its physical or social system of support (Ingman, Benjamin, & Lusky, 1999) and that the environment is a natural connector of generations (Steinig & Butts, 2010). Therefore, it has been a logical progression in programming and evaluation to design an experiential, nature-based intergenerational learning curriculum and examine how it might generally improve the environmental attitudes of children and also benefit elders. Relatively few studies have evaluated the effects of specific nature-based interventions on environmental attitude of children and adults (Liu, 2004; Doyle & Krasny, 2003; Durbano, 2003). The school is primed to test the hypothesis that both younger and older persons who participate in structured intergenerational learning about the environment will develop a greater stewardship ethic toward nature and that such intergenerative learning will also enhance the QOL of persons with mild to moderate dementia.

The nature-based science curriculum at TIS brings the generations together through experiential intergenerational learning in the parklands and watersheds that surround TIS. As in the previous study described, students ages 5–8 and 11–14 are joining approximately 15 elders from JP on several visits to a local nature center where they learn about such topics as habitats, wetland ecology, weather concepts and observations, water quality, chemical testing, macro-invertebrate sampling, wetlands and woods, and
soil testing. Students partner with elders on experiential exercises that teach them the art of scientific inquiry and help them acquire the vocabulary needed build a conceptual foundation about responsibilities for being stewards of nature. Elders make biweekly visits in which they mentor and work between and among older students, modeling responsible behaviors and conceptual ideas for younger students. Information technology experts from Case Western Reserve University are developing an augmented environment using the social networking application Second Life to allow students and elders to work together to model their local environment and envision it from a virtual perspective that overlays their real-life experiences.

While this shared-site curriculum could certainly be implemented in non-shared-site format, we anticipate that an experiential activity undertaken in nature (as well as on social media platforms) and shared across the generations can foster a powerful exchange of ideas and emotions that can surpass what is possible in age-segregated learning environments. For instance, during program recruitment, it has been learned that several elder participants from the partner site had in the 1960s been members of an advocacy group called the “Freeway Fighters” that successfully lobbied to save the host nature center from being developed into a superhighway. Exchange of intergenerational narrative with persons who have lived the history of the nature center can not only ground experiential learning in the moment but can also nurture a long-term perspective within a larger historical context that imbues the activity with greater meaning and relevance for younger students. Moreover, creating shared spaces in which older persons can educate younger children about significant aspects of their life stories fosters opportunities for increased senses of purpose and the furthering of legacies. Previous research on environment-based intergenerational programs (Liu, 2004) and on general intergenerational volunteering (Okun, 1994) has demonstrated that the most profound impact for elders is the recognition that children are genuinely receptive to their knowledge and views.

An Intergenerational Health and Wellness Practice

The multidimensional nature of intergenerativity means that this concept can and should be brought to bear on various domains of living. Therefore, concurrent with the school’s efforts to foster intergenerational learning about environmental health, leadership is also developing an intergenerative model for health promotion and education that will take the form of an Intergenerational Health and Wellness Practice to be housed within the school. As with climate change, there is a need for communities (particularly those in poor, urban environments that are overburdened by chronic, preventable diseases) to develop new models of human health that take a lifespan perspective and focus on prevention and wellness.

The Intergenerational Health and Wellness Practice will be a hybrid of a health model and an educational approach, creating space in which
moments of intergenerative learning can take place. Indeed, the practice will serve the health needs of children, adults, and elders using a primary care model based on the latest thinking of the patient-centered, medical home approach (American Academy of Family Physicians, American Academy of Pediatrics, American College of Physicians, & American Osteopathic Association, 2007). Practice-based teams of physicians and nurses will coordinate with existing school services such as nursing, social work, and counseling programs. Classroom and after-school activities will educate the school participants about how to keep healthy themselves and how to help their families and communities be healthy as well. Brain health approaches will be promoted based on social engagement, cognitive activity, balanced diet and physical exercise and will include elements of life planning and health coaching. School leadership believes that is important for all human beings to have a purpose in life and that acting to achieve this purpose in community with others (particularly with persons from different generations) can lead to a healthier outlook and psychosocial wellness (Whitehouse & George, 2008; Whitehouse, 2010). Most recently, the school has added an “Edible Forest Garden” project to create a social space that will potentially work alongside the health practice to assist in learning and health efforts. In this garden, youngsters and elder volunteers will learn together about how ecosystems work to produce healthy food that is of benefit to individual bodies and brains and to larger communities. In this way, the health practice is a prime illustration of intergenerativity because it attempts to bridge between multiple domains: young and old, health and education, public and private, and built and natural environments. It is part of a movement in medicine that is seeking to establish intergenerative partnerships through a process called Promoting Health Across Boundaries, which helps medical organizations deliver more integrated care to people and populations and fulfill the mission of the patient-centered medical home (Stange, 2009; Stange & Ferrer, 2009).

CONCLUSION

Intergenerativity is a concept that can bring focus to the interconnectedness among generative spirits of all ages in society, break down the ideologies and physical barriers of age-segregated learning that define many of our educational environments, and lead to a powerful confluence of ideas, emotions, and actions in local communities. At our shared site in Cleveland, this concept has gone from theory to practice by applying intergenerative models to various forms of intergenerational learning around urgently important issues such as climate change and human health and initiating the measurements of their effects. Indeed, in addition to modeling how intergenerativity can be fostered as an ideology and practice within shared site programs, we also
believe the concept has much utility as a form of measurement in research. It would, therefore, be worthwhile for future researchers to further develop methods of quantitatively and qualitatively evaluating aspects of intergenerativity and to seek out a range of shared site programs in which to conduct assessments.

Ultimately, intergenerativity is best grounded in experiential learning and appreciative inquiry models that highlight the importance of reflecting deeply between and among persons from various backgrounds who have diverse points of view and then provide a means of acting on those reflections. This process can inspire behaviors that create a healthier and more sustainable future and foster an intergenerational ethic that allows our species to continue adapting to our challenging times.

REFERENCES


