Abstract and Keywords

Public expectations should be changed so that all age groups experience certain aspects of social transformation together. In this way, each cohort will understand that harmony and cohesion require the adjustment of more than a single generation. This presentation identifies formative elements of a paradigm to support intergenerational learning. Emphasis is placed on the conditions needed to motivate optimal support, societal benefits of reciprocal learning, and ways to improve education in the classroom and at home. Adults want schools to communicate the attitudes, knowledge, and skills that students need to become successful. Grownups must become equally concerned about how to detect and meet their own learning needs. Every age group can become more influential by finding out how their behavior is perceived by other generations.

Keywords: lifelong learning, intergenerational learning, reciprocal learning, grandparents, parents, families, generation, older adults, motivation, education

Some adults believe that, because young people are the only cohort that society requires to attend school, their generation should be expected to assume most of the burden for adapting to change. Another strategy offering greater promise is to revise public expectations so that all age groups are obliged to experience certain aspects of social transformation together. In this way, all age groups should learn together and recognize that harmony and cohesion require adjustment of more than a single generation.

From now on reciprocal learning among generations will be essential to ensure that all age groups are aware of and are responsive to needs of cohorts other than just their own. How can these desirable but difficult shifts in attitudes and understanding occur? Many nations that are experiencing social transformation acknowledge that they have to develop a broader vision of education to stimulate social evolution while also modifying
some traditions so that they can be preserved but accord with patterns of behavior that reflect contemporary lifestyles and values.

The development of paradigms for intergenerational learning should be encouraged and carefully examined. A paradigm is a guide or model to rely on to establish expectations, govern direction, monitor progression, detect obstacles, and evaluate achievement (Barker & Erickson, 2005). Currently there are no paradigms to rely on for achieving the broad scope of learning that is necessary. Some formative elements for a paradigm will be proposed in this presentation. We describe: (1) conditions to motivate optimal support from all cohorts, (2) societal benefits of reciprocal learning, and (3) ways to improve the scope and quality of education provided by schools and families.

**Conditions to Motivate Optimal Support**

Motivating social change is more effective when the conditions that could inhibit success are identified and efforts are made to modify them. The conditions that seem to warrant the most immediate attention include: (1) recognition of generation as culture, (2) grant identity status to youth, and (3) establish learning expectations for older adults. Each of these changes is likely to encounter considerable resistance. However, initiatives rooted in patience and persistence are likely to prevail.

**Recognize Generation as Culture**

Culture is usually defined as a lifestyle that reflects the ethnicity and language of a particular group. Most children adopt certain elements of the culture they are oriented to by parents and surrogates. However, because the process of growing up differs for successive generations and has been accelerated by the communications revolution, peers have greater influence on lifestyle. Peer norms are conveyed and reinforced on a global scale by means of common social network sites such as MySpace, Facebook, Twitter, periodic texting, and cell phone discussions. This phenomenon explains in part why, regarding certain issues, teenagers in Tokyo, Atlanta, and Moscow more often share similar views with each another than they do with their parents. The present situation confirms the observation that, generally people resemble their times more than they resemble their parents.

When generation is acknowledged to be a factor for defining culture in the Internet age, the opinions of adolescents are viewed as deserving more attention. Adults also become less inclined to speak on behalf of youth in favor of encouraging teenagers to speak for themselves. Hierarchical cultures still exist in which adolescents are discouraged from stating their personal opinions that differ from those of adult relatives or other authority figures in the society. Teenagers in these countries who express divergent ideas are
A Paradigm for Intergenerational Learning

unfairly identified as lacking respect for elders. Because of such constraints to authentic dialogue, some youth decide to remain silent. In turn, this leads adults to mistakenly suppose that an absence of opposition means there is agreement across the generations.

A more promising outlook emerges when middle-aged and older adults listen to younger generations (P. Strom & Strom, 2011). Showing respect toward them means that younger people may be less inclined to devalue their legacy or abandon customs that they might otherwise decide to retain or revise. Middle school, high school, and college teachers should be models for other adults by showing that listening to youth is necessary to ensure both cultural evolution and cultural preservation.
Grant Identity Status to Youth

There is agreement that a well-defined role helps people acquire a favorable sense of identity. This is especially important in adolescence, when the most common goal is identity, working toward being accepted as an adult with an individual sense of meaning, purpose, and direction (Temple, 2006). Nevertheless, allowing youth a significant place in society seems more difficult in a technological society than in previous times. The traditional criteria applied to grant identity status are no longer appropriate. This is because preparing for a job, leaving home, working full time, and perhaps getting married are delayed until later ages (Greenfield, 2009). Accordingly, the current setting should be carefully examined to determine how to enable identity status for adolescents.

Adolescents rely on technology for conversations with their friends, and these same tools can expand the social context for their identity through interaction with adult mentors, relatives, community leaders, elders, and persons from different cultures. Efforts to enlarge the contextual base of identity acknowledges that the emerging social self can be too narrow if defined exclusively by interaction with peers online or in dialogue with one’s own generation. Generally it seems appropriate to credit adolescents for having some skills of technology that are needed for learning and job performance in the future and accept this strength as a criterion for bestowing identity status (Cushman, 2006).

Robert Epstein shares the impression that teenagers and some young adults are unfairly denied identity status. In The Case Against Adolescence, Epstein (2007) explores fallacies in how adults see youth as inherently irresponsible to be shielded from tasks of adulthood, and incapable of making reasoned decisions. Epstein describes the “artificial extension of childhood” by which teenagers are isolated from the people they are about to become and traps them in a meaningless world controlled by peers and the media. Epstein argues that society has forgotten how capable young people are but adolescents know it and feel frustrated.

The new equation for the identity status that youth seek should be based on their competence with tools of technology. This is a more rational response than to continue no longer attainable conditions that can lead to alienation and excessive reliance on peers for communication and respect. Dependence on peers for interaction is evident from the high level of involvement with social network sites. Talking to peers is easier since it is based on equality, a condition (p. 135) that is less common in conversations with adults. Because computer skills are important, individuals who possess them deserve status, should be given responsibility and expected to communicate with older and younger people to support societal harmony and development (P. Strom & Strom, 2009a).

Sharing dominance is essential for trading places, allowing the other person to sometimes assume the leadership role. The most successful chosen relationships are characterized by shared dominance instead of unilateral control based on age or gender. When people prize and rely on the strengths of one another, they have a partnership.

Before the era of the Internet, adults were rarely obliged to think of youth as being
possible sources of learning. Grownups should strive to demonstrate maturity and humility, recognizing that, in some situations, hierarchy is no longer sensible and can prevent more satisfying intergenerational relationships than are possible now.

Establish Learning Expectations for Older Adults

The American Association for Retired Persons includes a research unit called the Andrus Foundation. We developed a project, supported by the Andrus Foundation, to determine whether grandparents could understand the world from the vantage of adult children and grandchildren. A sample of 400 men and women, from 50 to 80 years of age, were assigned to an experimental or a control group. The 200 members of the experimental group attended a course on Becoming a Better Grandparent once a week over a duration of fifteen weeks. Each participant selected one school-age grandchild and one of that grandchild’s parents to provide a confidential assessment regarding grandparent attitudes and behavior. All three generations completed a separate version of the Grandparent Strengths and Needs Inventory before grandparents received instruction and again after training ended (R. Strom & Strom, 1993). The control group of 200 grandparents were denied instruction but were paid to complete the same assessment schedule as the experimental peers who attended the classes.

The grandparents attending classes assigned themselves significantly higher scores after receiving instruction than they did at the beginning of their course. Specifically, they reported progress in being able to define family responsibilities, having a sense of purpose, acquiring communication skills needed for intergenerational dialogue, and building better relationships with relatives. Daughters, sons, and grandchildren corroborated the gains. When the evaluation was administered a third time several months later, the gains each source identified earlier were retained. In contrast, the control group grandparents made no progress.

Most participants in the first classes were Whites who represented the majority of America’s 70 million grandparents. However, success with this group does not mean the same curriculum would be suitable for minorities. So, how should variance of educational needs for cultural groups be determined? It is often felt that outsiders seeking to help are limited by their lack of experience as members of a targeted culture. Whites cannot become Black or Hispanic to sense some things in a direct way. Similarly, but less often recognized, no one can accurately reflect the full range of generational views within their culture. Most people tend to be poorly informed about how younger or older relatives view things. Thus, while middle-aged persons, particularly politicians, may claim to speak for “their people,” they may accurately reflect only a consensus view of their cohort and not portray the core concerns or opinions of other generations.

To speak of cultural differences without also recognizing generational differences within cultures ignores a need for internal criticism to ensure cultural evolution. This means that building a curriculum for specific grandparent groups requires a consideration of three
A Paradigm for Intergenerational Learning

generational views. In this way, curriculum themes that transcend culture and ones differentiated by ethnicity are honored in program development. That is the strategy we have relied on to assess the performance and educational needs of Black, Hispanic, and White grandparents (McGovern, Ladd, & Strom, 2006; R. Strom, Heeder, & Strom, 2005; R. Strom et al., 1999). In addition, cross-cultural research has revealed generational perceptions of grandparents in Japan and Taiwan. The procedures, data analysis, and results of these studies involving more than 5,000 participants have been extensively described in scientific journals (R. Strom, Lee, Strom, Nakagawa, & Beckert, 2008; R. Strom, Strom, et al., 1995).

To summarize, the conditions for optimal support of intergenerational learning include recognition of generation as culture because it provides a unique set of experiences that shape attitudes, opinions, values, and ways of thinking. In addition, there is a need to support identity status for youth. Unless customary criteria are replaced, there will be alienation and excessive reliance on peers for communication and acceptance. The status youth seek should be attainable if their technology skills are valued and qualify them as sources of learning for adults. Finally, society should recognize older adults as capable of learning and expect them to sustain growth and adjustment (Butler, 2008; P. Strom & Strom, 2011). These respectful conditions appear necessary to motivate a more expansive vision for education.

Benefits of Reciprocal Learning

There is considerable evidence that a willingness to participate in role shifting can contribute to learning, motivation, and better relationships. The illustrations provided will demonstrate how trading places at work, in the classroom, and at home can yield unique and important benefits.
Trading Places at Work

Most employers arrange conversations between new employees and experienced mentors but less attention has been given to benefits that occur when reverse mentoring is applied. The concept of reverse mentoring calls for turning around the usual arrangement where someone who is a productive worker meets occasionally with a newcomer to provide mentoring tips about the organization, what is expected, and how to manage predictable problems. In contrast, reverse mentoring requires role shifting in which employees trade places. This procedure began as an experiment at the General Electric Corporation. Jack Welch, Chief Executive Officer, realized that he and other senior executives were unfamiliar with the tools of technology needed for effective communication in the changing workplace. Instead of sending management officials back to school or setting up expensive training programs for them, Welch paired 500 leaders with younger workers who had recently joined the company. The younger employees were assigned to teach senior colleagues to navigate the Internet and speed up communication within the company by using electronic mail (Welch, 2007). This shift recognized the greater competence of younger adults in the realm of technology, confirmed for new hires that their skills were valued by the company, and called on upper-level managers to view younger mentors as sources of learning. The experiment succeeded, introduced continuous sharing of expertise, and credited this approach for improved productivity. Many businesses have since adopted the General Electric mentoring model and confirm that it produces greater profits, more respectful relations, and better morale.

Trading Places at School

Administrators in the Olympia school district of suburban Seattle, Washington, decided to integrate technology with the curriculum at all grade levels. Organizers were agreed that schools were slow to embrace innovation, mostly because the views of students are overlooked. For the first time in history, many students know more than their teachers about tools of technology on which future learning depends. Many students report that life online after school is disconnected from the instruction methods that teachers use in class. Teachers concede that their low level of technology proficiency along with the prevailing emphasis on high stakes testing combine to prevent greater use of the Internet for learning (P. Strom, Strom, & Wing, 2008).

The Olympia approach to reverse mentoring is to pair students with a partner-teacher at their school. These student-teacher teams mutually plan a curriculum project that will be more appealing by some technology application. Teachers provide knowledge of the topic, awareness of learning needs, and steps to organize and guide lessons. The student is expected to contribute a visual element that makes the instructional presentation more appealing and better understood. This cooperative creation then becomes part of the curriculum offered by the partner-teacher. This process allows the students to practice
and refine computer skills for practical projects and gain collaborative experience needed for employment. The advantage for teachers is technology support to compliment instruction and new skills shared by their younger mentor (Reese, 2007).

Student-teacher team collaboration has the potential to benefit everyone. Studies have consistently found that lessons containing a visual component are retained to a greater extent and for longer than those provided orally or in text form. So great is the advantage of visual memory that it has been designated as the pictorial superiority effect. Experiments have demonstrated that people remember pictures with more than 90% accuracy several days following exposure even though the pictures were seen for only a few seconds. A year later the accuracy rate for visual memory exceeded 60% (Brockmole, 2008). Comparisons of text and oral presentations with pictorial presentations have found that visuals are always more effective. When information is given orally, people recall about 10% when tested three days following exposure. Recall rate rises to 65% if a visual element is added (Medina, 2008). The pictorial superiority effect had less relevance before the Internet introduced a broad range of visual resources. Given the enormous selection that is available from United Streaming, YouTube, and other Web sites, educators should emphasize the incorporation of visuals to optimize learning (P. Strom & Strom, 2009a).

Exciting technologies emerge at such a rapid rate that teachers do not have enough time to keep up with them. Reverse mentoring permits teachers to benefit from how fast the students learn the latest technical skills and how willing they are to be mentors. In the past professional development has relied on instructional specialists to train teachers in technology skills during in-service sessions with the hope that this approach will have a beneficial effect on student learning. The Olympia experience suggests that more is gained by reversing the procedure. Allowing students to practice technology while helping to enhance the quality of teacher instruction improves learning and comprehension while reducing boredom (Rosen, 2007).

The optimal reverse mentor relationship should be explored because it will provide clues about how teacher-student interaction should evolve in the future. Each party participates in setting goals to guide their collaboration. A curriculum lesson requires both to share complimentary strengths for interdependence. The teacher does not control the student but instead conveys freedom and trust that is vital for teaming. Student and teacher alternate leadership. Sharing dominance departs from the custom where the teacher is always the leader.

Over 1,200 schools have adopted the Olympia model for their integration of technology with curriculum. This kind of on-the-job technology training where a teachers engages in reverse mentoring with tech savvy students has proven effective to promote reform. Classrooms should be more interactive, collaborative, and related to real-life application. These outcomes are more likely when teachers realize possibilities of team problem solving and alternate leadership, and relinquish control in favor of self-directed learning.
A Paradigm for Intergenerational Learning

The most enthusiastic advocates for reverse mentoring are students whose projects can be viewed on Generation YES (Youth and Educators Succeeding) Web site at http://www.genyes.com/programs/genyes/sample_projects/CD.

Trading Places at Home

An inversion of authority is transforming the nature of interaction between adolescents and grown-ups. Both groups recognize that youth are more competent with tools of technology. Researchers at Carnegie Mellon University conducted an experiment to find out how this factor alters communication and relationships (Kraut, Brynin, & Kiesler, 2006). The participants were 170 people from 73 middle-class homes in Pittsburgh. All of the families included an adolescent and were provided a free computer with access to the Internet. None of the families had been previously connected to the Internet. During the orientation, researchers explained that computers would be remotely monitored to find out how often they were used, length of time spent online, and sites visited but not the content. At several month intervals the parents and their teenagers completed surveys that described self-defined computer skills, amount of time spent together online, and how often they helped one another solve computer problems.

Monitoring detected that, on average, the time that teenagers spent online was six times greater than their parents. Adolescents received ten times as much electronic mail as parents and explored the Internet to a greater extent. Another source of data were videotapes made during the home visits to observe how each family used their computer. The research team did not help if participants they were watching had technical difficulties. Problems appeared rampant in 89% of the families where the usual reaction of adults reflected a sense of helplessness. Grownups offered a broad range of excuses for their inability to solve computer problems. On the other hand, most teenagers seldom complained when facing difficulties and experimented until completing their tasks (Kraut et al., 2006).

Everyone was invited to phone Home Net line anytime to obtain assistance. However, the adults were more inclined to turn to daughters or sons for guidance. If adolescents were not home, adults usually chose to abandon a task rather than identify their needs to support sources from the Home Net. Those who phoned the help desk most often were the teenagers, the same persons who performed best. It appears that individuals with the most skill realize what they do not yet know and show more confidence in challenging themselves to try ever-more-difficult tasks. Knowledge trickled upward in most of the families as teenagers claimed the most authority, acting as consultants to their parents.

One way to reduce predictable risks associated with this familiar situation is to encourage adolescents to acquire attributes that characterize good teachers. Possession of a skill does not mean someone is able to convey skill to others. Patience and encouragement are implicated in teacher effectiveness. In contrast, impatience and lack of feedback can erode student motivation and cause them to doubt their capacity to learn. The Home
A Paradigm for Intergenerational Learning

Net findings revealed that many adults might be more inclined than adolescents to give up when faced with an unfamiliar learning situation. For this reason, teenagers expected to teach adults need to understand that emotional support should be given so adults remain willing to keep trying after failure (Kraut et al., 2006).

Trading places is an educational practice that offers possibilities to go beyond customary practices of learning, improve communication and respect across generations, support adjustment to novel ways of thinking, and create a society in which interdependence and harmony enrich the lives of everyone. Trading places can be difficult because it contradicts attitudes and behaviors that many adults are reluctant to abandon. Arranging creative initiatives for trading places at work, in classrooms, and at home can help to define the broader vision of human development and learning that we contribute to future generations.

Improving Education in Schools and Families

Society depends on schools and families to shape development of the next generation. There is continual dispute about aspects of schooling that need improvement and methods to increase benefits of education at home. Most of these dialogues involve adults only and rarely take into account the views of students who have the most to lose or gain from efforts to reform schools. This section considers ways to merge the insights of adolescents with those of adults, take advantage of the communications revolution to make nontraditional sources of guidance available, and inform parents about their learning needs as detected by daughters and sons.

Polling Students About Conditions of Learning at their School

Intergenerational learning can produce benefits in addition to the enrichment of individual relationships. These benefits should include improvement of institutions that provide education. Until recently, it was assumed that only adults knew when changes in schools were needed and would update policies and practices without consulting students. However, communications technology has transformed the experience of students by giving them access to the Internet, cellular phones, satellite television, iPods, computers, and wireless organizers (Rosen, 2007; Thomas, 2007). As a result, many adults recognize they are too old to know some things first-hand because they are not growing up now. Men and women cannot recall how they dealt with certain challenges teenagers face because these situations were less prevalent or did not exist in their youth. For these reasons, adolescents are the best source to express their opinions on what they value in schools and experiences they feel are missing.
Adults want to know about how well public schools perform. Students are also concerned and possess unique insights based on daily observation during classes. Inviting their opinions can make known the forms of instruction they prefer, obstacles to academic achievement, and factors that contribute to and detract from motivation. Finding out how youth perceive their conditions of learning can enable adults to reach more informed decisions on school improvement. Because students have the most to gain or lose from the efforts to provide them a good education, their input should be valued like that of other stakeholder groups (Tapscott, 2009).

Many adolescents are neither vocal nor assertive in public forums so their opinions should be expressed in a fair, anonymous, and democratic venue. The data gathering method should be a means teenagers feel comfortable with and use daily. The only assessment format to meet these conditions is Internet polling. Students welcome a chance to share their opinions about school when they have assurances that their responses are anonymous. They regard polling as a safe form of self-disclosure, based on their participation with media polls. Talent programs on television feature polls so that viewers can influence decisions about winners and contestants for elimination. Programs such as American Idol, Dancing with the Stars, VH1, and Nickelodeon invite observers to phone in or log on and cast their vote. The opportunity to have an influence on issues that concern them causes viewers to feel more involved than when limited to being passive spectators (Buckingham & Willett, 2006; Thomas, 2007).

Similarly, electronic polling, more than other reforms, conveys the message that school boards, administrators, faculty, parents, and community want to know how students feel about the quality of their education. In cooperation with faculty and students in secondary schools we devised 12 polls, each consisting of 15 to 20 multiple-choice items. These polls probe student-perceived conditions of learning related to: (1) Internet learning, (2) cheating, (3) tutoring, (4) time management, (5) stress, (6) peer support, (7) career exploration, (8) cyber bullying, (9) frustration, (10) dress code, (11) boredom, and (12) student responsibilities. Students receive password-protected entry data to access each poll and school code. This procedure ensures anonymity. Students vote in the school computer lab, at home or by cell phone connected to the Internet. Voter turnout is monitored daily by principals who get immediate access to the number of respondents and the proportion of students that provide each response option for each item on every poll. Schools generally have completion rates of 75%.

When the polling stations close, data files are used to create reports for each school. The reports feature bar graphs percentages for each item. Demographics related to age, grade, gender, and ethnicity are reported separately. Narratives for the fill-in type responses are summarized so that students cannot be identified. All stakeholder groups access results of the polls online as well as a summary of implications for school reform. After the stakeholder groups (students, parents, faculty, community groups) reflect on the reports, they meet to make recommendations for practice or policy changes to the school improvement committee. The school improvement committee then decides about reforms...
to implement and, after a trial period, evaluates the effects of change by polling students again. Finally, decisions are made to adopt or revise the trial changes.

The public is familiar with reports by educators describing student lack of readiness to perform tasks expected in the classroom. Less well known are students’ concerns about teacher readiness to design instructional tasks on the Internet to prepare them for an interdependent workforce. In a poll of one thousand students, only 8% reported their teachers expect them to share knowledge they gain from searching the Internet. Homework often centers on convergent thinking with students expected to demonstrate an understanding of correct answers. When divergent thinking is the goal, sharing answers with teammates before submitting an assignment to the teacher can enlarge group perspective. Data sharing can also cause students to become more accepting of divergent ideas and creative classmates who are able to generate new ideas. The national goal to elevate priority for creative thinking should include more opportunities for divergent thinking and recognizing possibilities in everyday situations, where there may be no correct answers but the ability to see potential options is needed to guide judgment.

Cooperative learning methods used in classrooms were developed prior to the Internet. Working in teams can be more productive when teachers organize team Internet searches and students are expected to bring printouts to share with colleagues. This orientation contributes to common learning and prevents excessive reliance on personal opinion as the information base used for discussion. When the learning individual students gain from the Internet is shared with teammates and then submitted to the teacher, benefits of social interdependence become evident and strategies can be devised to work together online (Tapscott & Williams, 2008).

Students realize that their possibilities for active learning depend on a major shift in the way that teachers use their time in getting ready for class. In the past, when teachers were the main source of learning, it made sense to devote the most time to preparation and presentation of lessons. However, because the Internet is now the main source of information, students believe that teachers should spend more time preparing assignments to facilitate self-directed learning online. This shift requires a new focus in the education of teachers and in-service development.

Stakeholders prefer the intergenerational approach of polling to school improvement as compared to the tradition of consulting with only adults that remains typical among the nation’s 14,000 school districts. Adolescent polling gives a more accurate picture of school effectiveness, identifies ways to foster student engagement, and offers a unique and relevant source of insight for local school improvement committees responsible for decisions on reform. More information about polling in secondary schools is available at http://www.learningpolls.org.

**Social Networking and Online Mentors**
Many adults are concerned about the 24/7 immersion of youth in their peer culture that is facilitated by cell phones and the Internet. Some teenagers are in contact with friends 70 hours a week while lacking meaningful contact with the important adults in their lives. Brief periods are spent with parents, but this usually involves watching television, eating, or checking in by phone. Observers warn that adolescents are being infantilized by a society that causes their isolation from adults and motivates them to communicate almost exclusively with others of their age group (Epstein, 2007). This assertion is reflected by a study of family communication among three generations in Taiwan, where teenagers are as tech savvy as their peers in the United States. When 116 grandmothers were asked to tell how often they communicated with granddaughters online, the response of “Never” was given by 95% of respondents (R. Strom, Lee, Strom, Nakagawa, & Beckert, 2008).

More contact with mature adults online and in person is needed to replace what in many instances has become a communication environment that is strictly peer-driven. Having mutually beneficial relationships with adults requires sustained interaction rather than permitting network social sites to substitute for the important dialogue that should take place in families. Teachers could assign some homework that requires family discussion of information students locate on the Internet. Such conversations would allow students to practice communication skills while parents solicit clarification and elaboration prior to giving feedback about the effectiveness of adolescent reporting. The parent role could include assisting students with some of their research by identifying key words and choosing paths to pursue. Monitoring the places students visit online by inspecting their Web site history is a necessary aspect of parental supervision. Novel initiatives that enable parents to learn with and from their children should be encouraged.

Most adolescents rely on social network sites to establish and maintain friendships, and they consider daily participation to be an essential aspect of lifestyle. It has been shown that technology tools are less often used to support intergenerational communication. However, there are innovative projects that signal exciting possibilities for adolescents to access expert advice online about the world of work and ways to promote civil and healthy interaction across age groups regarding emerging priorities for society.

The term “resilience” means being able to work toward a good outcome despite having to deal with threats to development. Teenagers should be encouraged by parents, teachers, and friends to acknowledge their setbacks and try to overcome them. This experience becomes the basis for confidence that difficult challenges in the future can be seen as contexts for success. Being on a sports team that frequently loses requires accepting defeat gracefully and determining how to perform better the next time. Failing a class should motivate a request for tutoring and then attempting to gain the necessary skill. When adults try to protect adolescents from having to deal with any adversity, they render them less able to cope with the unforeseen challenges everyone must face. Parents and teachers should consider involvement of allies in supporting resilience. Mentors can be an important source of support.
The concept of mentoring originated with the Greek myth in which Mentor was entrusted to educate the son of Odysseus when he left to fight in the Trojan War. A mentor is a wise and trusted advisor, tutor, coach, counselor, and faithful friend. Businesses often arrange for new employees to have a mentor. This strategy reflects a belief that experienced members of the company have valuable insights, seniority implicates obligation to share knowledge with younger colleagues, advice from veteran coworkers can reduce errors, and interdependence is the new perspective needed for individual, team, and company success.

The potential of mentors should be linked to career exploration as a source of motivation for adolescents to stay in school and identify goals they want to pursue. Grade 9 is the time when students who lack a sense of direction are the most likely to drop out of school. Leaving school is more common among inner-city youngsters who lack opportunities to talk with people who are successful. Career mentors can support resilience, make a difference in the student decision to remain in class and have a significant influence even when the parties never meet face-to-face but communicate on the Internet.

A notable example of how mentors are contributing to career awareness and student recognition of personal characteristics needed for the workplace is the Computer Clubhouse. This joint venture is operated by the Museum of Science in Boston along with the Massachusetts Institute of Technology Media Laboratory. This center and 110 others like it across the globe serve students in low-income communities where few adults have been able to achieve success. In this online, after-school learning environment students explore career preferences, develop job related skills, and build self-confidence.

The students choose their own mentor after reviewing biographical sketches online including visuals that have been prepared by the adult volunteers who are willing to dialogue with them. All of the mentors in the program have successful careers. They communicate the importance of integrity, civil behavior, and time management. Mentors also emphasize the resilience needed for dealing with disappointments, ways to support team cohesion and morale, and the value of reflective thinking in making decisions. Evaluations confirm this nontraditional form of intergenerational education fosters student success (Kafai, Peppler, & Chapman, 2009). Computer Clubhouse for adolescents is available at http://www.computerclubhouse.org.

Youth Noise. A growing number of teenagers document personal experience by recording events that capture their attention as well as expressing feelings and interpretations. However, unlike the guarded privacy cherished by diary writers in previous generations, authors now prefer to post their journals in the public domain. This recording of events usually appears on a blog, an online journal often updated with news, opinions, pictures/audio/video files intended for the public and open to responses from password-protected visitors or, on some sites, anybody in cyber space (Gardner & Birley, 2008). An online community is defined as a group that shares thoughts or ideas, or works together on projects by using electronic communication only. Online communities represent a broad
range of interests that can be social, hobby-oriented, political, spiritual, or professional. Teenagers consider MySpace, Facebook, YouTube, Hi5, Xanga, Live Journal, and Nexopia (Canadian equivalent of MySpace) appealing because these sites provide opportunities to meet new friends, dialogue with others having similar interests, and encourage postings on topics of interest. This context permits them to practice their developing logic in debates that are seldom possible with the adults in their lives.

By using a blog anyone can comment on matters they feel are being ignored or distorted by the media and express rants that are unlikely to be published by public news outlets. Blogs have a special appeal for teenagers since this forum allows control over ways to present themselves online without interruption or correction from adults. In this way, blogs facilitate some measure of independence (Horak, 2008). By reading postings of peers, adolescents also get confirmation that they are not alone in the way that they interpret contemporary situations and events.

The National School Boards Association conducted a survey to determine how much time students devote to social networking. The conclusion was that those in the 9–17 age range spent nearly as much time socializing on the Web as watching television (Karlin, 2007). An example of a beneficial social network is Youth Noise, sponsoring blogs catering to 13- to 18-year-olds from all 50 states and 176 countries. The site supports maximum volume and encourages the racket a group of teens can generate when they wish to make their voices heard. This is a place on the Web where students can discuss the things they dislike and work together attempting to reach solutions. Specifically, the goals for Youth Noise blogs are to (1) inspire adolescents to explore concerns that affect their age group throughout the world; (2) connect with other teens, realizing that two or more voices can be louder and therefore are better heard than one; and (3) empower adolescents to engage in communal efforts that support the development of maturity while improving lives of others.

Young and middle-aged adults are responsible for the supervision of Youth Noise (think of them as intergenerational advisors). The adult tasks include communicating information from 300 nonprofit partners that can motivate the middle school and high school students to become noisemakers who post their impressions. Students are also expected to access links where they are encouraged to read journal articles that offer background data about issues. These sources enable youth to debate more persuasively by accessing informed judgment as the basis for personal opinions. Some global topics for noise board reaction are stories about current relief efforts where people have been affected by natural disasters; exploitation of children in the workplace throughout the world; and concerns on health and what youth can do to improve their environment and other conditions. Students also get to use youth noise interactive tools that were devised to inform them about opportunities to participate in volunteer activity, either online or in their community.
A Paradigm for Intergenerational Learning

The challenges of raising children vary according to age. Most parents report that their role is most difficult and least satisfying when they have a daughter or son between 10 and 15 years of age. Some of the anxiety and frustration experienced by middle-aged parents comes from trying to help youngsters with issues that are unfamiliar to adults. Being a parent is further complicated because experts on family relations often disagree and recommend conflicting opinions on how to resolve problems. A related fear is that teenagers might turn to immature peers as main advisors instead of consulting parents. The criteria that parents rely on to judge themselves must expand to accord with greater competencies of children as they grow older.

Parents want to adapt so their teaching is age-appropriate for their child. However, few mothers and fathers get feedback on their performance. Some families assume that unless a daughter or son has difficulty at school or with the police, the guidance provided at home is suitable. This low expectation does not identify the things parents do well or what they have yet to learn. To assess these desired conditions, it is helpful to administer the PSI, Parent Success Indicator (R. Strom & Strom, 2009). There are two versions of this 60-item Likert-type instrument, one for parents and the other for adolescents. On the parent version, mothers and fathers perform self-assessments. On the adolescent version, children describe observations of their parents. The reason two generations assess parent behavior is because adults can make better decisions regarding self-improvement when perceptions of those they want to influence are taken into account. Parents are able to identify some of their assets and weaknesses but if they are the only source of observation (as adults also are in deciding on needs for school improvement), certain of their abilities and deficiencies are likely to be overlooked.

By relying on a two-generational perspective about family interaction, a balanced picture of parental competence and learning needs comes into view with a more accurate portrayal of how parents influence children. Parents naturally want feedback about their behavior. They receive a profile including all 60 items restated in a positive format along with the meaning of their scores for each item. The scores of children are never presented to parents. However, parents benefit from knowing the normative responses provided by their child’s peer group. Similarly, parents are never given the individual score of other mothers and fathers but they gain from being shown the overall group scores to understand how they compare.

The PSI has good psychometric indicators of reliability and validity, has been factor analyzed for multiple cultures, and is available in several languages (R. Strom & Strom, 2009; Beckert, Strom, Strom, Yang, & Singh, 2007). When strengths and learning needs of mothers and fathers as perceived by two generations are detected, a parent curriculum relevant for a particular cultural sample can be properly developed. All parents should be able to participate in education programs that help to establish appropriate expectations, motivate children to learn, provide suitable instruction, and build mutually satisfying relationships.
Results from the Parent Success Indicator reveal learning needs that might otherwise go undetected because of exclusion of adolescents as sources of observation. Two illustrations will demonstrate how insights drawn from youth are used to identify specific curriculum needs for middle-aged parents. Specifically, the importance of time management and coping with stress are described.

Spending time together is common among successful families, whether they are first-marriage couples, blended units, or led by single parents from any income group. The reason time is such a vital ingredient is because it impacts all of the other characteristics of a healthy family. Communication, learning, and emotional support all decline when a family loses control of how time is spent together (R. Strom, Strom, Strom, Shen, & Beckert, 2004). Many adolescents rate their parents as performing poorly in terms of spending time with them. In contrast, the explanation of parents is that they are busy working to ensure that everyone in the family can have a better life.

As a result, some parents are tired most of the time and unable to contribute much when they are with their children. Instead of giving children moments of their best energy and insight, these parents offer them time that is left over when the needs of others have been met, time that is second-best as demonstrated by parent fatigue. Other parents rationalize lack of involvement with their children by claiming that the occasions when they are together constitute quality time. However, the proper definition of quality time is any time children need their parents rather than when parents can schedule themselves to be with children (Levine, 2006).

Time management is an important factor in success. People who schedule time so that their priority concerns receive enough attention tend to feel more in control of their lives, experience greater satisfaction, and establish a more productive record at home and at work. It is essential that adolescents be equipped with the sense of balance that is provided by time management skills. With this orientation, they are able to avoid overscheduling themselves, procrastinating on important tasks, breaking promises to others, and ignoring the people who matter most to them (Luthar & Latendresse, 2005).

Another fundamental lesson that children expect their parents to teach them is how to cope with stress. Parents typically overestimate their favorable influence in this realm. In order to provide credible advice about stress, a person must be seen as demonstrating this capacity in their life. One effective method is to occasionally retreat from daily tasks to recover a sense of perspective. A PSI study of White (N = 537) and Black adolescents (N = 396) found that a majority saw their parents as ineffective in teaching them to cope with daily stress. It is troubling that the lowest self-ratings reported by White (N = 391) and Black (N = 271) mothers (60th out of 60 items) was difficulty arranging leisure time for themselves. Adolescents also rated lack of maternal leisure as 57th out of 60. This is not just an example of maternal sacrifice. Many mothers suffer from stress of multiple responsibilities that include taking care of children and a husband, satisfying an employer, managing a household, and perhaps giving care for aging parents. It is not
surprising that youth conclude that, if my mother cannot arrange personal leisure as a way to deal with stress, she cannot teach me how to do so (P. Strom, et al., 2003; R. Strom, Dohrmann, et al., 2002).

Black (N =102) and White (N =126) fathers of adolescents resemble mothers in reporting that their greatest difficulty was arranging leisure time for themselves. This inability to schedule free time is bound to influence parenting. Fathers do not generally accept as much responsibility as mothers do for care and guidance. It is improbable that a father could teach his children to deal with multiple demands on their time if he is unable to set aside time for his own personal renewal. Living with overchoice, feeling hurried and rushed, and sensing lack of control over events is a common complaint among all age groups in society. Fathers and mothers must deal with this issue or they cannot effectively teach children how to manage time or cope with stress. When students conclude that their parents cannot teach lessons they have yet to learn themselves, sources outside the family become healthy or unhealthy models teenagers may choose to emulate (R. Strom et al., 2000; R. Strom, Beckert, Strom, Strom, & Griswold, 2002).

Older Adults: The Beatitudes Experiment

Gerontologists assert that education is needed to support the quality of life for older adults (Butler, 2008). Unfortunately, little is known about how to facilitate learning and ways to assess efficiency of instruction for students in later life. To extend this knowledge, we conducted a project with the Beatitudes Campus of Care in Phoenix, home for 800 residents served by a staff of 300. The average resident is 81 years old. Most of these women and men get along independently in their own apartments; some help is provided for those in the assisted living and recuperation units; and about one-third have complete care because they suffer from dementia.

The project was initiated when the administration invited us to provide a course on intergenerational relationships. We agreed on the condition that some residents would volunteer for training so they could present the course themselves. Our hope was that this arrangement would foster indigenous leadership, cause residents to rely on one another, demonstrate a cost-efficient method for mental stimulation, and explore innovative methods of instruction for this age group.

A faculty of twenty residents, age 77 to 91, volunteered to be the faculty and operate the free program. They scheduled course sections at times and places of convenience to residents, made personal visits to invite potential participants, facilitated cooperative learning of their students; provided individual instruction for peers with handicaps; evaluated benefits of instruction for students and leaders; recruited and trained substitute leaders who could take over; and recommended improvements in the curriculum.
The faculty worked in pairs guiding small classes of 4–5 students. By having two leaders share preparation, there was no need to cancel a class if one leader was unable to attend. This strategy reduced anxiety of those who worried about unanticipated health problems and letting their group down. An average of 45 participants attended weekly meetings for one year. They met in lounges on each floor of the high-rise facilities. In addition to guiding classes, the faculty came to biweekly training. These sessions, led by a dozen graduate students, provided an orientation to cooperative learning, demonstrated lessons the faculty would later provide themselves, and discussed predictable obstacles.

**Developing Group Communication Skills**

The schooling of older adults when they were young focused on listening to the teacher and doing individual assignments. There were no group discussions, and talking in class was considered misbehavior. As a result, most elders lack the group process skills commonly acquired by students now that stimulate productive dialogue. Older adults like to visit but this type of interaction seldom includes mental stimulation. Their conversations can be enriched when elders learn to self-disclose, stay focused, evaluate differing points of view, yield to other speakers, defend their opinions, and practice group problem solving with scenarios in a low-risk environment. Observations of classes for younger grandparents prior to the Beatitudes project led us to formulate guidelines to support productive discussions (R. Strom, Strom, Fournet, & Strom, 1997). These guidelines were implemented in every class with feedback provided by college student observers. In this setting the younger generation shared contemporary values and skills with older adults.

To assess the effects of cooperative learning, the Peer and Self Evaluation System (now called the Team Skills Inventory) was administered (R. Strom & Strom, 1998; P. Strom & Strom, 2009b). This instrument assesses 25 skills that serve as criteria for evaluating how teammates contribute to thinking of peers. Each person applies the same criteria for self-assessment. Everyone gets feedback about their behavior as perceived by peers. The individual profile presents, for each item, the percentage of peers who saw the person being evaluated as demonstrating that particular attitude or skill. The format also includes a comparison of peer and self-impressions. Making known only collective responses for each item preserves anonymity of peer observers. This method ensures confidentiality and allows everyone to comfortably report. The peer- and self-evaluation system was recognized by older adults as a powerful tool to examine themselves from a larger perspective.

**Assessing Comprehension**

Courses for older adults rarely include evaluation. Such an omission would be unacceptable for younger age groups but is commonly explained as a benevolent way to prevent stress and embarrassment for elders. Our contrasting view is that the extent of elder learning must be determined or there is no basis for knowing how to improve instruction. After participants read and mark comments on their weekly written lesson, they come to class and take turns answering these questions: (1) What ideas in the lesson
made a difference in how you think about this topic? (2) What insights from the lesson can you apply in communicating with your relatives? (3) What were the most important aspects of this lesson for you? (4) What are some aspects of this lesson you would like to better understand? The several principles that go with each lesson are discussed before the students complete a duplicate self-evaluation form of multiple-choice questions. They keep one copy of the answers and submit the other without their name to the team leader. At the end of the week, when all class sections have met, aggregate percentages for each item response option are distributed. In this way normative responses are known and everyone is aware of how they resemble and differ from classmates.

**Next Steps**

Reports from older adult students, resident faculty, young adult observers, and anecdotal evidence confirmed that novel strategies to deliver instruction and evaluate learning were cost-effective, contributed to mental health, and fostered adjustment. The next steps are to apply instruction methods, assessment procedures, and indigenous leadership for a program at many facilities. Our intention is to deliver instruction using the Internet along with visuals that reflect the pictorial superiority effect on memory retention for older adults (Cherry et al., 2008). Younger relatives will be kept informed about the content of curriculum elders are taught along with possibilities for family input as important sources of learning. Specifically, relatives will be sent questions to answer by e-mail that elders will refer to in reporting to their classmates about perspectives of younger generations.

Many studies have detected decline in the mental abilities of older adults. But, these observations have not controlled for variance in amount of mental stimulation. Short-term interventions confirm elder potential for growth but the outcomes of sustained exposure to learning remain unknown. We can only speculate about what would happen when older adults, on a daily basis, participate in activities that stimulate thinking and broad outlook. Would such a long-term care classroom impact resilience for coping with loss, stress, and depression? Could this approach appreciably delay onset of Alzheimer’s disease? Because more people can expect to live longer than ever before, these issues deserve greater attention.

**Conclusion**

Intergenerational harmony is a common dream. Everyone would like to have older and younger relatives better understand their views and support them. Some observers contend that this dream is out of sync with the present environment and should be left behind since it can no longer come true. We disagree. Certainly, in comparison to the past, harmony requires more awareness of greater differences among cohorts. All age groups should be aware of how other generations interpret events, know the values that guide their behavior, recognize their vision of the future, and trade places as sources of
A Paradigm for Intergenerational Learning

authority when it is warranted. These conditions can be met when there is general willingness to rely on reciprocal learning.

Adults are commonly critical about the schooling of youth and should become as critical of their own learning needs. These needs cannot be fully detected by introspection alone. Instead, it is necessary to determine how our behavior is seen by others whom we cherish and hope to influence. In particular, young and middle-aged adults have to transcend the use of catch phrases of lifelong learning in favor of detecting personal limitations and overcoming them. A serious mistake is to suppose that older adults are the only age group implicated for intergenerational learning. Online social networks are here to stay. They present creative schools and families new opportunities to improve communication with relatives, enlarge curriculum to include additional mentors. Instead of complaining that young people communicate exclusively with each other, adults should grant them the identity status they deserve based on competence with technology tools that are needed for learning in the future. Grownups should also expect more dialogue with young people with the new modes of communication, not just the old ones. Young adult and middle-aged parents need to realize that time management skills and coping with stress are among the most important lessons that youth must learn to have a healthy and successful life. These lessons must be taught at home as well as in classrooms.

In contemplating the future, it is recognized that the 77 million baby boomers, born between 1946 and 1964, will become the largest older adult population in the nation’s history. This group has more formal education, is healthier, and anticipates a longer life than previous generations. If the education they receive for retirement is limited to a curriculum of financial and leisure preparation, then a lifestyle dominated by recreation could become a norm. On the other hand, if education for retirement includes a sustained emphasis on responsibility as family and community members, then baby boomers could make an enormous contribution to society. This possibility can be supported by the evolving concept of grandparent education.

References


A Paradigm for Intergenerational Learning


A Paradigm for Intergenerational Learning


---

**Paris Strom**

Paris Strom is a professor in the Department of Educational Foundations, Leadership & Technology at Auburn University in Auburn, AL.

**Robert Strom**

Robert Strom is a professor in the Division of Leadership & Innovation at Arizona State University in Tempe, AZ.