

Engaging Youth in Planning, Architecture, and Historic Preservation

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Introduction

I have no official credentials to speak to you today about youth education. I am not a trained K-12 teacher nor am I an education researcher. So what can I bring to this discussion? I am typical—indeed very typical—of the people who get involved in teaching and engaging youth in the field.

Like my contemporaries, I work in a profession and have developed an amateur's interest in youth engagement. My original profession was historic preservation and more specifically, historic architecture; more recently, I work as an educator for city planners. Therefore, I am not a disinterested party. While I want young people to learn about my fields of practice, I also propagandize. I want them to value the work and to embrace my point of view (i.e. planning improves community life).

Getting Started

How did I come to it? While working in the South Dakota Historic Preservation Center, I hired a young historic archaeologist, Todd Kapler, who volunteered to create an archaeologist-in-the-schools program and a summer archeological “dig,” which he opened to young people, families, teachers, and the public. This quickly became a popular part of our public outreach.

Inspired by Todd, I contemplated creating a short course I would call “Architecture & Community History.” But my ideas did not take shape until I read an article in the *Sunday New York Times* one Wednesday evening (because that is when it was delivered in Vermillion, SD).

[SLIDE: Roman road]

The story of students and the Roman road in England provided my “Ah hah” moment.

Educators in Great Britain were undertaking a major reform of the K-12 curriculum and setting national standards for all K-12 schools. Although the standards did not specify what textbooks to use, they gave curriculum guidance on how to meet the education standards. The reason for the reform—according to the article—was the need to accommodate newer immigrants who did not always respond well to the existing curriculum.

The students were assigned to solve an engineering problem in the construction of a road using the copies of the original Roman documents and a physical inspection of remaining Roman road. There was my realization—K-12 students could learn from primary source material. When I was a college student one of the great joys of life was learning how to conduct research. Reading original source materials, such as original radical labor history pamphlets for a history class, was exciting, like a door opening into another dimension. Young people could engage with this exciting evidence of past lives, long before they went to college.

Yet the English students were not just learning from documents, they were learning directly from the built environment. Further, the assignment was to solve a design problem by going through a design process. I learned later that I was reading about the Education Reform Act 1988, which was adopted in 1990. One element of the standards addressed technology and it calls for students to design and make objects (the design process). Much of the reform was buttressed by research into modes of learning and the role of design process. Later I will return to more of the interesting education programs taking place in the UK.

[SLIDE: Architecture & Community History]

In South Dakota, however, my project would not have gotten off the ground if I had not been sitting up late one evening at the State Historical Society Annual Meeting, talking with two teachers from Timber Lake. While I ruminated about my fantasy, they immediately challenged me to develop the course and to come to their school and try it out.

Research

So I began. I was uneducated on this subject of teaching children, but had developed my own training course for my survey teams. I was not so naïve as to think I was the first person to have conjured up the idea of teaching young people about architecture and the historic built environment and so began to conduct some research.

[SLIDE: NEA report]

My first contact was with the National Endowment for the Arts. NEA kept an extensive project file and much of the really interesting work going on was conducted by architects. Often supported by the American Architectural Foundation or a local AIA chapter, there were numerous architect-in-the-schools programs. In both Philadelphia and San Francisco architects developed especially strong programs, successfully working with local schools.

[SLIDE: Archi-Teacher exercise]

Many programs were inventive and engaging, capturing some essential elements necessary for developing visual literacy and principles of construction. Seeing how architects created simple exercises on how to support weight or bend a material were especially helpful.

From my experience in teaching field survey methods convinced me that younger people adapted easily to visual learning.

[SLIDE: CUBE]

Among the programs thriving in the mid 1980s was Ginny Graves' Center for Understanding the Built Environment in Prairie Center, Kansas. Her *Walk Around the Block* and *Box City* programs continue to be used today. *Box City*, which teaches young people to create a city from packaged boxes, may well be the most widely disseminated architecture and city building program in the country. Ginny also published a newsletter, *ArchiSources*, and maintained a bookstore, that served as one of the first links among those developing new programs.

Another early architect educator was Anne Taylor at the University of New Mexico. Her popular curriculum posters on architecture and children are a model of good graphic communication and clever exercises. She accompanied this with a teacher's guide.

[SLIDE: Salvadori]

Another early innovator was Mario Salvadori at the City College of New York. He is the co-author of *The Art of Construction: Projects and Principles for Beginning Engineers and Architects*.

Common elements ran through the programs. Most took young people outside the classroom. All used physical evidence or observation of the physical world as a starting point. Many were project-oriented and all incorporated hands-on activity in the learning. In contrast to today's curriculum materials, which have benefited from PageMaker, the graphic quality was simple or non-existent.

[SLIDE: Archi-Teacher texture]

I was critical, however, of some of the materials I reviewed. For example, the “touchy feely” lesson plans also gave me pause. Children would walk down the street, smell the air, rub the brick, wood or stone walls, make crayon imprints of manhole covers. At the time, this type of education exercise seemed too babyish and unserious for someone teaching youth about the greatness of architecture and past civilizations.

Only later have I come to understand this approach. It was recently expressed succinctly in a *The New York Times* article. A. O. Scott in a review of a film about a child artist, wrote “these...crayon scribblings (are the) vital byproducts of play, part of the cognitive and sensory awakening that is the grand, universal vocation of childhood.” Oh, now I get it. Maybe someone knew what they were doing in simply making children aware of the texture, weight, color, pattern, and feel of buildings, streets, and landscapes.

[SLIDE: Streetscape sculpture]

Afterall, one doesn't grasp the complexity of a city at the age of 6, but one can experience an element of a city—for example, at the Baltimore StreetScape sculpture park—and stop to be mindful of the experience.

Architecture and Community

By the time I began work on the short course, I had determined several guiding principles:

- ✓ The course would be based on the community's history and the physical evidence of that history
- ✓ The students would go through the same survey process as adult surveyors with some modification
- ✓ It would replicate the fun part of work
- ✓ Buttressed by my blind faith in “My job is fun—you'll like it to.”

Later, when I discuss the charter school movement, we will see the limits of that faith.

[SLIDE: Table of Contents and plan]

The course had three parts:

Slide lectures: how an architect designs; architectural history, and construction methods of the

Student project: Recording architecture; measured drawing; site plan; photography; research the history

Field trips: ranch and farm; walk through town

Throughout the week, as I tried each piece of the course, I pulled things apart, reshaped, adjusted, abandoned segments, rewrote, and hung on for dear life. It was a tremendous learning experience for me. Among the lessons I learned:

- ✓ In handling students, structure and teachers were crucial
- ✓ I did not provide enough instruction throughout the course
 - Students requesting more direction
- ✓ Students understand visual information very quickly, much faster than I expected
- ✓ The need for the right balance of lecture, visuals, and activity
- ✓ Continuous feedback to students in necessary
 - I should have returned to see and comment on the final project and praise
- ✓ Students were acutely aware of social issues in their community and enjoyed making connections to serious issues
- ✓ My experience may be difficult to replicate today, when teachers and schools are under more pressure to perform to standards. The openness of the teachers and the school to my experiment was extraordinary.

[SLIDE: Architecture and Community]

As I mentioned, the teachers were helpful and extremely gracious. Yet, it was my colleague, Peter Hawley, APA's former Assistant Director for Outreach, who raised my awareness. While I was busy trying to teach my profession to children, I failed to appreciate that I was not respecting the profession of teaching and the knowledge and skills that teachers could bring to these efforts. I had not asked teachers—at the onset—for help in devising this short course. This was, too often, the serious shortcoming in engagement programs in the early years.

Part Five: Museums

My work brought me next into the world of museums. In 1990 I had a fellowship that allowed to explore how historic architecture was being taught in a variety of settings. During the summer, I worked at Old Sturbridge Village Museum and had the opportunity to learn from the research and education staff.

American museums today are rich in imaginative and engaging education programs for young people. Museum education academic degree programs developed in the 1980s and produced a generation of educators that have changed the very nature of museums in this country. They helped museums look inward at their collections and outward into the community to see how young people could learn from their surroundings.

Old Sturbridge Village was an early innovator. The museum is a living history village in which interpreters act out the daily lives and tasks of New Englanders living between 1790 and 1840. They teach children to bake, play games, and generally explore history through engaging in a physical activity, but their education programs do not stop there. They also teach summer programs on historic archaeology field methods and conduct teacher workshops that explore the

village and surrounding communities. The teacher institute in which I participated explored the themes of work, family, and community.

[SLIDE: City by Design]

Other museums also developed strong programs that focused on architecture, preservation, and cities in the 1980 and early '90s. Among them was the National Building Museum in Washington, D.C. which created the *City by Design* program and the *Bridge Basics* curriculum. They also conduct city exploratory programs for youth in the summer.

In New York the National Design Museum, Copper Hewitt, a Smithsonian museum created a design exposure and apprenticeship program and numerous neighborhood exploratory programs. Chicago Architectural Foundation claims “the city is our museum” and has also developed strong education programs focused on architecture and urban design. In all these museums, practitioners have played a strong role—in instigating programs, shaping programs and carrying them out.

[SLIDE: CAF]

By the late 1990s these museums had published complete curriculum and well-tested lesson plans. The Chicago Architectural Foundation’s first curriculum is *From Schoolyards to Skyscraper* and just completed its second, *The Architectural Handbook*. Both were designed with teachers and curriculum developers and were created for the Chicago school system with the goal of wider adoption.

Museum educators have been especially adept in developing education programs that use the physical environment. Because museums can offer programs continuously, they have also contributed their experience and longevity to the conversation. Perhaps more than any of the rest of us, they have had the institutional support to evaluate their work and in some cases, the ability to drop unworkable ideas and develop new ones. They have also demonstrated how important it is to link youth education programs to teacher education programs.

City Planning

The American Planning Association embarked on youth programs in 1990.

[SLIDE: Resources]

Ramona Mullahey, a planner and community educator in Hawaii, created a newsletter called *Resources* that covered the emerging youth education scene. Ramona’s definition of planning has always been generous and so the publication covered the built environment, planning, urban design, community-based social activism, and the environmental education. The quarterly publication continues today in an electronic version and is free to all subscribers.

APA also created a half-day program, called Planners Day in School, that was held in conjunction with the National Planning Conference.

[SLIDE: Youth & Advocacy]

At the time, several planning academics were developing education programs. In the field of planning, a leading exponent of youth engagement is Professor Sharon Sutton, the winner of

APA's first youth education award. While teaching at the University of Michigan in the early 90s, she created Urban Network, K-12 urban design program and published case studies of youth engagement in "Youth and Advocacy." She is one of the few researchers in America to write on the subject of youth and planning and recently published *Weaving a Tapestry of Resistance: The Places, Power, and Poetry of a Sustainable Society*. Sutton is especially interested in planning as a means of sharing power with young people and enabling disadvantaged populations to shape their own communities. She is almost unique in talking about why these programs can fail.

[SLIDE: coloring book, Kids City]

Elsewhere planners were adapting existing programs such as Box City to local planning education programs. They added layers of planning elements such as permitting, land use choices, and civics lessons. Planners conducted visits to schools, created summer camps, and taught classes.

Many early efforts were quite simple, such as coloring books. APA's national program was conducted by the public information department, and saw youth programs as a means of publicizing planning. Journalists love photographs of kids building cities or acting as miniature adults. This is not to dismiss the sincerity of the efforts nor the hard work that went into them. But at my colleague Peter Hawley observed, APA and planners' approach generally was short-term and media-driven.

[SLIDE: Toronto, Albuquerque]

During that same time, planners were also thinking seriously of how to engage young people in the actual planning process. They were interested in going beyond education or simulations, but often included educational activities in the planning process. Although fairly common today, youth involvement in planning was a novelty when the cities of Toronto and Seattle began to integrate youth in 1990-1. APA has awarded programs in Albuquerque, Philadelphia, Las Vegas, and Rancho Cucamonga, (Cal.) to name a few.

In the mid 1990s APA shifted the emphasis. Peter was just completing the invaluable book *Design as a Catalyst for Learning* for NEA which influenced our thinking. Peter, Ramona, and I shifted the program's emphasis to education from public information and publicity.

First, we created training programs for planners. Having observed that planners going into the classroom were often ill prepared to work with youth, we created annual workshops at the National Planning Conference.

A frequent partner in these efforts were museums.

[SLIDE: San Diego, Boston]

In 1997 we partnered with the San Diego Children's Museum for a youth planning charrette that involved 7th graders. The following year we worked with the Boston Children's Museum, teaching planners how to build community-based programs with the help of museum educators.

[SLIDE: Sutton, NYC]

In 1999, we had the pleasure of working with Sharon Sutton as she wove our workshop into her year-long program working with four schools on issues of planning, architecture, and transportation. The following year, APA supported an *Urban Planning Design Studio*: called *Re-Design Your City*, conducted by the National Design Museum, Cooper Hewitt in New York. Over six weeks students explored planning and prepared projects on the redesign 114th Street in Harlem. The critique took place at the conference and students presented their projects in a conference session. The Northeastern Illinois Planning Commission (now CMAP) conducted a regional visioning program with youth. Using Electronic Town Meeting technology, they held the event as a workshop at the 2002 conference.

We partnered with ESRI, a GIS software company and offered two year's of workshops that brought teachers together with planners to see how GIS could be used in the classroom to explore planning. ESRI has developed its own extensive GIS in the K-12 classroom program and conducts an annual conference to include teachers.

[SLIDE: Youth Planning Charrettes]

To further support planners, we published books. Bruce Race and I described the charrette process in *Youth Planning Charrettes: A Manual for Teachers, Planners and Youth Advocates*. A year later in 1999, Ramona and her colleagues published the Planning Advisory Service report *Youth Partnerships in Community Planning*.

We began to review children's books that teach children about our beloved subjects. First and foremost among the authors is David Macaulay, a man-for-all-things-built. His great books on *City*, *Skyscraper*, and *Cathedral*, to name a few, are used extensively in classrooms and have won many awards. There are over two dozen reviews of these delightfully illustrated books on APA's teachers' website, ResourcesZine.

Partnerships

APA also embarked on a program of partnerships providing feedback to many groups who were developing environmental, city building, or design curriculum. Today, many professional and advocacy organizations have robust youth programs.

[SLIDE: Future Cities, ULI]

For example, the American Society of Civil Engineers runs a fascinating *Future Cities* national competition for high school students. Many planners, and I assume architects, have participated in this program.

Other examples include:

- ✓ The Urban Land Institute published *Urban Plan* and *Dilemmas of Development*, which were converted to web-based programs.
- ✓ The National Geographic Society has a robust website with both a kids' website and extensive lesson plans linked to NGS maps and articles.

[SLIDE: PLT, ViewFinder]

- ✓ *Project Learning Tree* created by the American Forest Foundation is one of the most ambitious multi-year, multi-level, curriculum programs.
- ✓ The Dunn Foundation's *ViewFinder* program examines the connection between environment, community, and aesthetics.

[SLIDE: 4-H, Jr. Achievement]

- ✓ The 4-H has developed a vast array of curriculum publications and two encompass planning--*Building Community* and *Going Places, Making Choices*.
- ✓ Junior Achievement carries out an elementary school curriculum program through volunteers, called *Our City*.

[SLIDE: NTHP, NPS]

- ✓ The National Trust for Historic Preservation developed a website, published a newsletter, and embarked on a youth education program under professional educator, Kathleen Hunter. Alas, I can no longer find any reference to this program on the Trust's website; it appears to have ended when the Trust shifted organizational emphasis.
- ✓ The National Park Service used its National Register of Historic Places program to develop online lessons for students.

The developers of programs such as *Project Learning Tree* and *The Architecture Handbook* are also more ambitious for their work. They have made a commitment to the long-term, to teaching training, and educational partnerships.

There are two trends that emerged in the 1990s and early part of this century. The first is the increasing ambition and scope of a curriculum and programs. The more sophisticated programs are linked to requirements of classroom teaching and to the profession of teaching. They were developed with the aid of curriculum developers and have been carefully tested in the classroom. For many of these programs, there has been a long-term commitment to teacher training and educational partnerships.

The other trend is the decline of programs. Like the National Trust for Historic Preservation's programs, many efforts did not survive the individual and failed to obtain widespread support and financial resources to maintain them.

National Standards and Educational Reform

[SLIDE: Bruce]

England was not the only country re-examining its K-12 education standards. However, while England has a national educational system, the United States does not. Each state, therefore, sets its own education standards. Many professions became concerned about the lack of consistent education that would prepare an educated workforce. The late 1980s and 1990s were a time of widespread "standard setting" as one field or profession after another developed voluntary, advisory standards.

As described in *Design as a Catalyst for Learning*, many of these new, voluntary standards embraced common principles with design education.

- ✓ National Council of Teachers of English in 1996 emphasizes problem solving, information gathering, and a balance of visual and verbal language.
- ✓ National Council of Teachers of Mathematics in 1989 recommend complex, open-ended, problem solving, and connection with everyday life.
- ✓ The Geography Education Standards in 1994 highlight civic and political partnerships and studying the built and physical world and their inter-dependence.
- ✓ The American Association for the Advancement of Science recognizes the need for understanding evolving technology and everyday contexts for learning.
- ✓ The North American Association for Environmental Education recommend considering the social, economic, political, technological, cultural, historic, moral, and aesthetic aspects of environmental issues (this REALLY sounds like planning to me)

In contrast to early youth programs, major national curriculum programs have come to recognize the importance of national and state standards. These standards are an every day reality of teaching in America and few teachers would take seriously educational materials that do not further the goals of the standards.

Charter Schools

[SLIDE: charter school]

Charter schools are a particularly fascinating, if at times precarious, development in architecture and city planning youth education movement. Started in 1988 the charter school movement expanded rapidly in the 1990s.

Freed from the strictures of public schools, charter schools often experimented with innovative curriculum. They would appear to present the ideal setting for the integration of architecture, preservation, and planning into the curriculum. Indeed, in 1993 the high School for the Physical City opened in New York. That same year in Los Angeles, the Open Charter Magnet elementary School opened with a focus on City Building Education. In 1999 the Charter High School for Architecture and Design opened in Philadelphia supported by the Philadelphia Chapter of AIA. In Milwaukee, planners from the University of Wisconsin are planning a charter School for Urban Planning and Architecture.

As wonderfully appealing as these schools have been to us in the professions, a number of them have had difficulties. The mission to serve students with special academic needs coupled with the challenges of building curriculum around the theme of the city or architecture proved daunting. By 2007, the School for the Physical City had a graduation rate of 40% and a

curriculum that proved unattractive to many students. It is no longer accepting new students and will close in 2011.

The Internet and Web-based Technology

And what of the impact of computers and the Internet? This area is growing and is complex enough to warrant a separate Hyde lecture.

[SLIDE: ResourceZine, A + DEN]

Technology, of course, has revolutionized our lives, our work, and education. Today, a vast array of lesson plans, curriculum, books, and learning activities are available on the web.

A most useful service is the websites that serve as resource centers. APA's ResourcesZine is both a searchable database of articles, lesson plans, book reviews, and events and has an electronic publication connected to the site.

The Architectural Foundation and the Chicago Architecture Foundation teamed up to create A + DEN. In addition to its website of resources, A + DEN hosted a 2006 conference for design educators.

[SLIDE: National Design Museum]

The National Design Museum, Cooper Hewitt hosts the Educator Resource Center, a well designed and easily-to-use site for locating lesson plans that are evaluated by users.

Many organizations have created websites for children, often with a pedantic purpose.

[SLIDE: K&C, Zoom]

APA's site is Kids and Community and the American Society of Civil Engineers hosts Zoom, to name just two.

Of course the granddaddy of all computer-based programs is SimCity and its many offspring. The program remains not only popular, but almost unique in the world of gaming.

So too, I should mention the rich materials available on Geographical Information Systems from ESRI and while I did not investigate this area, I understand that CADD software developers have also created school versions of their programs.

New programs such as Google Earth and Sketch-up as well as the many forms of visioning software are also being put to good use by educators and young people.

Back to England

[SLIDE: Archaeological Resource Center]

As a last stop on this tour, I want to return to England. What is so impressive to me is how the various interested parties work together to provide heritage, architecture, and planning education to young people. This is possible in part because of national standards, but perhaps it is aided by some sort of consensus on their history.

While in York, I visited the Jorvik Viking Centre and archaeological museum and discovered that its interpretation links to that of the city museum. The city museum connected to the Foundations museum under the cathedral, York Minster. And, all of them linked to learning programs at the Archaeological Resource Center. Visiting one site after another, you experience a continuous thread of interpretation and cross reference. The ARC was, by the way, the first time I'd seen interactive computer learning for young people.

[SLIDE: Brighton, Ingham Mote]

Many historic properties in the UK publish children's learning materials. Some quite simple, such as this activity book for Brighton Pavilion, and others are a complete curriculum on Tudor life, at Ingham Mote.

[SLIDE: Kids in Royal Tunbridge Wells]

In June at the end of school term, children mass upon historic town centers and sites to explore the history and design of their community. It is a kind of national history exploration day.

[SLIDE: Planning Aid]

The national government through Planning Aid provides grants to communities to involve young people in planning. In this example I toured on the Isle of Sheppy, children prepared the base map for the community plan and participated in the development of new planning strategies.

Although I did not go to England to specially explore youth education, it was all around me and supported by wonderful training materials.

Where are We Today?

[SLIDE: We are all city planners]

We have now arrived at 2007. It is time to ask is there some larger framework that has emerged for this many, many disparate and individual activities? Is this talk merely a catalog? Are we like the well intentioned and hard working creators of the School for the Physical City a collection of enthusiasts hell bent on creating our own unique programs that we will keep alive as long as we are able?

Over these past 20 years, I do see several patterns and even lessons that we have learned.

1. There is a lot going on. Even as older programs have faded, new ones are cropping up.
2. There is wide array of choices for how you do this.
3. Most critically, we have learned to work with teachers and educators.
4. Not all projects and ideas have to be hugely ambitious. Doing something, at whatever scale still has value. And may convert that one child to planning or architecture.
5. Many programs have used the design process as a backbone for their education program. I think this is a good backbone and serves many programs well.
6. Good education does not have to take place only in schools. Many museums and after school programs provide good education and sustained programs.

7. A + DEN attempt to create ongoing conferences or workshops will be very helpful in linking educators, professionals, and teachers. I hope this continues.
8. It can be very challenging, but also enormously rewarding.

So, go forth, expose the young to architecture, educate them to city planning, and propagandize about the value of historic preservation.