

Judy L. Hayward

Certification in Preservation Skills and Technology

The Preservation Institute, a division of Historic Windsor, Inc., (PI/HWI) has offered continuing education for building professionals since 1982. Two years ago, after several years of study and searching for an academic partner, PI launched, in cooperation with the Norwich University Division of Architecture and Art, a program of study leading to a Certificate in Preservation Skills and Technology. This article reviews the Preservation Institute's experience with training, the process that led to the creation of the Certificate Program, and an overview of the curriculum as developed thus far.

A Brief History

PI has employed four methods to teach preservation skills: slide/lecture programs in classroom settings; demonstrations and hands-on work in vocational school classrooms or privately owned studios; field trips to historic sites; and on-site, hands-on training at historic properties in non profit or public ownership. One or more instructors with demonstrated skills in the workshop subjects are employed on a contractual basis

to teach. Team teaching has proven to be very effective when offering one to four day programs on narrowly defined topics. Eight to thirty-two hours of training in a few days is very demanding for two or more instructors, let alone one. Team teaching permits a low teacher-to-student ratio and is virtually essential when more than eight students enroll in hands-on training programs on site. Enrollment in on-site programs never exceeds 15 people. Classroom programs could enroll up to 25 people theoretically, but average from 10-15 students per program.

Specialization in the building trades is the norm today. Graduates go on to careers in carpentry, masonry, plumbing, and electricity. Preservationists need familiarity and expertise in a number of areas. The object of their work has already been built; it is an interconnected system created by separate trades at an earlier date, but in need of repair by professionals who understand the value in, the problems of, and solutions for the care of historic properties now. In 1986, the National Park Service developed a Skills Development Plan for Historical Architects. The list of selected skills needed by historical architects outlined in that Plan addresses the same skills and understanding of materials needed by tradespeople working on historic buildings including the following: wood, masonry, paint, landscapes, moldings, foundations, structural systems, wall cladding, roofing, windows, flooring, mortar and repointing, plaster, stucco, mechanical and electrical systems, fire protection, and maintenance systems. Since the publication of the Plan, the following new subjects could be added: photography and documentation process, health and safety, access to historic properties for persons with disabilities, archeology, and computer applications for research, Internet, and project management.

PI has had success in developing educational programs for many of the skills and systems outlined in the preceding paragraph. Initially, educational programs were offered in classroom settings emphasizing slides, lectures, and demonstrations or contrived hands on training—building a brick wall with a historic mortar formula instead of repointing one, for example. The next step in training involved taking adult students

Jan Lewandoski points to some cracks in a fireplace during a workshop titled, Structural Evaluation and Repair. This workshop was presented with grant support from the NPS National Center for Preservation Technology and Training in Natchitoches, Louisiana in 1996.





Sculptor and ornamental plasterer David Flaharty instructs students in casting and mold making during an on-site session of Ornamental Plaster Repair.

Students practice making a simple medallion during an Ornamental Plaster workshop.

on field trips—visits to attics and basements of historic buildings instead of mainstream historical tours of rooms. Training in identification of architectural styles and in investigation of changes in building construction practice moved from slides and lectures to homes, commercial structures, and institutional buildings throughout Vermont and New Hampshire. On-site training was the next step. PI partnered with other nonprofit organizations or the State of

Vermont to offer training in skills on-the-job at no cost to the host site. Not only did the students have the best possible environment in which to learn, they became invested in the preservation of the buildings on which they worked. Completion of projects was found to be crucial to the success of this type of training; the students must leave knowing they have helped to save a structure.

Slide and lecture programs and field trips are relatively inexpensive. They inspire and offer essential information prior to on-site and hands-on training. They have become part of all on-site programs. All on-site programs are preceded by a tour of the Site to place the students' work in context. On-site training is costly. More hours to train, materials, insurance, food expenses, and logistics drive up the per student cost; nevertheless, it is the best way to learn and practice preservation skills. The only disadvantage with on-site training is that if a student needs to practice a specific skill such as troweling plaster for example, there may not be enough time to hone those skills, if a project must be completed within the workshop's time limitations.

Development of the Program

Historic Windsor, Inc., commissioned Craig Dreezen, director of the University of Massachusetts Arts Extension Service, to supervise a study of the feasibility of a certificate program in preservation skills. Dr. Dreezen, a former boat builder, had developed a similar certificate program in Arts Management at the University of Massachusetts. Dr. Dreezen worked with the board and staff of HWI to outline how the certificate program could be organized and administered. He developed a survey and 500 former PI

students were invited to participate. Forty percent of the students responded to the survey. The most significant information gained included:

- Students would enroll in a certificate program because they believed it would make them more competitive in bidding or lead to advancement in the workplace.
- It was important for the credibility of PI to be associated with a recognized college, university, or trades school.
- College credit was of less interest to most students than increasing their knowledge of preservation philosophy and skills associated with the care and repair of buildings. Many of PI's existing students have attended or graduated from college. Graduate credit was of significant interest to vocational building trades teachers.

A number of conversations were held with faculty at several colleges in Northern New England about partnering on this program. Ultimately, it was the fact that three active members of Historic Windsor, Inc., had undertaken graduate and undergraduate study through Vermont College at Norwich University that led to



the partnership with the Division of Architecture and Art, the only NAAB accredited program in Maine, New Hampshire, or Vermont. Its five-year program of study leads to a bachelor of architecture degree. Norwich University has earned a distinguished reputation in many areas; limited residency, adult education being one. One of HWI's board members (an alumnus of Vermont College at Norwich University) wrote to Vice President Richard Hansen of Norwich about the concept of the Certificate Program who shared the information with the faculty. Professor Sharon Carter Matthews, Chair of the Division of Architecture and Art, began discussions with HWI Executive Director Judy Hayward in December 1994.

Partnership with School of Architecture

Matthews and Hayward came to agreement quite quickly that such a partnership was not only

feasible but desirable. The conflict that arises on job sites due to lack of respect and understanding for the roles and skills that architects, contractors, and tradespeople play is a costly problem for owners and for those working in preservation. The Institute could address this problem by placing architecture students and architects in workshops along side tradespeople. Matthews and Hayward agreed that a certain number of Norwich University students would be admitted to the program in trade for use of the facilities. Other Vermont-based, construction and design education programs had contacted the Division of Architecture and Art about partnerships at the same time Hayward and Matthews were in negotiations. While these partnerships are in their infancy, they have laid the ground work for a trades education program that welcomes architects, architecture students, other design professionals, and community planners to learn side by side. The theory is that if design professionals and tradespeople enjoy learning together they will work more cooperatively together.

Hayward drafted the curriculum for the Certificate Program and the architecture faculty reviewed it and made suggestions. The curriculum was reviewed by Dr. Dreezen and by preservation craftspeople as well. A simple contract was developed and approved by the administration of Norwich University and Historic Windsor's Board of Directors and signed in early 1996. The L. J. and Mary C. Skaggs Foundation funded the development of the partnership.

The Curriculum

The objective of this program of study is to provide continuing education for building professionals in the field of historic preservation leading to a certification of the participants' completion of eight required courses, five electives, and a community service preservation project.

The following eight courses offer students the required information and skills that should be shared between tradespeople and related building professionals employed on historic preservation projects: Preservation Philosophy; American Building Design and Technology; Structural Evaluation: Timber Frame; Structural Evaluation: Masonry; Historic Plaster Repair; Paint: History and Practice; The Business Side of Preservation; and Health and Safety for Preservation Professionals.

Thirty-one electives have been identified from previously offered PI workshops or potential new workshops from which students may choose to enroll. Each year four or five of the required workshops are offered with up to ten electives. If students wish to design an independent study, that option is permitted as well.

The Certificate Program is designed for building professionals including tradespeople, contractors, architects, building trades teachers, engineers, specification writers, and interior design professionals. At least one or two years of professional experience is required for admission. Homeowners and interested lay people may be admitted if they can demonstrate their knowledge of and skills in construction. Students are graded pass/fail, and in order to complete the Certificate Program, they must design and implement a Community Service Project for a non profit or government owned historic site under the supervision of a mentor approved by the Preservation Institute. The historic site covers the cost of materials; PI doesn't charge tuition, but the student pays the mentor a modest honorarium of \$250. Fifteen students enrolled in the Certificate Program in 1996; the first community service projects will begin in late 1997 or early 1998. The purpose of the Community Service Project is two fold: to remind students that although they can earn a living by working on historic buildings, that volunteerism and philanthropy continue to be the backbone of historic preservation in the U.S.; and to demonstrate the knowledge and skills that they have acquired while being enrolled in the Certificate Program. Based on tuition and registration fees as of 1997, the program can be completed for approximately \$3,000 in a minimum of two years or up to five. Currently, the Certificate Program workshops do not have college credit, but it is anticipated that such an option might be available in the future.

The Certification Program presents an opportunity to recognize the efforts of tradespeople who pursue continuing education in historic preservation skills. The program equips them with the knowledge and skills to work with design and conservation professionals during work on historic properties. The partnership with the Norwich University Division of Architecture and Art permits tradespeople and architectural professionals to learn side by side about historic preservation and the role that each plays in executing sound preservation work. The students prove their proficiency by completing a community service project on a qualified historic site under the supervision of an approved mentor.

Judy L. Hayward is the Executive Director of The Preservation Institute, Historic Windsor, Inc.

Photos by the author.