

Cultural Heritage: Educating the Next Generation. Case Study Analysis of the Center of Preservation Research

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Abstract

University Centers combined with specialized degree programs may provide a framework for faculty and students to engage in traditional and applied research and hands-on learning across disciplines. This paper will present a case study of the Center of Preservation Research development and its connection to students in the Master of Science in Historic Preservation program to create an experiential learning model. The focus is on educating the next generation of preservation practitioners, fostering an understanding of the region's historic environments and cultural landscapes, and becoming a resource for addressing preservation needs throughout the American West. Emphases are on the organization's development, structure and administration, areas of research activities and funding, and examples of projects that emerged from regional needs, classroom pedagogy, and partnerships with a broad external constituency in the public and private sectors, creating a nexus for discourse around heritage and historic preservation.

Keywords: Cultural Heritage, Education, Experiential Learning

1. Introduction

Partnerships and collaboration between universities, public and private sector organizations, and local and regional communities represent a different type of association not typically found within academia. These relationships often develop as part of a program curriculum dedicated to experiential learning, whereby students learn by doing, or within the structure of a center that links research, teaching, and service-related components.

The value of this multi-pronged connection is the capacity created for students to engage in learning and research in response to a community's needs, acquiring knowledge through experience and guidance from experts as they prepare for their professional careers.

1.1. Center of Preservation Research

Between 2010 and 2020, Colorado was one of the fastest-growing states, with a population that grew at nearly twice the rest of the nation. Colorado saw almost 15% growth while the nation's population grew only 7.4%. Development along the urban Front Range grew faster than the national average, while the state's population more than doubled in the past 40 years, with much of that growth occurring between 1990 and 2000.¹

The impetus for the Center of Preservation Research (CoPR), pronounced 'copper' and referred to as the "Center" hereafter) was to direct the momentum from a multidisciplinary faculty involved in teaching and researching communities challenged by this type of population growth and development pressures.

¹ Colorado State Demographer, U.S. Census Bureau.

Faculty taught courses on architecture, landscape architecture, historic preservation, public history, archeology, museum studies, and geography using experiential models. The research and teaching explored the effect of urban infill on the adaptive reuse of existing buildings, the demolition of designed landscapes, the impact of suburban development on agricultural lands in creating sprawl, the loss of rural working landscapes and small-town communities, and the negative impact of tourism on natural and historical sites.

The Center would also create a mechanism for connecting the interests of the faculty with the needs of external agencies such as the National Park Service and other federal agencies, the State Historical Fund, or professionals in the private sector.

The Center was initially approved under the name the Colorado Center for Preservation Research (CCPR) in 2004 as an outcome of existing faculty-centered research and teaching, focusing on heritage and the impact on the surrounding areas experiencing accelerated growth in the region. Existing courses taught in the College of Architecture and Planning (CAP) were combined with existing courses in the College of Liberal Arts and Sciences (CLAS) history department to create a Certificate in Historic Preservation (CHP) shared between CAP and CLAS. Recognizing the students' need and interest in developing a deeper understanding of preservation and the region's opportunities, the faculty's role in CCPR was reimagined through facilitated meetings to establish a new vision, mission, and name. The Center built on the foundation established by CCPR with a reenergized vision and direction, a new commitment among faculty, and a new name that broadened its reach beyond the state to the region and the American West. The Center's acronym conveys the historical significance of the relation to the landscape of Colorado. It directly denotes the influence of the Center on preservation and the region since it is quite literally in the "center" of preservation activities in the American West.

The Center's new mission was to be an interdisciplinary, collaborative, adaptable organization that investigated and participated in preserving the region's built environment, cultural landscapes, cultural heritage, and natural landscapes. As the interest and need for preservation education continued to grow, the Master of Science in Historic Preservation (MSHP) was created and approved by the university in 2010, aligning with the applied research in the Center. CAP housed and administered the degree exclusively, distinguishing it from other preservation programs typically found in history departments. The CHP was then administered solely through the history department. Students in both colleges participate in courses in both disciplines.

1.2 Strategic Initiatives

Heritage preservation in Colorado was and continues to be at a crucial point for embracing a change from the established building-oriented approach to exploring preservation at a large scale. The value is creating a broader understanding of cultural landscapes and the connection and interaction between built and natural environments as critical to a sustainable future.

The Center focuses on traditional and cutting-edge approaches to heritage preservation while shaping and advancing the discourse around the inherent value and challenges of protecting place and heritage. Through a series of facilitated meetings focused on developing the mission of the Center, the faculty identified two strategic perspectives for long-term planning—Regionalism(s) and Sustainable Preservation.

Regionalism(s) grew out of several critical ideas that responded to the region's preservation needs and influenced research and education in the Center. The concept articulated the importance of the geographic extent of the Center's research endeavors in the American West. The term Regionalism(s) suggests the significance of place, including the sense of identity that emerges from the specific cultural and social patterns, including the context of the built environment,

vernacular forms, and cultural landscapes tied to the authenticity of the place.

The idea of the region focuses attention on Colorado, the Rocky Mountain West, and the American West. The spine of the Continental Divide, extending upward from northern Montana to New Mexico, defines the Rocky Mountain West. The land and the mountains are as important a part of the region's narrative as its geography.

Appending the (s) to the term regionalism conveys the projects' geographic diversity and breadth. At the same time, emphasizing the Western United States, mainly through educational fieldwork and local preservation endeavors, the Center recognizes and celebrates projects that extend far beyond the borders of the Rocky Mountains and the American West.

Sustainable Preservation relates to the motivation to "build green" and has gained tremendous momentum with the ever-growing concern about preserving vernacular structures and cultural landscapes associated with sustainable environments. These challenges are particularly acute in Colorado, with some of the nation's most fragile natural environments and distinctive cultural landscapes.

Historic preservation and sustainable design increasingly engage the professional, academic, business, civic and public communities. The discourse, practice, and theory surrounding these models become more complex and should encourage debate and discussion, foster problem identification and resolution, test principles against an application, and present ideas, solutions, policies, and tools that can inform decisions in the field.

These strategic perspectives guide the development of research, projects, courses, and the pursuit of external funding resources. The two identified areas are broad enough to be engaging and encourage invention, yet definitive enough to be articulated to individuals and organizations outside of the university.

In addition to the two overarching strategic perspectives, the faculty developed three initiatives that further characterize the Center's research, practice, and educational focus. Those initiatives include the Built Environment, Layered Landscapes, and Education.

Built Environment

The emphasis is on preserving historic districts, neighborhoods, and vernacular environments, focusing on understanding the context and significance of a place for potential local, state, or national designation as a significant site, assessment, documentation, and planning projects, and designs directed toward adaptive reuse. Examples of the type of projects include pattern books for historic neighborhoods, Light Detection and Ranging Remote (LiDAR) scanning of historic structures and environments, adaptive reuse, and the creation of historical contexts.

Layered Landscape

The layered landscape was evocative of the increasing awareness and importance of cultural landscapes beyond the physical to include the interpretation of the past and present, including the full spectrum of the natural, manmade, and historical forces that altered the landscape. Examples of the type of projects include surveys of historic farms and ranches and LiDAR scanning of historic sites in the CANM, creating regional historical contexts.

Education

Using the State of Colorado and the region as a laboratory, the Center's areas of foci supporting the MSHP curriculum create a synergy for experiential learning through education, rethinking traditional approaches, and advancing innovative research. The Center has become a hub of preservation scholarship, education, and community engagement in Colorado and beyond. Examples of the courses include Regionalism(s) and the Vernacular, Documentation, Analysis, Representation, and Historic Buildings in Context.

2. Historic Preservation Education

There are several educational paths available to students in historic preservation careers. A traditional course may include enrollment in an undergraduate or graduate historic preservation degree program, certificate, or developing an area of emphasis with a degree not specific to historic preservation.

Approximately forty-five degree programs related to historic preservation exist nationally, almost a 50% increase in programs over the past decade. In addition, there has been a 40% increase in programs with research centers, for a total of eleven centers dedicated to historic preservation. The growth rate in the number of programs is a clear indicator of the importance of this area of study and an interest in research and experiential learning.

A survey of the historic preservation programs suggests that the most common graduate degrees are the Master of Science in Historic Preservation and the Master of Arts in Historic Preservation. Universities also offer degrees with specializations, concentrations, or areas of emphasis in historic preservation. For example, the University of Colorado offers the Master of Science in Historic Preservation. Colorado State University offers a Master of Science in Construction Management, emphasizing Historic Preservation. Both are public institutions. The Colorado Mountain College (CMC), a private institution, offers an Associate of Applied Science Degree in Historic Preservation. Only four west of the Mississippi River provide graduate degrees in Historic Preservation—Colorado, Texas, California, and Oregon of the nationally identified programs. Up until 2020, only three of the eleven research centers were located in the Western United States—two in Colorado and one in Texas—demonstrating the substantial opportunities available for the Center and the need to address historic preservation concerns in the region and the American West.

Another educational path is involvement in a university center that conducts fieldwork and research as its primary mission. The Center aims to become a resource where faculty, students, organizations, and communities come together to serve the preservation needs of the region.

In 2008, the state's historic preservation office had identified, surveyed, or documented less than 5% of the state's cultural resources, creating an opportunity for research and teaching. The state boasted the most significant preservation funding in the nation, raised from legalized gaming in designated historic towns. Although Colorado also hosted many private and public sector preservation organizations, there was a continuing need for professionals to address the state's preservation needs.

2.1 Learning Lab

The structure developed in the Center supported the organic growth of the Learning Lab model. The Learning Lab became a vital component of the MSHP and addressed and rectified several issues relating to the management, administration, and continuity of student-centered projects. Projects would often be started and explored in the classroom during a fifteen-week period ending in a wide variety of outcomes from the various students.

Projects started in the Learning Lab involve hands-on learning and applied research, a physical space for learning, fieldwork, and pedagogy that allows students to participate in real-world projects. Under faculty supervision, students engage in fieldwork and often continue in classroom activities. They initiate, research, develop, and complete the types of projects they will undertake as professionals. The benefits of the Learning Lab are:

- Engaging in hands-on experiential learning and interacting with historic preservation professionals and communities.

- Enhancing experiential learning through interaction with various preservation constituencies and applying problem-solving activities in multiple environments.
- A multidisciplinary and professional environment to participate in real-world preservation projects with faculty, professionals, and communities.

The projects in the Center focus on three key areas: Assessment, Documentation, and Survey.

Assessment

The Center's assessment projects focus on classifying existing conditions, recommending treatment approaches and options, and analyzing potential reuse opportunities for historic buildings and structures throughout the region by producing detailed written and photographic reports. The goal of assessment is to understand the building's condition before any physical intervention takes place. Examples of the types of assessment projects undertaken include evaluating the structural integrity of a one-room schoolhouse, developing a Historic Structures Assessment for a 1917 historic grain elevator and agricultural warehouse, and evaluating the transition of the granary into a community gathering space to connect back to each other and the land.

(Descriptions for assessment, documentation, and survey were developed for promotional materials to inform potential stakeholders)

Why Assessment?

- Any treatment of a historic building needs to begin with a building condition assessment; assessments are the first step in restoring or preserving historic structures.
- Creating a permanent record of a property's physical and historical characteristics enables appropriate choices when moving forward on a project.

- Obtaining information as a basis for planning, maintaining, and managing historic resources.
- Establishing priorities and costs for preservation, reconstruction, restoration, and rehabilitation approaches.
- Making a rapid evaluation of a structure after a natural or manmade disaster.
- Locating and assessing endangered resources and documenting their current conditions and immediate threats.
- Evaluating adaptive reuse or energy retrofit upgrade plans based on the Secretary of the Interior's Standards, raising public awareness of historic resources through outreach, and disseminating assessment findings for potential funding and rehabilitation.

Documentation

The Center's documentation program strives to preserve artifacts, structures, and cultural landscapes, using drawings and data captured with a wide range of tools and strategies. The accurate recording and research of these objects and places becomes critical to creating comprehensive documentation for scholars and the public. Increased awareness of the region and how places fit into a historical and spatial context are valuable outcomes of the documentation projects and research. Examples of projects include documenting significant cultural landscapes found in the Canyon of the Ancients National Monument (CANM), traditional fieldwork and hand measuring of historic ranch complexes, and LiDAR scanning used for complex and large landscapes. All approaches meet the requirements of the Historic Architecture Building Survey (HABS) and Historic Architecture Landscape Survey (HALS).²

² HABS is the Federal Government's oldest preservation program. Drawings are included in the nation's largest

archive housed at the Library of Congress and administered by the National Park Service.

Why Document?

- Creating a permanent and accurate record of a place, providing information for future scholars. To promote understanding of the technology employed and why a technology used is appropriate.
 - Recording threatened or endangered resources for future research and study.
 - Raising public awareness of historic resources through public dissemination of digital and non-digital interpretive materials.
 - Understanding artifacts, buildings, and cultural landscapes that help define communities.
 - Provide agencies with data for management plans, archiving, metadata strategies, and complete documentation processes.
 - Developing interpretive and heritage tourism goals based on documentation results.
 - Understanding the issues facing the creation of digital documentation standards and guidelines.
 - Training research associates, students, and volunteers on documentation strategies.
 - Educating and inspiring students and the public.
- Creating a permanent record of a property's, community's, or region's physical and historical characteristics provides valuable information for future scholars.
 - As a basis for planning, identifying the properties that contribute to a community's character or illustrate its historical and architectural development by providing the data needed to make informed decisions about managing these resources.
 - Establishing priorities for conservation, restoration, and rehabilitation.
 - Identifying buildings of a particular type, style, or period.
 - Locating threatened or endangered resources.
 - Identifying buildings or landscapes eligible for historic designation on a local, state, or national level.
 - Raising public awareness of historic resources through survey outreach.
 - Educating through the incorporation of survey data into interpretive plans.

Survey

The Center's survey program focused on identifying, researching, recording, evaluating, designing, and interpreting the historic buildings and landscapes of the region by producing detailed written and photographic records. The goal was to foster an increased understanding and awareness of the built environment.

Why Survey?

- Understanding the buildings and landscapes of a community, county, or region by identifying defining historical, cultural, aesthetic, and visual characteristics.

3. Opportunities and Challenges

In the Center, students conduct historic preservation research projects and learn about heritage in the field. The projects would not be possible without the students; the students would not have the opportunities available through experiential learning without access to the projects, and the communities and agencies benefit from the outcome. The following describes the type of projects developed in the Center:

Traditional Historic Preservation

Traditional preservation projects are conducted at the Center for a specific end-user or organization for an agreed-upon fee. They include documentation, survey, assessment, nominations, and context studies that require the provision of a clear deliverable and agreed-upon date. The process parallels the expectations encountered when

working in the profession. In the Center, projects involve a faculty member as Principal Investigator (PI) who supervises paid students in conducting and completing the project. These projects have often developed initially through a course in which the students receive grades and credit for the initial work completed.

Opportunities—These types of projects educate students in basic preservation skills. Students who work in the Center are paid for the work completed; internship opportunities in the profession often emerge for individual students.

Challenges—Quality control issues associated with an inexperienced student workforce are challenging, often requiring unanticipated corrections and revisions by the PI beyond the project's original scope. The additional effort often results in more significant resource expenditure than initially budgeted. Timing also can be problematic when projects begin or run through the summer when fewer students are available.

Design, Planning, and Building

Although these projects are also conducted for an end-user or organization and include a documentation phase, they go beyond the detailed reports related to traditional historic preservation and differ in overall objectives and deliverables. These projects consist of preservation master plans, pattern books, feasibility studies, and conceptual design that often involve courses such as seminars and studio classes.

Opportunities—Critical to the success of such projects is the need for the project to align with the design and research interests of the faculty member/PI since their experience and ongoing involvement are significant. These projects substantially benefit students in their real-world application and serve as a form of community outreach.

Challenges—The challenges and disadvantages discussed in the previous section also pertain to these projects. Their scope often lasts well beyond the scope of a semester.

Applied, Leading-Edge Research

Applied research encompasses academic research to solve problems, advance technology, and contribute to professional practice. There is the opportunity to join theory and practice and advance new technologies. This type of research in historic preservation is valuable in university preservation research centers.

Opportunities—Applied research provides an exciting opportunity to achieve prominence and distinction, opening avenues to new funding sources.

Challenges—This type of research represents a much greater and more ambitious mandate and requires substantial funding to stay relevant in the use of cutting-edge technology.

Traditional Academic Scholarship

Academic research is a central component of the Center's mission and vision. Traditional academic research enables faculty to explore emerging practices, issues, and significant trends in historic preservation practice and theory. Faculty and research associates present research findings through papers at academic and preservation conferences with the intent to broaden the research or develop journal articles.

Opportunities—Traditional research is critical in creating visibility and academic credentials. These research endeavors provide a substantial opportunity to develop an essential presence in the heritage and preservation communities and discourse. A considerable amount of data was collected by teams for projects throughout the years that will inform future research and publication.

Challenges—The challenges with traditional research are based on the time required to develop a meaningful article while also being committed to fieldwork, timelines, and managing data. One disadvantage of this type of research is that it is not a substantial source of funding nor a mechanism for curriculum delivery.

4. Conclusion

Research and historic preservation education at the Center has taken significant strides forward during its existence. The Center (2008) and the Master of Science in Historic Preservation (MSHP (2010) focus on addressing Colorado's preservation needs and educating the next generation of preservation professionals.

The Center's Learning Lab serves a greater educational mission by delivering classes comprising the historic preservation curriculum and focuses on research and pedagogy, experiential learning, and mentoring for student success. The Center's Learning Lab serves as a catalyst and a forum for dialogue about cultural heritage and historic preservation.

The Center has completed approximately \$1.5 million in funded projects over the past decade and employed thirty-five graduate students. The project outcomes include thirty projects focused on the documentation of built environments and cultural landscapes; fifteen projects focused on surveys of individual structures, neighborhoods, and main streets, and nominations for individual structures, complexes of buildings, and entire landscapes; four Historic Structure Assessment projects that evaluate the condition of buildings for preservation planning; and two projects focused on education including the development of the Master of Science in Historic Preservation program and a study evaluating Colorado's preservation educational needs. In pursuing its mission, the Center is:

- Engaging a broad constituency including faculty and students; the greater academic environment; local, regional, and national government bodies; the preservation and professional communities; and the general public.
- Enhancing the understanding and appreciation of culture by investigating material culture, cultural heritage, and cultural institutions.

- Advancing the research and discourses surrounding historical and cultural preservation by generating new knowledge and methodologies.
- Contributing to documenting and disseminating new historic and cultural preservation developments through education, publication, symposiums, and research sharing.
- Emphasizing the use and value of the history of the built environment as a resource in shaping the future.
- Celebrating the concept of "Regionalism(s)" in its work throughout Colorado, the Rocky Mountain region, across the United States, and beyond.
- and inspiring appreciation of place as a source of identity, value, and belonging.

The Center serves the students' education and the region's preservation needs through a mutually beneficial partnership with stakeholders. The Center develops a strong connection with the public and private sectors, preservation professions, design professions, and surrounding communities. Over the past decade, work produced at the Center has been recognized, and a reputation built in documentation, cultural resource management, and interpretation. The efforts have contributed to the significant historic preservation body of knowledge and discourse, locally, nationally, and internationally.

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