The original drawings give a better understanding of the architect’s intent because they were hand drawn. There is no misunderstanding Matsumoto because he is so thorough. It could have been possible for us to recreate everything without photos because the drawings are so well detailed. -Kelsey Mocock, M. Arch.

The SCRC provided the class with high-resolution images of the houses using online resources. The SCRC then hosted these images to the class for digital model building.

Early in the semester, ARC 251 students begin learning basic digital modeling applications. Concurrently, they study drawings and photographs of the assigned houses using online resources. The SCRC then hosts a session in which students are allowed to view the original drawings for their projects.

“arcs” digital representation
The use of case study examples from the SCRC’s in teaching digital drawing techniques introduces students to architectural archives, significant regional architectural history, time-honored construction techniques, and design strategies. These archival materials help to cultivate among students a critical understanding of how architectural representations have developed in the past few decades. The course establishes a practical framework for engaging primary source materials as effective learning tools for beginning design students.

The collaboration between the SCRC and the ARC 251 class came out of discussions with Professor David Hill about ways of bringing architectural archives into the classroom and connecting students and scholars with digital collections. The SCRC provided the class with high-resolution digital files for full sets of drawings of houses designed by George Matsumoto and James Fitzgibbon for the students to use as case studies for their digital model building.

In class, students produce a series of presentation boards that include rendered model views (both interior and exterior perspectives), two-dimensional plans and sections, and supplementary drawings. Finally, the Google SketchUp models and PDF files of the presentation boards are transferred to the SCRC and become part of the SCRC’s digital collections.

Since initiating the use of primary source materials in the course, students have expressed greater interest in historical examples of regionally significant architecture, and how they can build on this legacy.

In past years, ARC 251 students built house models based on the primary source materials: the primary source materials have transformed the project objectives and outcomes. The thoroughness, completeness, and clarity of the design/idea definition has ensured that the drawings and models do not become self-referential representations, but rather tools for understanding complex architectural concepts.  

The field of special collections is ripe for future study. Some questions to effectively support studio and design education is the topic of how special collections can more broadly be used.

The primary users of archival and special collections are professional researchers. The SCRC may have collections that are not being fully used.

Working in groups, students build digital models using the scanned construction drawings as digital underlays. Students focus their research and analysis on one house in order to develop an intimate knowledge of its historical and physical context, structural and material evidence (floor plans, details, etc.). Ultimately, students produce a series of presentation boards that include rendered model views (both interior and exterior perspectives), two-dimensional plans and sections, and supplementary drawings.

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The process of replicating his design in SketchUp allowed us as students to more completely understand the design, perhaps even his design process. -Kelsey Mocock, M. Arch.