The Pedagogical Practice of Locative Experiences
Ann Morrison  Lorna Macdonald  Ian MacColl  Matthew Simpson
Information Environments Program
School of ITEE, University of Queensland

Abstract:
We work collectively with varied locative-type projects and look to integrate our students into contemporary experience design culture. Students experience the 'how and what' of locative by becoming participant users, being exposed to contemporary works, and placing themselves in the role of the designer producing their own located works.

Keywords:
Locative, located, place, orientation, studio, interactive, physical computing, experience-learning, site-specific, experience-design

Studio4 Locative Physical Interactive Environments Course

Multimedia Studio 4 is a project-run studio course for 2nd year students that implements a focus on locative computing and physical computing interactive environments. For the purposes of this course we use the term locative to include meanings of place, site-specific, placed, and located, as well as works using locative technologies. These projects advance our teaching methods in moving location and interaction firmly into our students' pedagogical experience, both as a learning process, and also as the subject of their project work. Students are introduced to the locative arena via playing a campus location-based game (o week), a localised GPS game, visiting a games arcade, and playing with dance mats and iToys to become participant users. They then move into the design role and study the campus as a site to house their own locative interactive experiences. In order to do this successfully the students need to negotiate the campus's management, history, current use, environment and audience, including skill-sets and available technologies. Working in teams, students build on combinations of the themes of the brief -- community, locative and/or wow -- to design and construct physical people-sized interaction spaces.

As background material and to inform their direction and decision-making processes, students are shown contemporary case studies of works that emphasize interaction as play, locative projects, and site-specific, installation and interactive environments. They blog responses to this work, analysing why some works appeal and others not, as well as keeping track of their weekly process. A lot of the team work is handled via group blogs, instant messaging and weekly face-to-face meetings, emulating hybrid locative team processes. The design problems the students encounter in the implementation of their projects include reworking interaction in a familiar space for unfamiliar participants; problem-solving locative technologies; shifting from implementation of small prototypes to larger-scale installation works; and constructing successful physical computing environments. The studio supports this progression with skill sessions in building physical sensors and inputs; electronics and wiring; hacking existing technologies for alternative uses; hand–tools, joins and construction; and code support. Successful site-specific works were produced and converts to working within a locative context were spawned.

Oweek Experience Example:
The Oweek experience relies on experiential learning to promote greater retention of program-specific orientation information. Information not suited to task-based distribution is compiled into a set of cards that students can use for future reference. The experience begins with an IT session that introduces students to computer logsins, university email and newsgroups, and procedures for reporting IT problems. Student mobile phone numbers are gathered through this process and used for communication with teams for the remainder of the experience. Students are then SMS’ed instructions to find and form teams at particular spaces around the building. Once formed and acknowledged, teams are sent a set of keywords that they need to locate and borrow an item from the library. The instructions found in this item, a DVD case, send students to the program’s main building to locate first year staff offices. Here they match photo’s on ‘staff cards’ to photo’s on office doors. Stickers with staff details are retrieved to fill-in the blanks on the ‘staff cards’, which can be taken away at the end of the day. When completed, students submit a spare card to the program office where, following the procedure for borrowing equipment, they ‘borrow’ their next task.

This ‘Journey Task’ uses a series of photos of landmarks and symbols to navigate teams to particular locations on campus; there are 4 different paths each involving a walk of about 400m. Teams SMS the ‘magic word’ found at the destination and, if correct, are recalled to the program building for a final exercise in rapid design.

As an introduction to first semester classes and a finale for the experience, ‘The Great Egg Challenge’ requires teams, in a limited time and with limited materials, to design a housing for an egg that will protect it from breaking when dropped from a height.

Contact
http://www.itee.uq.edu.au/~ow
ow@itee.uq.edu.au

Ann Morrison
morrison@itee.uq.edu.au
Ann Morrison lectures studio process, physical computing interactive environments and information visualisation within The Information Environments Program, School of ITEE, at The University of Queensland. Morrison is an installation and new media artist, currently working with alt reality and locative projects, writing and constructing a context containment interactive environment.
http://www.itee.uq.edu.au/ [~morrison/]

Lorna Macdonald
lorna@itee.uq.edu.au
Recently graduated from Information Environments, and with a background in Product and 3D design, Lorna is currently working on her PhD. The design of the Oweek experience provided a starting point for her research concerning frameworks for the design and development of location-dependent games and experiences.
http://www.itee.uq.edu.au/ [~lorna/]

Ian MacColl
ianm@itee.uq.edu.au
Escaping a previous career as a lighting designer and production manager, Ian MacColl teaches and researches in the overlap between social and technical aspects of IT in the Information Environments Program, School of ITEE, at The University of Queensland, with an emphasis on mobile, distributed and pervasive computing in non-traditional contexts.
http://www.itee.uq.edu.au/
Matthew Simpson
matts@itee.uq.edu.au
Matthew Simpson lectures information technology, graphic design and studio process within The Information Environments Program, School of ITEE, at The University of Queensland. Simpson is a designer in interaction, web and usability with a background in architecture, currently lecturing in information technology and design who is currently researching in collaborative design and locative experiences.
http://www.itee.uq.edu.au/~uqmatsim/