ActiveCampus – Experiments in Community-Oriented Ubiquitous Computing

Presented by Mary Salinas

What did they do?

- Created two software components: ActiveClass and ActiveCampus.
- Distributed HP Journada Pocket PC PDAs to 3 classes and 300 freshmen to use with software.
- Encouraged students to use them to interact with instructor and students in class.
- Encouraged students to use them in informal interactions with each other.

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Why did they do it?

- Wanted to study use of handhelds in a way that would enrich the experience of college life.

- Answer questions about what sort of applications, infrastructure and interfaces would make handhelds fulfill promise.

- Using technology that would provide value from fellow users

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Implementation

- Client/server model with server including a web server with MySQL and PHP.

- Applications served with HTML

- SOAP RPC calls handle location detection and reporting.

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ActiveClass Functionality

- Could ask a question

- Questions could be answered by others

- Questions could be voted on to encourage professor attention

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ActiveClass

- Designed for use in large class where often students do not interact much with professor.

- Acted as a "virtual student".

- Identity of student is hidden from other students but is available to professor of the class.

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ActiveClass Results

- 1/3 of students used it regularly. Majority did not.

- Professor felt it was a success and would use again.

- Students found it hard to use phones in addition to taking notes.

- Students frequently answered each others questions.

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ActiveCampus Views

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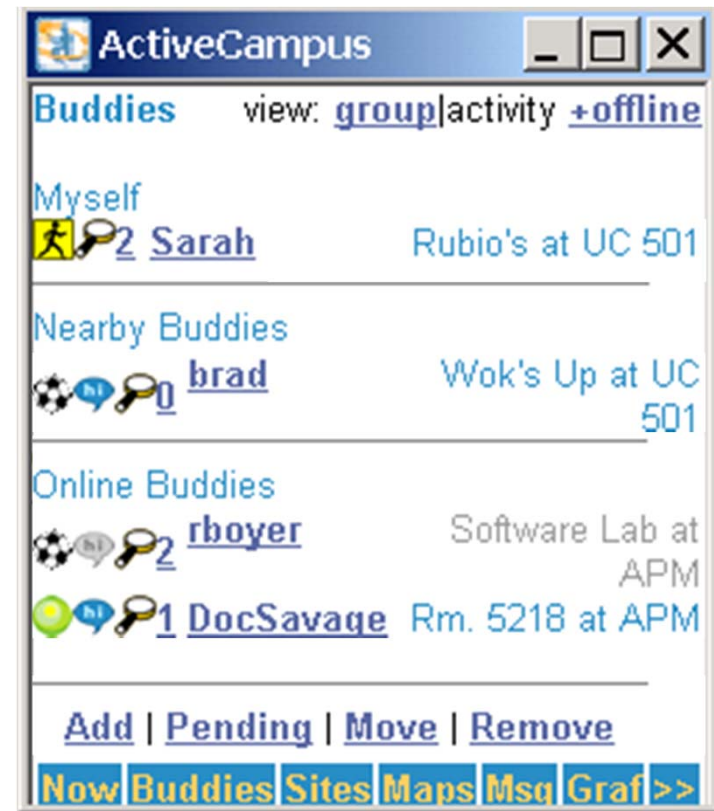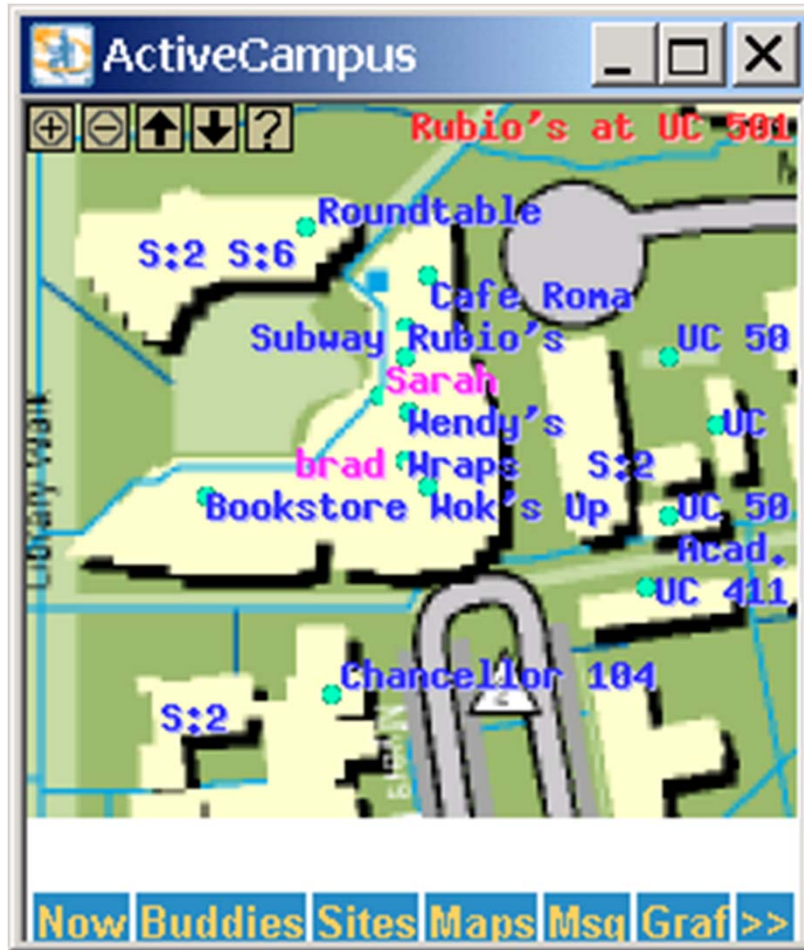
ActiveCampus Functionality

- Main screen includes showing location, activities and Buddies on map.

- Buddies list is organized by proximity to user with location displayed.

- Other pages show list of locations, list of graffiti, and can do actions to them.

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ActiveCampus Limitations

- Limited PDA battery life and constant use model was serious limitation.

- Graffiti was not displayed on maps and thus not obvious.

- Users had difficulty keeping phones where they could be used. Women's clothing does not provide pockets for storage.
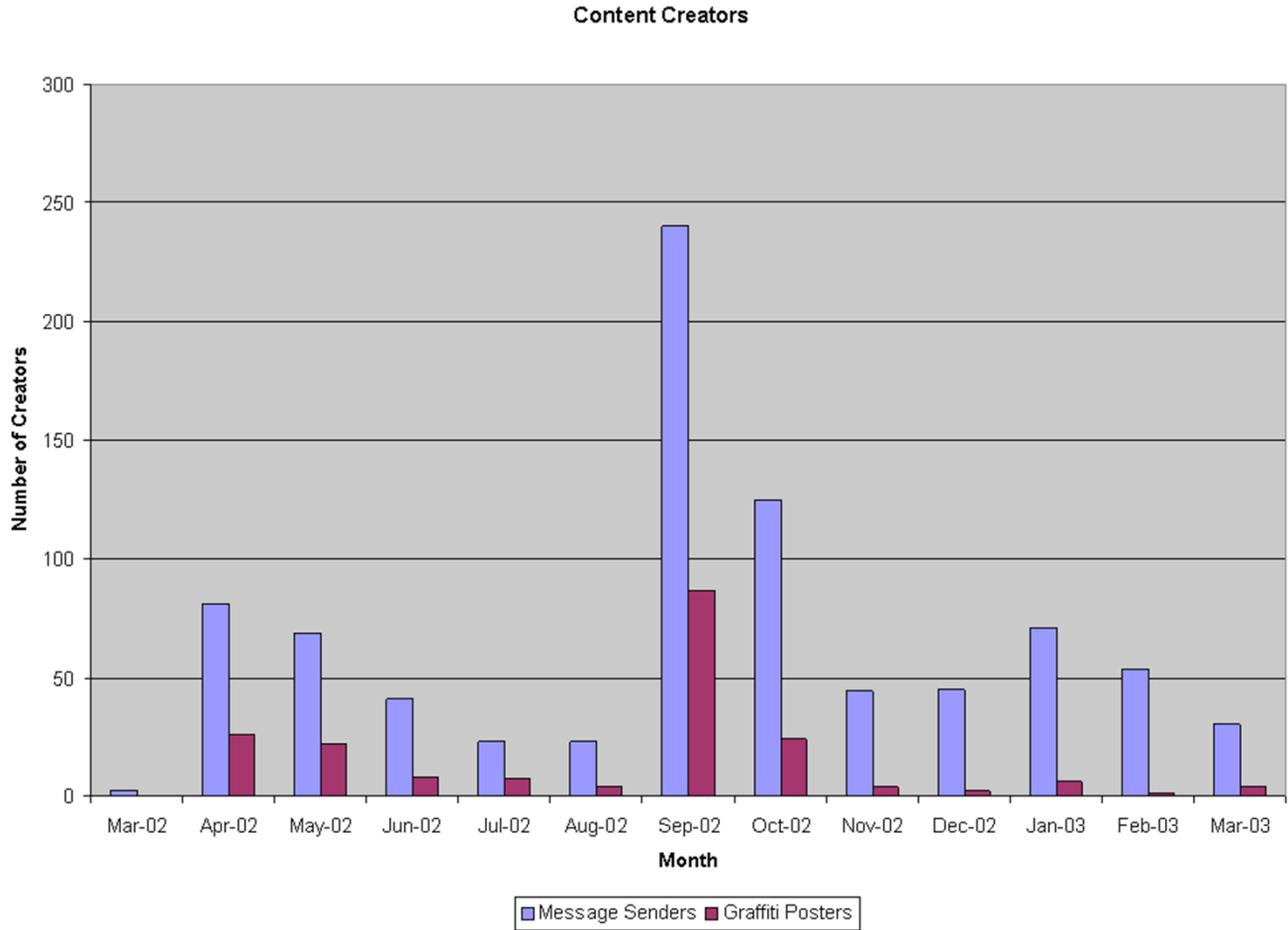
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ActiveCampus Postive Results

- Users did seem to use it more frequently for people nearby.

- People did not seem concerned about their location and only 1% hid it completely. 8.2% revealed location to non-buddies.

- Suggested that relative location might be very useful.

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ActiveCampus – Participation over Time

Content Creators

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What has happened since then?

- Two separate areas really. One is location-awareness and social applications.

- Foursquare (2009) and other location-aware applications exist now.

- Also follow-up work in many places on improving classroom interactions

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Other work in classroom environment?

2007 - Exploring the Potential of Mobile Phones for Active Learning in the Classroom
http://cseweb.ucsd.edu/users/wgg/Abstracts/fp142-lindquist.pdf

Discusses SMS, MMS interaction in class as well as tablets. Too costly for many

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Any Questions?

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