

# CAERUS

## Context Aware Educational Resource System

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### Overview

CAERUS is a complete context aware software system for visitors to outdoor tourist sites and educational centres. Consisting of a handheld delivery system and a desktop administration system, CAERUS provides tools to add new maps, define regions of interest, add themed multimedia tours, and deliver this information to Pocket PC devices with GPS capability.

### Benefits to Educational Technology Research

CAERUS uses GPS-enabled mobile technology to provide personalised learning opportunities in an authentic context.

- Information is location-based and is delivered automatically when the learner enters a region of interest.
- The handheld application's push-button interface allows learners to concentrate on their environment and not on the mobile device.
- The easy to use desktop application allows administrators to easily design and administer multiple educational scenarios.

### Benefits to Microsoft

- Provides a compelling application for the Pocket PC platform that has already attracted interest from the education and tourism industries.
- Exclusive use of the .NET Framework and Compact Framework for application development.
- Demonstrates the use of XML files as a means of transferring settings and data between desktop and handheld applications.

### Availability

A full featured 30-day evaluation version is available for download from [www.caerus.bham.ac.uk](http://www.caerus.bham.ac.uk).

### Research Publications

Naismith, L., Sharples, M. & Ting, J. (in preparation). Evaluation of CAERUS: A Context Aware Mobile Guide. Accepted to mLearn 2005 - Mobile technology: The future of learning in your hands, Cape Town, South Africa.

Naismith, L., Ting, J. & Sharples, M. (2005). CAERUS: A context aware educational resource system for outdoor sites. CAL '05 – Virtual Learning? University of Bristol, UK.

Naismith, L. & Smith, P. (2004). Context-Sensitive Information Delivery to Visitors in a Botanic Garden. ED-MEDIA World Conference on Educational Multimedia, Hypermedia and Telecommunications 2004(1), 5525-5530.

**Additional Publicity**

- Education Guardian Article: [Flowering technology](#), 24 November 2004
- NESTA Viewpoint Article: [Interacting with nature](#), October 2004
- University of Birmingham Press Release: [Guide on the Go](#), 15 September 2004