Yorkshire Coast College: Geocaching – You are the Search Engine

Summary

Yorkshire Coast College needed a team building and location awareness activity. They wanted to use more technology and raise awareness of unusual applications. The College developed activities around geocaching (using a GPS device to search for items) and mobile devices to use with teaching and management teams, students and external groups.

The result was the development of activities that supports individuals with kinaesthetic learning preferences and also the development of transferrable core and social skills by learners.

About Yorkshire Coast College – part of The Grimsby Institute Group

The Grimsby institute Group (GIG) is one of the East Coast's largest providers of Further and Higher education. The group comprises of the Grimsby Institute, University Centre Grimsby (UCG), and Yorkshire Coast College (YCC) in Scarborough and Lincolnshire Regional College in Skegness. Serving the community and surrounding region, YCC are one of the main providers of vocational training in the region, operating out of two campuses.

The challenge

The College wanted to develop team-building activities for both internal and external use. They sought to increase bonding amongst staff and increase understanding of emerging technologies based on traditional ‘navigational’...
and ‘problem solving’ skills. The College was also asked to help groups of professional individuals new to the area develop a greater understanding and appreciation of their locality in order to increase the chance of their staying in the region and keeping skills in the area.

Additional motivations were to help individuals improve the general understanding of a range of different technologies and to support some of the learning needs and skills development of students on uniformed services courses.

**The activity**

Geocaching uses a GPS (Global Positioning System) satellite navigation system that provides exact location details and this is used to find hidden items in a container, “caches”. A geocaching website provides details of current caches and their location.

The technology needed to utilise geocaching has become more mainstream, as geocaching ‘apps’ are available for smartphones. Mick Mullane, Network Manager, says “geocaching adds contextualisation to the world around us, unlocking secret navigational skills.” Yorkshire Coast College identified that it could be used for a variety of different teaching, learning and supportive events.

One of the first trials with geocaching technology involved working with trainee GPs new to Scarborough, linked to their mentor scheme. Mick developed a trail that would involve individuals identifying and then locating caches at points of interest to help them learn about the area they have moved to. The hope is that individuals get to know more about where they are living and they will become ‘attached’ and are more likely to stay – for example, keeping new medical professionals in the area.

The College has used geocaching with uniformed services students to support skills development in relation to map reading, navigation and understanding distance, as well as wider social skills in relation to roles and responsibilities. They support each other to identify and find locations and ultimately the actual cache, which in some cases they will need to use detective and situational awareness skills too.

Mick says that they “added an element of competition to the activities by utilising SMS tools, through the inclusion of an SMS code ‘responder’ to text inside the cache which, when received back at the college, resulted in a time-stamped ‘locator’ to see who is winning.”

The following key steps are those used by Yorkshire Coast College when using geocaching:

[http://www.jiscrsc.ac.uk/case-studies](http://www.jiscrsc.ac.uk/case-studies)
• Register on the Geocaching website and/or download a geocaching app. Get participants to download relevant apps to their own mobile devices, if appropriate.
• Identify cache(s) to track and check they are still active (by exploring most recent ‘finds’).
• Put codes / SMS responders in caches (as close to the start of the event as possible).
• Save caches to mobile device(s) to reduce the need to remain connected to the internet – hints to find locations can be encrypted to provide additional skill development opportunities.
• Additional support and training is sometimes needed when individuals are not familiar with the technology or app they are using and the sort of data / responses they need to understand to use the technology to navigate to the correct place.
• Retrieve codes from the caches (as soon after the event as possible).

Mick notes that the activity of locating caches could still be used even if no mobile devices were available as the longitude/latitude can be “manually plotted on maps in advance or as part of the activity as an additional learning opportunity, or even simply printed as a map via Google.”

The outcomes

The following outcomes for participants have resulted from this project:
• Rediscovered ‘navigational’ and ‘detective’ skills
• More independence and familiarity with mobile devices
• Use of more inbuilt functionality of mobile devices
• Greater understanding and awareness of the local area
• Discovery of interesting and significant natural / geological and manmade landmarks

The impact

Mick reports that the impacts resulting from this project include:

• Learning activities that naturally support individuals with kinaesthetic learning preferences.
• Learning and Skills developing through ‘discovery’ linked to the theories of the “Hole in the Wall” projects founded by Dr. Sugata Mitra.
• Contextualised learning about the local area and environment that increases the depth of learning and improves the retention of knowledge through the connections made while navigating to and locating the actual cache.
• Improved chances that local professionals (new GPs) will stay, and therefore keep medical skills, in the area.

http://www.jiscrsc.ac.uk/case-studies
• Increased awareness of the use and application of technology, mobile devices and ‘apps’ by teachers and managers who have taken part in geocaching activities.

• Development of relevant and transferrable core and social skills by learners who have used geocaching to support their learning about navigation and working as a team – through a combination of ‘traditional’ and ‘new’ methods and techniques.

The lessons learned

Key factors to developing and running successful activities incorporating geocaching include:

• Finding relevant caches before setting it as a location to find.
• Checking that caches are still ‘active’ by looking at the last time someone logged that they had ‘found’ it.
• Accompanying individuals or groups as they navigate to find the first few caches, especially if they are not familiar with the technology they are using or they are new to navigating or following compass directions.
• Varying the type of ‘cache’ individuals will find (if possible) to increase the development of ‘discovery’, ‘situational and environmental awareness’ and ‘detective’ skills.
• Ensuring that the mobile device participants are using includes the required functionality – for example the iPad must be the 3G version which has GPS built in.

Mick Mullane concluded by saying that “using geocaching is a sustainable activity that is becoming easier to introduce and incorporate into activities due to the increased availability and ownership of smartphones and mobile devices and free geocaching apps, with relevant tracking and navigational functionality, by students, teachers and professionals.”

Yorkshire Coast College plan to develop the activities they use to include trails, based on short stories, that include clues to solve to find each cache (which has relevance to their learning) and then directs them to the next. Mick adds that “this type of activity could easily be devised around different subjects including history, geography, environmental awareness, architecture and design, for example, through the selection of appropriate caches and the accompanying clues and stories.”

Useful links

Yorkshire Coast College

http://www.jiscrsc.ac.uk/case-studies
Geocaching Association of Great Britain
Geocaching website
Hole in the Wall Learning (Dr. Sugata Mitra)

Disclaimer
Jisc Regional Support Centres work with more than 2,000 UK learning providers helping them to improve performance and efficiency through the use of technology. Case studies may refer to specific products, processes or services. Such references are examples and are not endorsements or recommendations and should not be used for product endorsement purposes.