Title of Project | KEATS Analytics  
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Project Leader | Dr Jonathan P. San Diego  
Lead Department | Dental Institute  
Other contributors/Departments | Dr. Ian Barrett, School of Arts and Humanities  
Dr. Stylianos Hatzipanagos, CTEL  
Dr. Ehsan Khan, School of Nursing & Midwifery  
Phillip Blake, School of Nursing & Midwifery  
Dr. Mary Webb, Social Science and Public Policy  
Dr. Andreas Konstantinidis, CTEL  
Tom Dore, Central Unit of Distance Learning  

PROJECT DETAILED  

**Outputs:** What has been produced thus far?  

The project has implemented its first prototype with six Feedback displays (see Annex 1), instead of implementing a single Feedback display we aimed for in the project proposal,. The six Feedback displays are about:  

- Location based analytics – users’ geographical locations where students are accessing KEATS (e.g. inside or outside King’s campuses)  
- Pageview analytics – pages users are viewing over a specified period of time  
- Forum analytics – forum activities report over a specified period of time  

The other outputs are a set of module design guidelines and KEATS development recommendations which are in-progress. The project team has also started planning the collection of the Feedback Displays requirements analysis. This will list all the other feedback displays that will be identified from the requirements analysis.

**Outcomes/Impact:** To what extent are you achieving the original aims of the project? Please include examples where possible.

The project outputs highlighted in the original proposal have been modified. This was necessary because of the technical constraints the project has encountered. The procedures around the ULCC Moodle service obliged us to follow an alternative approach which is equally valid and within the spirit of the original proposal. We originally aimed to deliver a Feedback display block. However, because of the above technical constraints we opted to deliver an offline engine to run the analytics.
In terms of impact, the project has been receiving recognition from outside the college through invitations to present at conferences/seminars (please see dissemination section). The project leader and a project member have been invited to become members of the International Moodle Research Committee.

We have already carried some pilots using the logs from the Dental Institute and the School of Arts and Humanities courses.

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<th>Supportive factors: What are the main factors that are contributing to the successful progress of the project?</th>
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| The project team has met three times and has been regularly exchanging emails about the progress of the project. There is a technical core team (JP San Diego, A Konstantinidis, the intern developer and a Dental Institute TEL Officer, P Fotaris). The active team members have identified the courses/modules which have been informing the development of the Feedback Displays. 

The project recruited a student intern through the internship office in order to contribute to students’ employability in line with the KCL teaching and learning strategy. The intern has been working as a research assistant with the technical core team on data generation, processing and presentation.

The CTEL Director Mark Russell has been very supportive in identifying contacts outside the College and helping us to disseminate project outcomes. |

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<th>Challenges: Have you experienced any barriers or challenges in developing your project? What could be done to support innovation in the curriculum?</th>
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| In order to achieve the outputs above, logs of learning activities need to be collected and downloaded from Moodle. The access to the log file is limited by the data set by the ULCC Moodle Service Provider or by the College Moodle administrator. Therefore, the project can only work on available data and the types of analytics we can produce are basic statistics (e.g. technology use such as a chart of ‘pages’ visited by users). The project also needed some information from ITS e.g. about IP Addresses. However, ethical concerns about this increased the difficulty of acquiring and using these.

In the award letter, it was recommended to seek further IT support as the committee thought that the 8 days technical consultancy costed was not sufficient. The project had some difficulty getting this support due to IT staff changes. The project leader will talk to Nick Leake about this.

The project will recruit another student intern to help conduct the interviews and surveys, analyse the data (transcription, coding, Moodle logs) and administrative work.

In terms of dissemination activities, the funding proposal for conference attendance was reduced. As learning analytics is a ‘hot’ topic in Technology Enhanced Learning, the project has to reject some of the invitations for external events. This can have a negative impact on the project. We would not be able to keep ourselves up-to-date with fast-changing developments in the area particularly the technical updates that will help with the developments.

There is an opportunity to exploit learning analytics for curriculum innovation but more investment is needed to produce a robust system. |
**Recommendations:** Based on your projects, what recommendations would you make for improving the curriculum and student experience generally? Are there any wider implications of your project for the College/University undergraduate and/or postgraduate curriculum? In particular what would be the implications of introducing your innovation on a large scale across a range of disciplines?

The main project output is a software prototype. It will be used on modules/courses identified above. KEATS Analytics offers the potential to provide feedback to teachers about learner activities in relation to the design and structure and contents of a module and also to provide feedback to students on how they are using the resources of a module. It would be possible to evaluate students’ online behaviour and possibly to identify various pedagogical disciplinary practices. However, it will require further development at a large-scale in order for it to be implemented across the college. We recommend that the College invests in this so that the prototype can be embedded into KEATS as a ‘plugin’ for others to use certainly within the college and outside to widen our TEL impact on the field of online/distance learning.

**Dissemination:** Has the project been shared with colleagues within and beyond the institution yet? What are you plans to do so?

The project outcomes have been disseminated within and outside the College.

**International Conferences**


**UK Conferences:**

**Internal dissemination:**


San Diego et al. (2012). KEATS Analytics Space KEATS presence.
We will present a joint paper, from all the departments involved at the College Excellence in Teaching conference. In addition we will present a seminar on the outcomes from the studies within each department and tailored to the contexts of the courses and departmental needs. In addition, we will submit a paper to the Association of Learning Technologies Conference and/or Computers and Learning Conference. Participation in these seminars and conference presentations will help the project team to produce a journal paper to be submitted to either the Journal of Learning Design, or the Research on Learning Technology Journal, or Technology, Pedagogy and Education Journals.