

# Evaluation of the InDUCKtion project at UCL

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## Executive summary

There is evidence that a good induction to university life can help with student retention; however, there is also a danger of overwhelming students during the intense period of fresher's week. Under the auspices of a small grant from the Higher Education Academy's 'Changing the Learning Landscape' funding stream, staff at two universities (University College London and Southampton Solent University) collaborated to produce an innovative and engaging induction project entitled 'InDUCKtion', based on the idea of an induction duck being a fun character for students to interact with.

At UCL, the InDUCKtion duck existed in the form of a physical plastic duck included in international postgraduate student induction packs, and they were encouraged to take photos of themselves in and around UCL and London as part of a photo challenge using social media. It was anticipated that this would enable students to familiarise themselves with the locale, make friends and have fun at the same time. The InDUCKtion duck was also evident on flyers and posters with QR codes advertising an online tour to enable students to gain an accelerated familiarisation with the campus and its facilities.

Within UCL, the project was a collaborative, cross-departmental venture instigated by members of UCL's E-Learning Environments (ELE) working in partnership with the Centre for the Advancement of Learning and Teaching (CALT) and Student Support and Wellbeing (SSW). The logistics of the project meant that the team members also had to liaise with a number of other individuals and departments around UCL, to help promote and implement the project.

Despite a rapid following on Twitter in a relatively short period, a reasonable hit rate on the QR code for the main page of the online tour resource, and some engagement with the photo challenges using social media, participation in the project was lower than anticipated. Lessons learned from an evaluation perspective revealed that adding another activity to an already overwhelming fresher's week was problematic, despite its innovative and interactive nature. The use of QR codes was problematic for a number of reasons, and the project needed more buy-in from student representatives and academics to provide institutional endorsement.

Recommendations for future instances of the project include securing student representation and academic endorsement, integrating the activity with parallel induction activities – particularly with academic departments, replacing QR codes with an alternative technology-enhanced learning approach and optimising the learning design to better motivate students and promote groupwork.

# Introduction

## Background

A positive induction experience promotes student persistence with their studies and engenders a sense of institutional belonging (Edward, 2003; Hassanien and Barber, 2008); it therefore plays an important role in student retention (Harvey and Drew, n.d.). However, there is also a recognised danger of overwhelming students during the intense period of fresher's week and the early weeks of the first year (Harvey and Drew, n.d.). Such an approach fails to engage students, particularly when the information is delivered in a dull, didactic format (Edward, 2003; Laing et al., 2005). The challenge therefore exists of how to engage students in a meaningful induction experience that does not overload them with extraneous information. This report documents the development and evaluation of an innovative approach to induction implemented as part of a joint venture between two universities, designed to try to optimise the induction experience while being mindful of the dangers of overwhelming students.

## Remit of the joint UCL-Solent project proposal

Staff from University College London (UCL) and Southampton Solent University (SSU) collaborated to develop a project proposal under the Higher Education Academy's 'Changing the learning landscape – embedding learning technologies' funding call. The joint project aims sought to fulfil the needs of new students in terms of:

- Getting to know each other, feeling that they belong to the institution
- Actively engaging with induction, with information available all year round at point of need
- Getting acquainted with the campus, its services and practices including e-learning and library facilities
- Exchanging technology practices, using smartphones and other mobile devices

The project as initially proposed sought to do this by placing QR codes around the campus to direct students to useful online information. Students would be encouraged to work in groups, taking a photo of the group at each QR point and uploading it to the e-portfolio system Mahara. By doing so, they would be entered into a prize draw which was perceived as a way to motivate the students. It was conceived that this would promote knowledge brokering about mobile technology within groups, and informal learning about e-learning technologies in advance of assessment deadlines.

Early project brainstorming between staff at UCL and Solent led to a decision to make more use of social media, particularly Twitter. Both institutions signed up to the idea of an 'InDUCKtion' duck identity, and UCL ELE staff created an @inducktion Twitter account to promote online social interaction between students and with the institution, to complement and showcase the physical induction activities.

## The project at UCL

To fulfil the aims of the funded project, E-Learning Environments (ELE) staff worked with colleagues in the Centre for the Advancement of Learning and Teaching (CALT) and Student Support and Wellbeing (SSW) to plan and deliver an innovative approach to induction, available to all students but targeting a specific group of students – international postgraduates – who have been recognised as experiencing particular challenges at induction. One student evaluation study showed that induction activities are perceived as more beneficial by international students than by UK students (Hassanien and Barber, 2008). In addition to finding themselves in a large, unfamiliar environment with lots of new people, international postgraduate students may also experience cultural differences and unlike undergraduate students, typically come for only one year as part of a Masters

programme. Thus there is a need to rapidly induct them into university life, in terms of making them feel at home and raising awareness of available student services, allowing them to concentrate on their studies.

The UCL InDUCKtion project had two parallel streams of activities:

- A poster tour using QR codes to direct all new students to an online instructional resource about facilities and services on campus; and
- A daily photo challenge hosted on Twitter, which encouraged international postgraduate students to take photos of plastic ducks – issued to them in their induction packs during a face-to-face session – in locations around UCL and London.

The poster campaign ran for just over a week from 18-27 Sept 2013 and the photo challenge for one week from Friday 20-27 Sept 2013. All materials were designed to include a yellow duck, the iconic image for the project overall:



*The InDUCKtion duck project flyer*

The paper flyer, shown above, was distributed by hand to students on entry to the face to face ISD student orientation sessions, and was also shown on the presentation slides at the beginning of these sessions and during the initial face to face induction session where the project was officially launched.

## [The poster tour](#)

Posters included the duck alongside a unique QR code with a bit.ly address at the foot of the poster for students who had mobile devices but were unable to scan QR codes. An example is shown below:



*Example poster from the InDUCKtion tour*

Posters were placed at point of need in key locations around the university, such as libraries, eating places, museums, fitness facilities, shops, the health centre, the student centre and specific UCL highlights such as the showcase of the preserved body of Jeremy Bentham. The web resource on MyPortfolio (the UCL installation of Mahara) also advised students on essential facilities such as locations of water fountains and internet access. The main page is publicly available at: <https://myportfolio.ucl.ac.uk/view/view.php?id=32163> and screenshots are shown below:

**About the UCL Induction Tour**

by inDUCKtion Ducks

**Hello - I'm Induction Duck - welcome to UCL!**

**HAVE YOU SEEN THIS DUCK?**

**Take the campus tour!**

This self-guided tour is about the general wellbeing of all new students at UCL - comfort, convenience and support. You'll discover loads of helpful information for students at UCL, including water fountains, food, internet access, showers, printing, computer rooms, study spaces, walking & cycling, recreation, emotional support, joining up the different parts of UCL - and many other delights.

**How?**

Look for the yellow duck posters at 18 locations across the campus. Scan their unique codes with a barcode scanner on your phone or tablet. This will load a web page containing a useful entry about that location, a cryptic clue to the next destination, and a link to a map.

Need help? See our scanning guidance and visit our [Questions & Answers](#).

**Where do you start?**

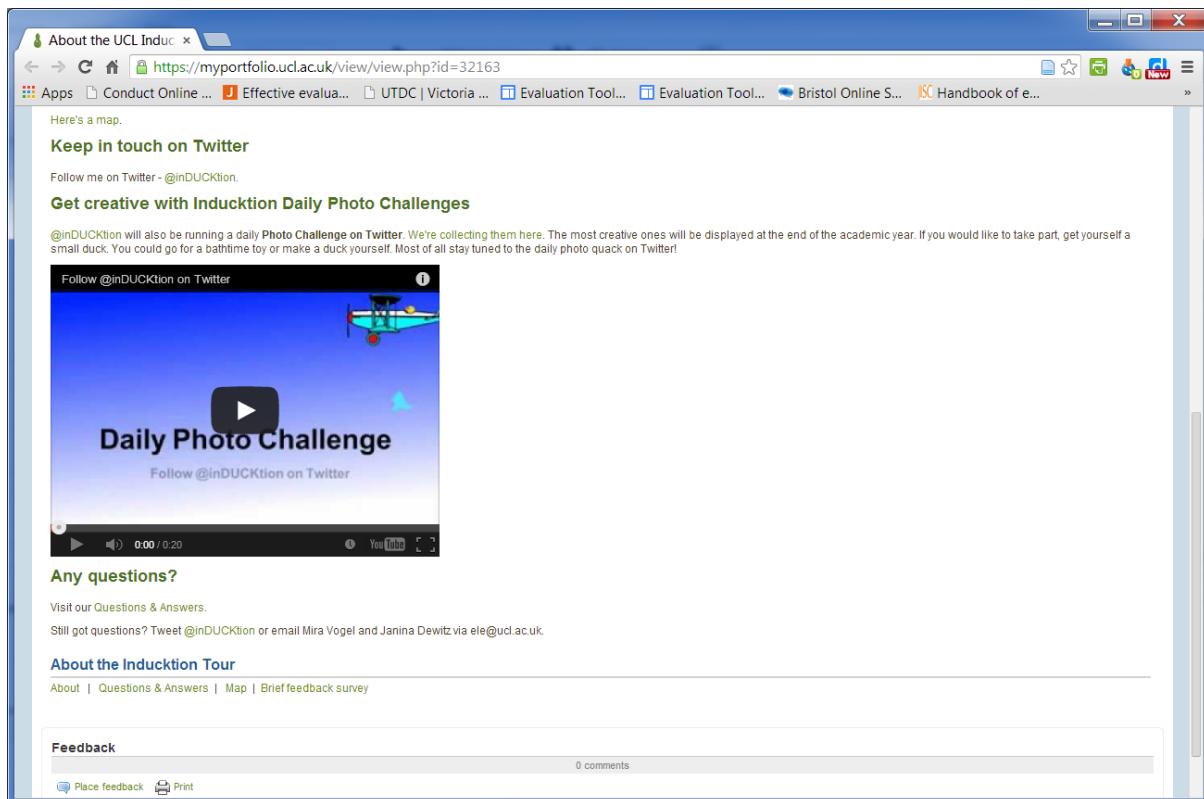
A good place is the Student Centre near UCL's front lodge on Gower Street.

Look for the Induction Duck poster to scan, and then follow the clues from there.

Here's a map.

**Keep in touch on Twitter**

Follow me on Twitter - @inDUCKtion.



*Screenshots from the introductory Mahara resource page for the Inducktion tour*

## The daily photo challenge

Every morning, the @inducktion account tweeted a themed photo challenge (#DailyDuck #DailyPhoto). Students were encouraged to mingle by putting different coloured ducks together in their photos, and the Inducktion team tweeted examples. Students were able to upload their photos via Twitter or to an [inducktion@gmail.com](mailto:inducktion@gmail.com) email account to avoid excluding students without a Twitter account. Images sent via email and Twitter were curated using the Storify platform, available at <http://storify.com/inDUCKtion/daily-inducktion-photo-challenge>. Examples of daily photo challenges included 'What mode of transport is your duck taking today?' and 'Snap your duck as it explores a green space in and around campus'.

## Methods of project evaluation

A number of methods were employed to evaluate the InDUCKtion project. Access statistics were obtained during and after the active periods of the two InDUCKtion activities. Statistics during the active periods revealed a relatively low engagement with both strands of InDUCKtion activity compared to the number of students who potentially could have engaged. In response, it was deemed appropriate to capture the experiences of staff and perceptions of students about the project.

### Access statistics and measures of engagement

Access statistics were obtained via Twitter directly and Storify (used to collate photo challenge tweets). Analytics software (Twitonomy) was also used to summarise Twitter activity associated with the @inducktion account. Another analytic tool, Twitter Counter, was also trialled retrospectively to attempt to gain more insight into the Twitter interactions.

## Interviews with UCL stakeholders in InDUCKtion project

An 'independent' evaluation comprising semi-structured interviews was conducted by the E-Learning Evaluation Specialist (VHD). Four staff who were involved in delivering and supporting the project were invited to participate in the interviews, as were several representatives of the student body affiliated with the Student Union. Thematic analysis as described by Braun and Clarke (2006) was performed to code and categorise recurring patterns in the responses.

## Informal survey of students on campus

Perceptions of students about the poster tour were assessed using a structured survey delivered informally in conversation with students on campus. Three ELE staff (MV, JD and VHD) opportunistically surveyed the students and made handwritten notes of the students' paraphrased responses, transcribed immediately afterwards into the Opinio online survey software for storage and ease of reporting. Students were asked questions about the underpinning concept of the project, the promotion of the project, and technical aspects focused on QR code scanning and the layout of the introductory page in the online resource.

## Social Network Analysis

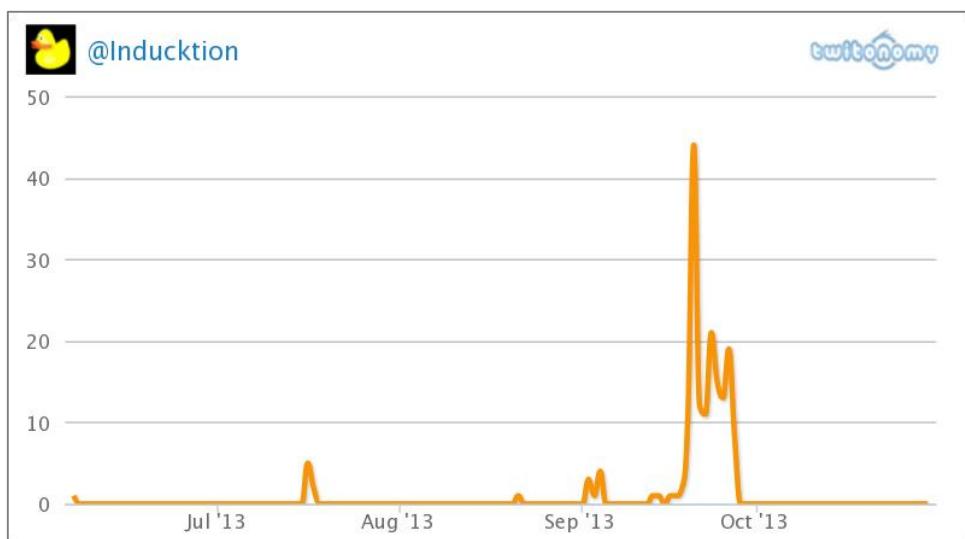
A social network analysis (SNA) was attempted using NodeXL to visualise the Twitter interactions to gain insight into communication between participants.

## Results

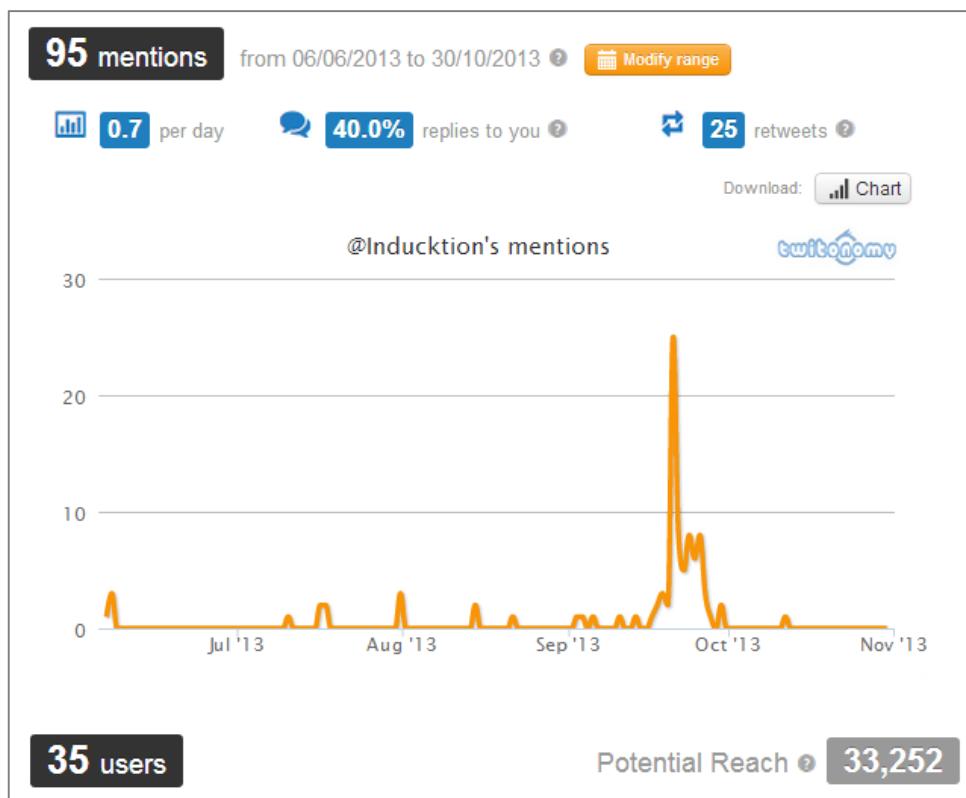
### Access statistics and measures of engagement

#### Overall Twitter statistics (poster campaign and the photo challenge)

In the end, the Induction Duck (@inducktion) made 177 tweets, amassed 112 followers and followed 243 other twitter accounts (individuals or societies). The account was established on May 20<sup>th</sup> 2013 and tweets were made between June 6<sup>th</sup> and October 11<sup>th</sup>. Retrieving data using the #inducktion hashtag is complicated by the fact that both institutions used the same hashtag for their individual projects, so this data has not been included. The graphs below shows the number of tweets made by the UCL @inducktion account, and the number of @Inducktion mentions. The graphs highlight maximum activity during the active campaign period (18-27 September at UCL).



*Number of tweets made from the @Inducktion account*



*Number of @Inducktion mentions*

A later attempt was made to try to analyse the Twitter data using Twitter Counter to try to gain greater insight into the data; however, although this web-based software did not impose a time limit on the data that could be imported, the retrieved data did not seem truly representative of the Twitter interactions when manually compared with the actual Tweets. This may have been due to the user's lack of familiarity with the software rather than a problem with the platform itself but as a consequence, it was decided to abandon use of this tool.

#### Poster campaign

Of the 19 pages in the e-portfolio which related to different stations of the poster campaign, the most commonly visited page was the 'About InDUCKtion' page. The access statistics for the other locations are shown below:

Location	Page views	Location	Page views
About InDUCKtion	315	Wolfson Social Study Area	9
Jeremy Bentham	31	Refectory	8
Print Room Café	24	UCL Shop	7
Main Library	22	Security	4
Engineering Front Building	16	Grant Museum	4
Science Library	14	Bloomsbury Fitness	3
Lost Property	14	UCLU Rights and Advice Centre	3
Petrie Museum	11	George Farha	2
Health Centre	10	Bloomsbury Theatre	1
Student Centre	10		

*Number of visits to the Mahara Inducktion tour pages*

### Photo challenge

In all, 59 photographs were tweeted or emailed and curated via the Storify platform. Of these, 26 were produced by UCL students (the others having been tweeted by members of the InDUCKtion staff team). The student-tweeted images include fun/humorous images, images of the duck in popular UCL locations, and the duck beside famous London landmarks. The submitted photos reflected the photo challenges that students had been issued with and some of the images appear below:

	
Image of the duck outside UCL's Wilkins Building, a response to 'Snap your duck on the most interesting place on campus' challenge	Response to the 'What is your duck eating today?' challenge
	
Response to the 'What mode of transport is your duck taking today?' challenge	Response to the 'Take your duck for a swim' challenge

*Example images sent by students as part of the photo challenge*

### Interviews with UCL stakeholders in InDUCKtion project

Four members of staff agreed to participate in an interview with the E-Learning Evaluation Specialist (VHD) about their experience of the project, representing Student Advisory and Events Services, E-Learning Environments and the Centre for the Advancement of Learning and Teaching.

Representatives of the student body from the Student Union declined to be interviewed about their perceptions of the InDUCKtion project but expressed a willingness to comment on the final project report. Where appropriate, the number of interview participants who identified with a particular theme is shown in brackets.

### Motivation for the project

The various motivations for the project included:

- getting the students to talk to each other (3 participants)
- making induction a fun and positive experience (3 participants)
- familiarising students with the campus (3 participants)

- encouraging students to use their own devices and social media (2 participants)

Individual staff perceived that the motivations for the project included: welcoming students, trying to counter the overwhelming nature of induction and helping international students to get inducted. Two participants also recognised that the proposed project was in line with their work remit anyway, and one participant (outside of ELE) stated that they were motivated to engage with the project because of the different, innovative approach to induction using ducks.

#### Roles within the InDUCKtion team

There were a number of recognised roles within the team:

- project manager / liaison with funder (Higher Education Academy)
- raconteur, to introduce the concept to students
- content developer
- photographer (not one of the interview participants but another member of ELE)

Participants also recognised that their responsibilities included problem-solving, creative educational design, support for international students, social media and publicity, purchasing the ducks and bagging them in the induction packs, and providing helpful suggestions to other team members. Despite recognised challenges associated with working across a number of departments, there was a sense that staff were working hard as a team to realise the project vision:

*That doesn't mean we agreed on everything ... but we always found compromise because we were pulling in the same creative direction.*

#### People the InDUCKtion team would have liked to involve

One of the participants commented that they would have liked to involve more students:

*Definitely more students, I was so keen to work with the volunteers but that connection was never made. That was not down to me not asking and not pursuing it. I have pursued it and I have asked people but it was just like running at a brick wall and we were running out of time in the end. There was just no way – we just didn't have access to students and I wanted students to be involved and have some input and to see the project from the student perspective*

Another participant would have liked to involve staff from the academic departments more:

*... academic departments as well because we know that the students take their main – they get signals about what they should prioritise from the academic departments so this was un-integrated with that. So I think we learnt – got the message that the lack of integration doesn't work, whether the departments could – I know the departments have their own struggles with getting students to attend but there we are.*

#### What worked well in the project

Aspects of the project that worked well included:

- the technical infrastructure (3 participants):

*The whole social media side worked quite well, all the systems that I'd set up didn't break down and worked well, so that was mission accomplished as well. In*

*that sense it was a success because all the daisy chaining of various different tools didn't let us down so that was good.*

- the way the activity was launched in the face to face session (3 participants)
- getting the ducks into the induction packs (2 participants)

Other things that worked well as identified by individual participants included the striking visual identity of the duck project, positive validation from service owners about the online tour content relating to the services, cooperation from the Student Union in terms of offering noticeboard space for posters, and a rapid Twitter following in a short time:

*We had over 100 followers in the end so that was quite good. Obviously not all of them were students, some of them were UCL departments, but that's still not too bad really considering it was only running for one week. So 100 in a week I think that's not bad.*

One participant also identified corollary benefits of finding out more about the institution themselves, and discovering that not all students have useable mobile technology for interacting with QR codes, despite the fact that a recent survey had indicated that the majority of students had smartphones.

#### Perceived benefits to student participants

Recognised benefits to students, from the perspective of the induction staff team who were interviewed, included early familiarisation with the campus, in addition to participating students having fun:

*I think those people who did contribute to it had a bit of fun with it, so the fun component was definitely there, and we did get emails from people and people did send photos – fun photos – not just rigid boring photos but quite fun photos as well, suggesting that those people who chose to participate got something out of it.*

Individual participants also recognised that participating students would have received an institutional welcome, a sense of community and belonging, a chance to talk with other students, and an opportunity to explore London.

#### Challenges associated with the project

Being a new and innovative project, there were a number of recognised challenges with the project:

- Purchasing the ducks and associated materials (3 participants)

*We ended up having to request a quote, having to organise – having to follow-up on how the money from your Department was going to be transferred to our Department, we had to get back to your team to ask 'well what exactly is that you're wanting to purchase because if you go onto the website they have about a million types of ducks' so would have been helpful if it was – a quote was obtained and all the information was provided and for us to just pay because we agreed to do that. But we did more – well let me just put it differently – it felt like we did more than that.*

*The whole paperwork process of ordering these ducks, you know the money thing again ... partially down to money being shuffled from one account to the other*

*internally, from account codes needing to be set up for plastic ducks that didn't exist before. It's not like your everyday item is it? To forms that were so complicated to fill in that they weren't filled in properly for the purchase process and then had to be bounced back and forth a few times, all these little delays, processes and internal politics just made this whole thing really awkward.*

- Lack of student ownership or involvement (3 participants)

*That's the other thing, not knowing who your audience is really, and for those people who do know what the audience is not really engaging with us to help us and guide the project and shape the project.*

- Identifying appropriate contacts at UCL (2 participants)
- A recognition that the project was risky or ambitious (2 participants)
- Logistics of getting the ducks into induction packs (2 participants)

Two participants recognised that it was a difficult challenge to launch the project at the end of the face to face induction session after a series of other induction talks. Other challenges perceived by individuals included the fact that the innovators themselves (ELE staff) were new to UCL, the lengthy process of decision-making leading up to the project, the logistics of putting posters up around campus, and poor project timing:

*The other challenge, identifying the owner of a piece of wall to hang a poster on ... the whole postering process took probably around three days; two days to find locations and talk to the wall owners and one full day to put posters up because when we arrived with our posters obviously there were different people on those security desks than had been there before so we had to go through it all again, and yeah, it was phenomenal.*

*It may have been that or the timing was wrong and in fact the timing was wrong. The Higher Education Academy gave us the money very late in the day because they had in their minds [that] this funding cycle was for this academic year and of course we had to get everything done and dusted by week one.*

### What did not work so well in the project

Aspects of the project which were recognised to have not worked so well included:

- Minimal uptake by students (3 participants):

*Occasionally I just looked at the Twitter and Storify stuff and it was mostly us from what I could tell ... It just didn't seem to have the foundation to gain the traction that it needed.*

- It contributed to the overwhelm of induction (3 participants)

*... the plastic ducks got lost in the induction pack, some of [the students] have said it was full of other things including a lot of advertising. So yeah I think we actually just contributed to the overwhelm really and probably we were competing with other things which is – we felt like other things were competing with us but we were also competing.*

- The posters were easy to ignore (3 participants)

*I think the posters just went missing, there weren't enough of them, they weren't big enough and it just all got lost in the melee I think.*

- International postgraduate students perhaps not being the right cohort to target, and a sense that they may have found the project identity trivial (3 participants):

*In a way you wanted to involve your end constituency and for one reason or another the group to which this was directed at was probably the least appropriate group for it ... they're postgrads and thereby are more likely to see this as a bit of a waste of time or a bit of a childish thing ...*

One individual commented that there was a lack of communication regarding parallel induction activities within the departments:

*There was so much going on with the departments as well so no matter how much we plan around the official timetable, and we think there's air space, but that air space may be taken up by stuff in the departments, that we are not necessarily aware of and I think a lot of that happened as well, there was stuff planned for the international – our cohort, or our duck cohort, and neither [of us] were aware of it, you know we find out on the Friday that they were going on a thing on the Saturday. Well we could have tied that in had we known about it but we didn't, which goes back to the lack of communication.*

Another participant commented that having two independent InDUCKtion activities running in parallel might have been confusing for students, and that the tasks were not designed to require groupwork.

#### What staff perceived non-participants missed out on

Staff considered that students who did not participate in the activities would have missed out on:

- A chance to meet others and make friends (2 participants)
- Condensed, centralised information about the campus (2 participants)

Individuals also considered that non-participants missed out on the opportunity for early familiarisation with the campus as well as memorable, fun experiences. One interview participant went so far as to state that even those students who did participate missed out to some extent because of the low student engagement.

#### Thoughts on parallel Solent initiative

Two interview participants reflected on the fact that the parallel project had similarly failed to engage students in the way that staff would have hoped:

*Well what was interesting and strangely comforting is that they gave away shiny gadgets, they turned it into a competition and they haven't had much response either ... that's very comforting actually. So it wasn't necessarily a flaw in the way we've tackled it.*

One of the two staff members also acknowledged that it was not possible to compare the projects:

*The projects were very, very different so pitching them against each other, there was no real – you know you can't really compare it in that sense other than to say neither approach really worked.*

### What the team would do differently in future

To make the project more successful, interview participants considered that they would:

- Launch the project a few weeks into term (2 participants, although another participant considered that induction week was still the appropriate time for this activity)
- Recruit student advocates to champion the project (2 participants)
- Target student groups other than the international postgraduate cohort (2 participants)
- Integrate InDUCKtion with other (competing) induction activities (2 participants)

Other suggestions included speeding up the decision-making processes, spending the funds differently (less on the plastic ducks and more on promotion), designing the activity to require students to work in groups, exploring alternative technical solutions for campus tours such as augmented reality. One participant suggested tracking the success of the project longitudinally and one suggested that a treasure hunt of some sort would be useful in incentivising students and introducing an element of gamification:

*I still think the incentive of a kind of treasure hunt even if it was either 'find the golden duck' or actually the golden duck could be exchanged for 50 quid of Waterstones vouchers or something or that you had a number of them, that there would be some kind of – you know it would have a sort of gamifying element to a degree ... if you told them it was a treasure hunt and there was a golden duck to be found they'd be just out there you know.*

### Other observations

Two staff members observed that to be successful, the project required student involvement, as well as strong leadership or institutional backing.

### Final thoughts

Two interview participants strongly felt that the project was still a good idea, despite the limited student uptake:

*I do like the idea of induction and building a bit of a fun story around it, something that's a bit tongue in cheek. So I'm concerned that the response to this was so poor that anybody looking at it from the outside would probably say 'oh don't bother, forget it'. But I do think it had a lot of potential and on this occasion just did not get to that point where it would run away with itself.*

Two staff interviewees commented on the fact that the InDUCKtion tour online content relating to different services could be repurposed in some way:

*Certainly the stuff that's been set up in terms of the locations, you know all of that, all the stuff that has been mounted on the websites and whatever else, you know the QR codes and so on and so forth, so all of the electronic documentation around that, all of that is useful. So you could build on that in terms of restructuring it to perhaps just up the incentive or something. It's not as if it's just*

*'I'll throw all that out again', what's been done as a prototype is reusable entirely, it seems to me.*

### Informal interviews with students

Eighteen students agreed to participate in an informal conversation (based on a structured questionnaire) in and around campus. Of the 18 respondents, 16 were new students, comprising 12 new undergraduates and four new postgraduates. Two respondents were third year undergraduates.

#### The concept of the poster tour

The majority (13) students considered that the concept of a self-guided poster tour around campus was useful – others were happy to just use a map. Students in favour of the poster tour considered that it would be useful in terms of:

- Helping with navigation
- As an independent learning / self-paced resource
- As an alternative strategy for campus familiarisation

#### Promotion of the poster tour

Asked whether they had seen the InDUCKtion duck (in flyer or poster format), the majority (14) commented that they had seen the poster and one other had noticed the plastic duck in the induction pack.

The majority (13) of respondents answered that the poster/flyer did not make them want to take part in the poster tour; reasons included that there was so much else going on at induction or they were unsure what the poster was asking them to do:

*Honestly, it was among all the other things ... There was a lot of advertisements so I didn't read anything very carefully.*

*Other than being amused by the pun I didn't quite understand the point.*

After the purpose of the InDUCKtion tour had been explained, the majority (13) said that they would not take the tour; only three considered that they *might* access the tour and one of those acknowledged it was not their priority. One student who was not planning on accessing the tour also mentioned that having lectures the next day was their priority.

Asked what they thought the flyer was inviting them to do, the majority of students were not sure. Eight students recognised that they were being invited to use their smartphone to scan the QR code. Six students thought that it was to promote a virtual tour. Other responses included: advertising a society, party, event or free plastic duck giveaway; access to information about a particular building; or an opportunity to meet people – either to contact someone about induction or meet other students studying the same topic.

#### QR code scanning

QR code scanning was problematic, for the reasons that students did not know how to use them, they had to pay extra for internet access, their phone was running out of battery or did not read QR codes, or it was too much effort to scan the QR code or type the short URL to access the information:

*Also [points to QR code] I have a phone that does that, but I get charged for internet by default ... If they replaced the QR code with the actual information I would read it, but otherwise it's quite a lot of effort.*

*I can't read the QR codes and it takes too long to type the address into my phone.*

One student commented on students' general lack of familiarity with QR codes:

*Not many people are using QR codes. Everyone has a smartphone and can scan it but they haven't built up a relationship with QR codes.*

### Design of the online resource

When students were shown the introductory page of the InDUCKtion tour on a tablet screen and asked to comment what they thought of it, they recognised that the resource was very informative. However, some stated that the point of the tour needed to be made clearer and the page more visual from the very start. Suggestions included more pictures or videos at the top of the page:

*It's really informative, it seems decent but it's quite plain. It should have more pictures, be more interactive, have a video at the top of the page which explains what it's about.*

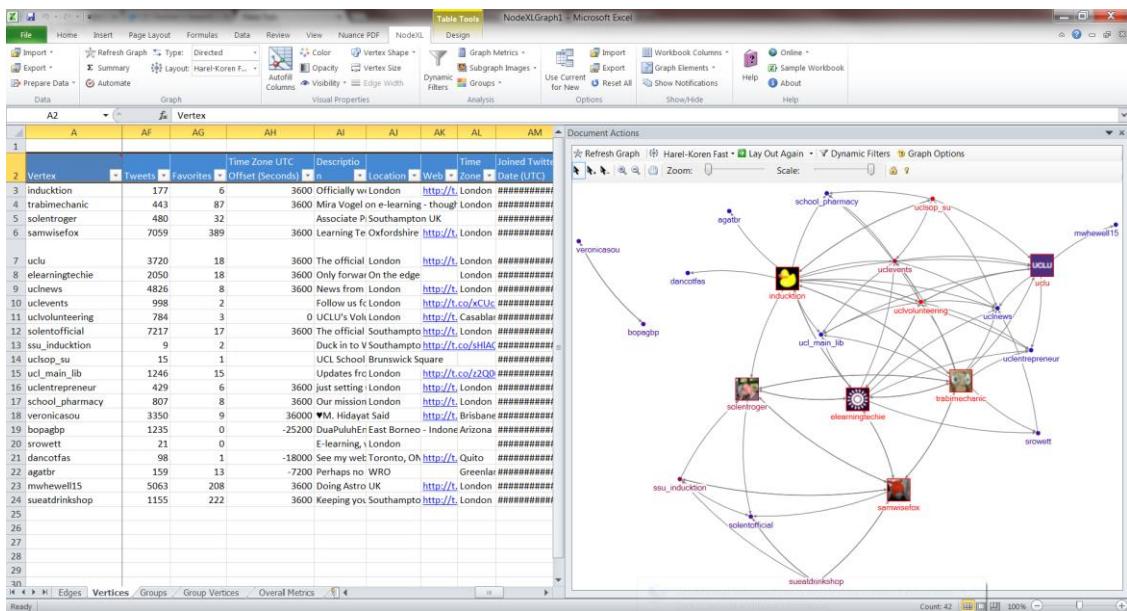
Students generally also wanted a searchable list of information rather than a cryptic clue leading to the next destination:

*Some people might appreciate a cryptic clue – but if you're new sometimes you just want to get from A to B.*

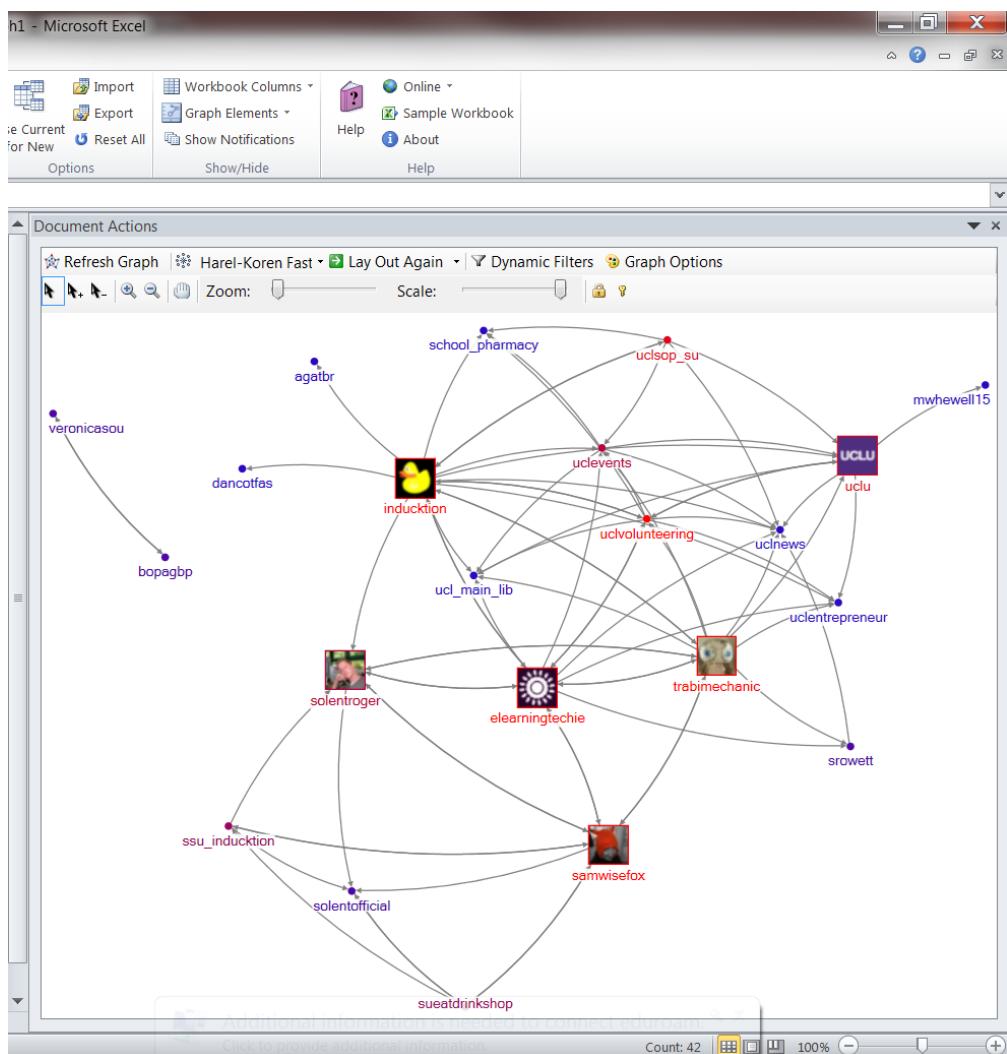
*Is there a way to find out where the destinations are? Ah – there's a clue to the next destination. It does sound quite fun. Depends – if I were in a group of two or three people [I'd do it] but by myself it would be a bit lonely.*

### Social Network Analysis

An attempt was made on 3<sup>rd</sup> October 2013 to import all the relevant Twitter mentions, replies and hashtags using NodeXL (<http://nodexl.codeplex.com>), in order to visualise the online interactions using Social Network Analysis (SNA). Due to the team not having any prior experience of SNA, the following instructional video to using NodeXL on YouTube proved to be a useful introduction to using the tool: <http://www.youtube.com/watch?v=PC-PgkhpsNc>. This is one of a number of YouTube videos on this subject. Unfortunately, despite repeated attempts, the NodeXL software ran into issues trying to import all the @inducktion and #inducktion data, and only retrieved some of the data. The online technical advice argues that this happens when too many calls to the Twitter API are made within a certain time frame; however, this happened on every occasion, even when no previous calls were made within the previous 24 hours. The visualisation of partially retrieved data is shown in the screenshot below. Although not complete, the visualisation shows the main players or 'hubs' within the project – namely the InDUCKtion team members at UCL (@trabimechanic and @elearningtechie) and Solent (@solentroger and @samwisefox). Also visible in this image is the role that other societies and organisations within UCL played in terms of publicising the project (e.g. @UCLU, @uclvolunteering, @uclevents, @school\_pharmacy, @uclentrepreneur and @ucl\_main\_lib). Also visible on the edge of the graph is the interaction between two student users (@veronicasou and @bopagbp) about #inducktion independently of the main Twitter interactions on this topic.



*Screenshot of NodeXL displaying interactions as identified after importing a subset of the data.*



### *Section of the screenshot of NodeXL in more detail*

A second attempt was made to conduct an SNA of the Twitter interactions by importing the complete Twitter archive – created by JD at the close of the project – into Gephi SNA software (<http://gephi.org>). However, this proved to be problematic on account that the two SNA programs (each essentially comprising multiple spreadsheets) have different fields set up for vertices and edges (representing the nodes or individuals and links between them, retrospectively). In addition, while NodeXL uses the Twitter names to refer to nodes or individuals, Gephi uses the Twitter ID. This would have meant an excessive amount of data transformation, so was abandoned.

A third attempt was later made to investigate SNA, this time returning to NodeXL and reattempting to import all relevant data. While this time, all the data was seemingly imported, there was a problem since the Twitter Search API in NodeXL only recalls data from the previous 6-9 days. Thus, the data was not representative of the activity within the active period of the InDUCKtion project.

## Discussion and recommendations

There is a lot to be learned from this project, in terms of how it was conceived and implemented by the InDUCKtion team and received by the students. It is clear that this was an innovative, ambitious project which the InDUCKtion team still consider to be a good idea, despite the limited buy-in from students (at both institutions). Students also considered the project to be useful in principle, and there is evidence that a minority participated in the project and were recognised to have had an enjoyable and engaging induction experience. However, despite the good project organisation and delivery, engaging project identity and successfully implemented underpinning technology, the project did not attract the level of student buy-in to generate the level of activity initially anticipated. As one InDUCKtion team interview participant acknowledged, “It’s one of those things that will get to a tipping point and it just didn’t make it to the place where it would, and it just needs some help up the hill.” That participant suggested implementing a treasure hunt, an approach which has been recognised as successful in other institutions, whether physical or virtual (Edward, 2003; Piatt, 2009).

Despite being aware of the dangers of information overload, and trying to alleviate this through an innovative approach, problems identified with InDUCKtion included the fact that the project was introduced to an already intense fresher’s week, where students were constantly bombarded with advertisements by advocates for a wide variety of social, recreational, educational and cultural activities at the same time as trying to make friends and orientate themselves on a large campus for the first time. Due to the fact that there was so much happening in such a comparatively short timeframe, it was easy for the project to be overlooked, despite the visually engaging posters and the flyers and plastic ducks given to students.

Even where there was an initial surge of interest; for example, as evidenced by the number of page visits to the ‘About InDUCKtion’ page in Mahara, this interest was not sustained. Students explained that this was because they were unsure what to do when they accessed the resource initially, or it was not their priority given that their studies were about to commence. In addition, it is clear that QR codes were problematic for technical reasons and students’ lack of familiarity with them. As another Inducktion team interview participant stated: “QR codes is – at the same time – it’s an innovation and it’s also nearly obsolete”. Despite the fact that the Information Services Division (ISD) Student Survey conducted in January 2013 indicated that 91% of respondents had smartphones, it is clear that many students did not have a QR code scanner app on their phones or did not know how to use them. This finding mirrors the results of a study by Archrival, cited by Gahran (2011), which

reported that only a minority of students were able to successfully scan a QR code despite widespread smartphone ownership, and that the process was perceived as convoluted. With increasing emphasis placed on student digital literacies (Anonymous, 2013), it seems that induction processes should continue to embrace technology-enhanced learning, but alternative technologies need to be explored.

In line with what members of the Induction team considered they might do differently in future, and to address some of the challenges that arose during the project, the following recommendations are suggested for consideration:

- Given that this is a cross-institutional collaborative venture, establish and stick to project timescales and roles and responsibilities early on; the importance of clear communication between induction stakeholders has also been highlighted by Hassanien and Barber (2008);
- Make the purpose of the project less ambiguous to students; as well as an enticing project identity, make it clear from the outset what the project is attempting to do, to engage students more successfully;
- Target innovative ‘fun’ induction projects more at undergraduate students, and consider alternative more ‘serious’ approaches for induction activities focused on international students, integrated more with their studies;
- Develop learning designs which require students to work in groups and engender a sense of gamification to motivate students;
- Allow the induction process to run throughout the academic term; as QR codes are not considered to be an appropriate technology, consider alternative technologies which can be made permanently available;
- Recruit student advocates to champion the project, as well as academics to give it institutional endorsement;
- Integrate induction activities with other departmental and institutional induction activities to avoid competing demands on students’ attention.

Integrating induction activities with departmental induction events will also help to holistically address the needs of new students – combining opportunities for academic adjustment (relating to new methods of learning and assessment) with geographic adjustment (to an unfamiliar environment), administrative adjustment (to institutional systems such as for enrolment) and personal adjustment (new social networks and self-management) (QAAHE 2005). Such a holistic approach would also mean that induction activities could be spread over time and focused on facilitating the development of crucial study skills (Harvey and Drew, n.d., citing Billing, 1997). Aspects of effective task-based, discipline-specific, group learning approaches to induction that foster a competitive element between groups (Edward, 2003; White and Carr, 2005) could be emulated, while at the same time embracing the affordances of technology-enhanced learning.

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