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## **Learning beyond the classroom: evaluating the use of Pinterest in learning and teaching in an introductory anthropology class**

Dr Nick Pearce

**Durham University**

<http://digitalscholar.wordpress.com/n.a.pearce@durham.ac.uk>

Sarah Learmonth

**Durham University**

[sarah.learmonth@durham.ac.uk](mailto:sarah.learmonth@durham.ac.uk)

**Abstract:** This paper details a case study of using Pinterest as an educational resource in an introductory anthropology course. Its use was evaluated through the data provided by the platform itself and focus groups. This evaluation found that Pinterest was a popular and useful tool for developing curated multimedia resources to support students' learning. The focus group findings suggested that online resources were shared by students across a variety of social networks, including but not limited to Pinterest. These resources were shared and used beyond the classroom, both physically in locations outside, but also with friends and family that were not part of the classroom. The opportunities for developing critical thinking through the use of tools such as Pinterest are explored.

**Keywords:** Pinterest, educational resource tool, curated multimedia, anthropology

### **Introduction**

Over the last decade digital media have become embedded within the daily life of many students and staff. Their use in an educational context has begun to be explored and it is clear that they have some potential in this area (Rodriguez, 2011). Pinterest is a new social media platform that is focussed on visual material and is increasing in popularity, firmly establishing itself amongst the major social media sites such as Facebook, Twitter and YouTube. This paper will evaluate and discuss the potential of Pinterest to enhance student learning in an introductory anthropology class and discuss some of the broader issues which arise from using social media to aid learning.

Social media sites such as YouTube are already being effectively used in the classroom (Seo, 2012, Snelson, 2011). Whilst there is a community of people who use YouTube as a social network (Burgess and Green, 2009, Strangelove, 2010) for many YouTube is effectively a repository of digital content.

This paper will build on the results of an earlier project funded by C-SAP (the former Higher Education Academy subject network for Sociology, Anthropology and Politics) which demonstrated the ways in which students were using YouTube to

support their learning and were keen to contribute to a YouTube playlist in order to develop a resource to aid their study, a "modern day reading list" (Pearce and Tan, 2013). In this project YouTube was not being used as a social media, but as a repository for video content and therefore this project can be seen in a much broader tradition of evaluating the use of new resources in the classroom.

The use of videos arranged into playlists was popular with students as it helped them to "understand more visually" (ibid) but this approach had some limitations. It was restricted to content on one site, and the playlist was presented in a linear way which suggested a hierarchy that is particularly unhelpful for a very diverse anthropology course (which effectively covers, biological, archaeological, linguistic and cultural anthropologies).

Another outcome of the C-SAP project was the recognition that students were independently interacting with each other using various forms of social media (although not the YouTube platform) to develop their own understanding and knowledge. An example of this can be seen when students collect links into a blog post to share with peers, or post a video onto another's facebook wall. This collaborative approach to learning, piecing together objects from different sources, is evocative of the anthropological concept 'bricolage', which is the construction or creation of a work from a diverse range of objects that happen to be available (Levi-Strauss, 1966).

To articulate this newly emergent way of interacting with the digital world, the concept of 'clickolage' was developed to capture the essence of bricolage in a social media setting: "clickolage refers to the self-directed creation, curation and linking of multimedia content through social media sites and tools" (Pearce, 2012). Unlike with the lone bricoleur, clickolage emphasises the shared aspect of this co-creation. YouTube provides a partial platform for this form of sharing, but Pinterest potentially provides a more comprehensive platform as it can link to a wider range of objects and present them in a non-linear way to a wide audience.

The project explored the use of Pinterest to create a multimedia online resource to support a ten week introductory anthropology course at the Foundation Centre at Durham University. The centre offers a one year programme which prepares mature and international students for their undergraduate degree. This student diversity has an impact on the design of the course, which is intended to be a stimulating introduction to a wide variety of anthropological topics such as evolution, archaeology, coming of age and culture. This course was taught weekly across two campuses to two classes of students, with 52 students in total.

This paper will offer a discussion of the use of social media in education and an evaluation of a case study of the use of Pinterest to teach anthropology. The paper will conclude with a critical discussion of the potential for social media in promoting engaged learning in the social sciences.

## **Digital Resources in education**

Teachers have been amongst the early adopters of digital resources in the classroom.. YouTube has come to replace the use of video/cine film which has been well established in classrooms (Johnson, 1971, Snelson and Perkins, 2009, Tan and Pearce, 2012), and has been similarly used to promote informal learning (Tan, 2013).

Focussing on the use of multimedia resources in teaching sociology, Miller states:

"[The] most critical function in terms of cognitive learning appears to lie in their capacity to serve as representational applications for key ideas. Whether in the form of a news story, movie clip, interview or documentary, information and illustration afforded by media are particularly valuable in helping students acquire the initial mental imagery essential for conceptual understanding." (Miller, 2009: 396)

This illustrates how the key ideas in the social science domain are not often amenable to simple representation. Unlike a chemical reaction, for example, which may be reproducible as an elegant diagram or animation, a concept such as 'culture' can only really be understood through multiple, differing examples. In the context of this course, the understanding that the rituals and ceremonies accompanying death vary dramatically across different cultures is best illustrated through numerous contrasting examples, something which is best demonstrated through a collection of multimedia resources.

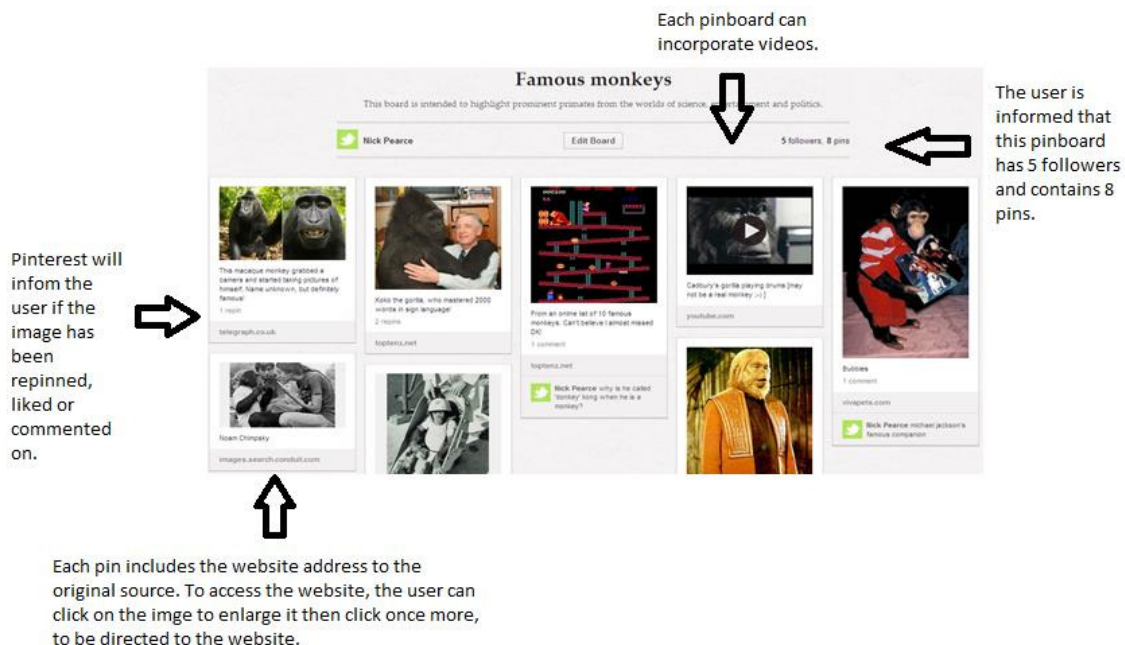
These multimedia resources need not be created by the teacher, or even for specifically pedagogical purposes. In fact this re-use of non-pedagogical content has been a significant sub-theme of the wider Open Educational Resources (OER) (e.g. Ehiyazaryan-White, 2012, Weller, 2012).

There are significant issues to be overcome in reusing potentially copyrighted materials in this way, and this parallels a separate discussion about the copyright issues raised by Pinterest itself (Brent et al., 2012, Browne et al., 2010, JISC legal, 2012). These legal issues have potentially serious consequences for the teacher although the consequences to the student are less clear.

### **Pinterest**

Pinterest is a contemporary digital version of creating a collage or scrapbook. It was launched in 2010 and reached 10 million unique visits quicker than Facebook and Twitter (Constine, 2012). Images can be collected, grouped by common theme and displayed to others via an online pinboard. Users are encouraged to interact by sharing images 'repinning' through the use of browser add-ons, and can comment and 'like' pins (see Figure 1).

Figure 1. Screenshot of Pinboard



Pinterest provides an attractive platform for sharing pictures and video clustered together by theme or topic. Each resource is a link back to the original content, therefore encouraging users to explore the images and videos in their original context. This encourages the non-linear and nebulous collaborative learning which is enabled by social media and is a key feature of clickolage (Pearce 2012).

Popular topics across the site include wedding planning, fashion, recipes and home decoration. To take wedding planning as an example an individual can use the site

to collect together images and videos as part of their preparation for a wedding, as well as looking at the pinboards of other people who are likewise planning their wedding to get inspiration and ideas.

Educators who have adopted Pinterest for their teaching and learning have adapted pinboards for educational use. A couple of examples of such adaptations are Nathan Jurgenson, social media theorist, who has designed his pinboards to demonstrate feminist theory within a sociology class (Jurgenson, 2012) and University of Minnesota adjunct instructor Leslie Plesse who asks her media graphics students to use Pinterest to build a portfolio of their inspirations for their project work (Holt, 2012). There are a growing number of academics exploring the pedagogical value of Pinterest and they recognise this multimedia platform as offering potential within, and outside, the classroom (APN\_News, 2012, Glenn, 2012). Notably most academics are based within the US, where Pinterest started and is most popular. This paper offers an exploration of Pinterest within a British institution.

In this way the pinboard is similar to a glossary or YouTube playlist, with a few important exceptions which make it particularly relevant to anthropology and the social sciences. These pinboards encourage students to explore around a topic, rather than be presented with a single 'correct' definition. It is this interaction and engagement with multiple definitions which is a key feature of social sciences and anthropology, where students need to unlearn previous cultural certainties (Mills and Harris, 2004). Also, the resources are presented in a non-linear way, so that students are discouraged from thinking of a particular resource as definitive or superior and have to develop their own critical thinking skills in evaluating the resources. Lastly the way the pinboard is set up means that the owner has complete control over and can moderate the content. This last point means that a student is developing their critical thinking skills within an environment over which the teacher has some oversight; which is particularly important for a course at this introductory level.

### ***What was developed?***

The first objective of this project was the creation of a range of pinboards reflecting each week of a 10 week introductory anthropology class covering a wide range of topics (e.g. biological anthropology, rites of passage, birth). These pinboards were collated by a student project assistant who had taken the course in the previous year, and who was therefore well placed to identify content which was relevant and interesting to current students.

The pinboards were developed with a focus on the requirements of the students, which was identified as two key areas: as a supplement for additional reading, and secondly as a revision resource prior to examinations. Each weekly topic was identified and a corresponding pinboard was created and appropriately titled.

Due to the visual nature of Pinterest, the images would have to be appealing but also correspond to an educational resource that was relevant and suitable for introductory level anthropology. Information that was deemed interesting and thought-provoking and related to a particular topic was also included. Sources were gathered from academic blogs, Google scholar, museum archives, university research publications, online newspapers and social media sites such as Tumblr.

Unforeseen limitations included the constraint of sources, some of which could not be pinned as not all websites enabled sharing, such as National Geographic and videos from the BBC learning site. This could be related to copyright issues and licensing of material available on Pinterest. The important issue of copyright will be discussed later. Additionally, valuable sources would occasionally be overlooked due to either a lack of, or unsuitable, images which was often the case with scholarly articles. PDFs are currently unable to be pinned. A further difficulty was ensuring the sources selected were of an appropriate level to be consistent with an introductory level course.

## Evaluation methodology

The pinboards were incorporated into the anthropology class. They were linked to via the VLE on a week by week basis relating to the specific topics. Each was linked to via QR codes on the printed reading pack which accompanied the course and the resources were mentioned in class. It was decided to take a qualitative approach to evaluate the use of the pinboards, augmenting the quantitative data that is available through the site. Focus groups were used to evaluate the resource's popularity with students and whether they were viewed as useful in developing understanding of the content of the course.

Pinterest does not offer statistics about unique user visits to the pinboards, although data about the number of registered pinboard users who follow pinboards and follow and re-pin specific pinned resources can be collected manually. As part of the evaluation of the resources created this data was recorded shortly after the course was completed.

Collecting such data from Pinterest is not without its limitations. The only data recorded is from registered users of Pinterest, whereas the pinboards are accessible to users who do not have an account. There is no view counter as in YouTube. There is little evidence of students creating accounts in order to fully interact with the resources, although as the user accounts often use pseudonyms it is difficult to know the true figure. This data was collected after the class and exams had finished, and so students who had stopped following the page would not have been counted.

In order to complement the quantitative data drawn from Pinterest, it was decided to carry out two focus groups, drawn from students studying the class. Focus groups are a useful method for evaluating interventions such as this and have been used by the author in previous projects (Pearce and Tan, 2013). Focus groups are particularly useful in exploratory research as they can provide insights into the sources of complex behaviours and motivations (Denzin and Lincoln, 2011, Morgan, 1996).

Each focus group was drawn from a particular class and the moderator was the teacher of that class. There were 6 participants in one group and 7 in the other, and this represents 25% of the total students in each class. The students were keen to participate, which would suggest an element of self-selection for early adopters of social media, although this lack of a representative sample is not unusual for this method, or an issue for this type of analysis. It is noteworthy that one participant in a group was not a keen user of social media, "I don't like modern technology, I just don't feel comfortable around it", which led to a rich discussion in itself.

Using students from the same class and the teacher as moderator has the advantage of quickly establishing a 'group effect' (Morgan, 1993) where the interactions amongst the group are richer, with individuals interacting with one another rather than directly with the moderator. The disadvantage is that there may have been issues with the power relations between teacher and student, which may have foreclosed negative or critical discussions about the technology being used, although there was still some discussion of this sort.

## Data

The 'Discovering Anthropology' Pinterest account had 120 followers; that is, users with Pinterest accounts who had followed the account in order to receive updates. Four of the followers of the account were clearly identifiable as students, which means we can be sure that a minimum of 8% of the course cohort had interacted with Pinterest accounts. In the period preceding the exam for this course the lecturer received emails from two further students who were having trouble properly accessing the pinboards, which indicates a potentially higher level of use by those with non-registered accounts who did not have trouble accessing the underlying resources on pinboards.

Of the online multimedia objects which were 'pinned' 182 were 'repinned' 228 times in total, which indicates some level of sharing amongst the registered followers. Most pins were shared 1-3 times but the most popular items were: a Mexican Day of the Dead image pinned in the 'Death' board (30 repins), A Margaret Mead quote pinned into the 'Introduction to Anthropology' board (10 repins) and (A Snapshot into Life of a Forensic Anthropologist pinned into the 'Introduction to Anthropology' board (8 repins).

In order to supplement the limited information available through Pinterest two focus groups were held. The results from the focus groups uncovered a range of issues surrounding its use for educational purposes and a number of themes were identified. There was broad support for the resource with comments received such as "I used it lot to prepare for the exam which helped make sense of it all", "I think Pinterest is awesome" and "when we were studying Archaeology, I found things on Pinterest that we had been talking about in class."

A key focus of the project was the encouragement of clickolage. A student commented that this was one of the main attributes of the resource, the grouping of a range of multimedia items in the one place.

"The nice thing about Pinterest is that the information is grouped. With YouTube, it's all videos and they are meshed together which can be quite confusing. The nice thing about Pinterest is that you can group them by topic. You can then add anything; article, photos, videos or whatever you want."

The same student continued by stating, "It's a very interesting way to store information. It's very coherent, things are nicely grouped and it looks cool."

This ability to create collections of materials from different sources was also supplemented by a number of comments about the ability to share such resources, even with friends and family from outside the course, as in "I shared with my mum. She's interested in languages so when I saw something on linguistic anthropology I showed her and she shared with her friends." Other examples of sharing the resources used different social media such as Facebook "my friends will send me a private message on Facebook with information they think will be useful to Anthropology". This emphasises the inter-operability between these sites, where social media are used interchangeably.

The focus groups highlighted that students were accessing the resource via their mobile phones, and by downloading the dedicated app. Students remarked, "I looked at the videos on Pinterest through my phone" and "I downloaded the app for Pinterest to have a look at the boards." This mobile use took place in a variety of settings, including on the bus and whilst writing essays on a computer. The importance of mobile apps was further highlighted by the mention of Whatsapp, a popular mobile based messaging service, by one of the students "I can share by linking [an educational video] through Whatsapp". Another student mentioned the use of the camera element of smartphones, "if someone isn't in class, friends will take photos of what the teacher has written on the board and send it to them to cover what they have missed."

Whilst the majority of comments around Pinterest were positive there was one area that both focus groups agreed was negative. Students commented that they felt the volume of information was too much to process based on the time they had available to use the resource. This was evident in the following remarks:

"At the beginning of the term, I saw that there was a lot of information on Pinterest. I thought I cannot read all of that now due to my assignments, I'll read it in my spare time but any free time, I would spend on Facebook."

"You wouldn't look at everything just because you're interested, otherwise that would take a really long time."

"I'd have looked through all of it but I don't have the time."

It is interesting to note that these comments were made despite the fact that the resources were carefully curated, in an effort not to overwhelm. Each topic had around 10 pins in it initially. These comments may have been related to the workload of the overall foundation year, which is itself quite intense (18 hours per week contact time).

## **Discussion**

The data collected from this case study highlighted that students had generally found the resource useful to their learning and understanding. A number of themes emerge which have wider application for students' use of social media in their learning across disciplines.

### ***Social media interoperability - sharing across networks***

Whilst the focus of this project was on evaluating a case study of Pinterest, it became abundantly clear in the focus groups that the students do not keep social media separate. Examples from the previous section include Pinterest being used alongside and with Facebook and Whatsapp, but the pinboards themselves included content from other social media such as Youtube and Tumblr. The digital objects are shared and repurposed across multiple sites and networks and this appears to be a learning strategy being used by a number of the students in this, and previous studies (Tan, 2013). Whether or not this is an effective learning strategy is for future research to evaluate.

There was no mention of copyright or legal issues in the discussions around sharing content, although there was some discussion of the technical limitations to sharing certain types of content through Pinterest as some websites are 'unpinnable'.

### ***Developing critical thinking***

Critical thinking is of central importance in social sciences, especially in anthropology (Mills and Harris, 2004). The resource created through this project was intended to provide students with a curated set of objects with which to construct their learning. Nonetheless this was felt to be an overwhelming number of resources by many of the students, although this may have been due to external time pressures. These resources were still curated centrally, and this may have been appropriate for an introductory course at this level, but clearly to fully develop critical thinking it would be preferable to encourage students to not only seek out their own resources (as there was evidence that they do) but to share these with the class. This could be done through creating their own pinboards as a portfolio type assessment as in (Holt, 2012).

### ***Learning beyond the classroom***

Learning through digital social media can take place anywhere, inside or outside the classroom, with fellow students, their family and friends, or the wider public. Social media sites are obviously accessible outside the classroom through desktop and laptop computers but both focus groups provided plenty of evidence of the use of the mobile phones in students' learning. This mobile learning took place in a variety of settings such as the bus and at the desk whilst working on another computer. The extent to which this mobile learning can also place within the classroom is starting to be explored (e.g. Merchant, 2012, Ng and Nicholas, 2012).

It is also interesting to note that even in these limited focus groups there were examples of the sharing of learning resources between friends on the same course, friends on different courses (and universities) and family members. There was strikingly little evidence of sharing across the classroom or course, such as through the VLE. It would be interesting to establish what the barriers are to sharing content in this way.

## Conclusion

We can conclude from analysis of the data that there is evidence that Pinterest was used by students to develop their understanding. The data also identified that students recognised the resource as useful despite raising concerns about the volume of information and the time available to access an additional resource. There was positive feedback on the variety of multimedia sources, grouped together by topic. Pinterest is an effective way of providing a range of learning resources and overcoming some of the limitations of the YouTube playlist.

Pinterest is part of a wider social media ecosystem within which students search for and share multimedia resources to help them learn. By engaging with these media students work together, share, curate and comment on a variety of content. Students can broaden and deepen their understanding of the world around them and develop their anthropological imagination (Pearce 2012).

There were three key issues which need further investigation. Firstly, whilst there was evidence that the resources were deemed useful by the students, it would be useful, although difficult, to establish the effectiveness of the resources on student learning.

Secondly Pinterest offers a useful opportunity to develop students' critical thinking. This could be done through integration with similar social media, into formative assessment which might assess their digital literacy in selecting appropriate and relevant resources.

Lastly there was evidence of sharing of resources amongst friends and family. More could be done to investigate the barriers to sharing across the student cohort and this might be promoted through the formative assessment mentioned in the previous paragraph.

Overall Pinterest is the latest digital resource to emerge for non-pedagogical purposes but which has been adopted by various teachers across disciplines and educational levels. The way it has been designed promotes collections of resources from a variety of sources, which can then be easily shared. This makes it an ideal vehicle for the kind of learning which takes place on introductory social science courses of the type discussed here.

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