

Digital diversity, learning and belonging (DD-lab)

Overview and initial findings

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Introduction

This research project is about widening participation (WP) once students have begun their university education. The study is investigating how digital technologies are impacting on the successful engagement of diverse and under-represented students whilst studying at the university. This addresses an important part of the WP agenda, by building understanding of these students' experiences in university and of future strategies that might be used to support them.

The project has been funded by the University of Bristol's Widening Participation Research fund from May 2013 – December 2015. It aims to understand and reveal the ways in which digital technologies are influencing the work and studying practices of these students and how they might support their sense of belonging and participation within and to the university.

The work is framed by the following research questions:

1. To what extent is 'a culture of belonging' and engagement experienced by WP students?
2. What are the impacts of informal support and peer relationships on WP students in their learning lives?
3. How are digital technologies being mobilised by WP students for educational, cultural and social purposes?
4. What new forms of learning interactions are created?

This short working paper begins with an overview of the key areas of research that the study is bringing together before presenting the research methodology. This is followed by a summary of some initial findings on digital diversity, learning and belonging. Contact details and sources of more information can be found at the end of the document.

Putting the participation back into Widening Participation

Widening participation is concerned with opening up access and uptake to higher education (HE) to more diverse and under-represented groups. However it also concerns students' experiences once they reach university. Students must become confident and successful learners and integrate into the culture and practices of university life, in order to maximise their university experience and increase the potential for success post university. HE institutions have a responsibility to support the students they admit under a WP brief - as Tinto suggests, "access without support is not opportunity" (Tinto, 2008). Thomas has reported that "*a culture of belonging*" is critical to the success and well being of students at university and that this is fostered in particular within the academic sphere and through supportive peer relationships and meaningful interactions between staff and students (Thomas, 2012, p17). Yet, despite this, surprisingly little attention has been paid to how informal networks and interactions might contribute to under-represented students' successful participation in HE. This includes the interweaving of social and study dimensions of university life both online and offline.

Student engagement with digital technologies

The increase in digital devices, their mobility and a proliferation of online spaces and tools in society as a whole is contributing to a changing landscape of where, when and how studying at university takes place. Typically however, studies of undergraduate experiences of using digital media tend not to focus on diversity or the experiences of particular groups of students, rather they suggest the universal applicability of technologies. Understanding the experiences of more diverse groups of students in mobilising technologies has received little or no attention to date.

Furthermore, research points to on-going frustrations students have with institutionally owned technologies. This includes the lack of integration with students' own media practices and the very limited control students are able to exert over the technologies and digital spaces they operate within, in sharp contrast to their own experiences with technologies (Timmis, 2012). Therefore there remains a wide gap between what might be called 'teaching technologies' integrated into the formal curriculum and student's own digital practices which might be considered part of the 'hidden curriculum' (Giroux, 1983).

Säljö argues that digital technologies allow possibilities for new ways of learning and new forms of knowledge (Säljö, 2010). However, digital technologies are neither neutral nor necessarily positive influences (Selwyn, 2011) and online social networks, for example, can reinforce existing inequalities and exclusion (Hughes, 2009) and contribute negatively towards some of the challenges of diversity. This is critical because access to technology has been regarded as a major equity issue in HE (Osborne 2003). It is therefore important to look at both the possibilities and constraints that an increasingly digital experience of university might involve, who participates and how.

Methodology

In line with recent work on undergraduate involvement in research (Timmis & Williams 2013), undergraduate students were invited to participate in the study as co-researchers documenting their learning lives throughout their second year. Thirty-two students initially participated and thirty-one have continued throughout the project and are currently involved in the planned dissemination activities. As a first level of sampling, we selected students who did not attend a fee-paying school and whose parents did not go to university. From this group, we sampled a range of WP students from all 6 faculties, including subjects as varied as medicine, social policy, classics, history and civil engineering. The final sample includes 17 women, 14 men, 11 mature, 11 BME and 7 locally based in the South West. The sample also included a balance of home-based (own or parents' home) and residential students (in halls or shared student accommodation).

Each co-researcher was provided with an iPad in order to document their learning lives using the application 'Evernote' which enabled the collection of multimodal data (audio, video, text and image). Three phases of data collection took place during the academic year 2013/14 in November, February/March and April/May and involved a three to four week period when students documented their daily lives on a regular basis. Phase 1 was followed by individual interviews, phase 2 by focus groups and phase 3 again, by individual interviews. The final data included 637 participants' Evernote documentaries, 54 interviews and 5 focus groups. Students also took part in regular discussion sessions both face to face and through Facebook to support data collection, invite contributions to the analysis and assist in building a sense of community and mutual support amongst the co-researcher group.

We take a sociocultural positioning to investigate the social, cultural and educational activities that university students engage in. In particular, we employ Holland et al (1998)'s work on agency and

identity in cultural 'figured worlds'. Figured worlds can be understood as social encounters (such as universities or connected networks or groups) where the positions of those taking part matter and where what we do and how we act to overcome obstacles is part of how we build our identities. We take this framework to explore how WP students reshape their sense of self and negotiate their sense of belonging through continual participation and personal positioning in the construction of the university/academic figured world they take part in as second year students.

In the following sections we offer a summary of our initial findings. These will be refined and updated as the project progresses but this provides an overview of key themes.

Initial findings

The challenges of belonging and studying

When asked in what ways they developed a sense of belonging to the university, areas highlighted included home, course group, flat mates, the university itself, Bristol, work, societies, degree programme, and friends, both those from the university as well as those outside of it. Here we are focusing in particular on the challenges to belonging and studying that the students reported.

Changing patterns of connectedness to home

Students experienced changing levels of connectedness to home and to university over time, depending on geography and backgrounds. Those who moved away from home to come to university and who lived in predominantly student focused accommodation reported that the links with home were often changing as they became more integrated into university life and developed stronger student identities. This made some of them feel more disconnected from home and friends from home. In some cases, the better they were integrated into the university, the less they felt they belonged in their home context. This was contrasted with another group who maintained strong links to home and managed to balance their connectedness to both places.

A further group with stronger links to home were those who live in one place, often local to the university (although some were travelling some distance into university as well). They tended to have the opposite problem where they felt more disconnected from the university because they were more established at home and because of the constraints of travelling. This made it more difficult to be part of the social activities as well as meeting up with peers for studying, making the challenges of integration harder. So paradoxically, the more local you are, the harder it can be to feel you belong. There was one other group of students within the study group who had transferred to Bristol after the first year. These students were less established with their peers, which sometimes made it harder to integrate into university life, and friendship groups or it took more time to do so. Many students reported on the significance of who they lived with in their first year and the impact of the halls of residence on their social circle. However, most of the students also felt that who they lived with and where they lived in the second year were even more critical. Social lives are very much built around where you live or can afford to live and this influences your sense of belonging and who you live with.

All of which points to the transitional nature of student life – the comings and goings and constant adaptations that being a student, either local or away from home involves.

Other constraints on belonging

Often students from black and minority ethnic communities felt that it is not so much a question of specific difficulties that they encounter to do with their ethnicity at University that limits their sense of belonging but a lack of diversity in the student body and a lack of awareness of cultural diversity. This may be caused by the demographics of the student body at the University of Bristol in particular which may be less diverse than in other cities. Equally all students in the co-researcher group reported on the economic and social divides that contributed to a sense of unbelonging. This was linked to the perceived insensitivity and lack of awareness of those in more well off circumstances in considering the situations of others and their differential economic means. It suggests that more could be done to raise awareness amongst the wider student body. The divides between those who attended fee-paying schools and those who didn't were particularly strongly felt. Students point to the traditions behind who goes to which halls of residence being one example of how this plays out very early on in university life. Many students from fee-paying schools already know about different halls of residence (as they hear this from those who have gone before them) whereas those from state schools didn't know about this in advance. Furthermore, those from fee-paying schools often arrived with friends from school and so existing networks were perpetuated. This contrasted with many of our co-researchers (18 – 22 year olds) who were the only one from their school to go to Bristol and had to make friends from scratch.

We grouped students aged over 21 as 'mature' students in accordance with the University's own definition. However many of them were quick to point out that mature students are not all the same and there are many different age groups within that category and not all identify with the term 'mature'. Some felt they were just a few years ahead of the school leavers and able to integrate well with their peers. Nevertheless, there were some more mature students who did report feeling very different from their younger peers and not part of the prevailing culture, social networks and social lives of the majority. They sometimes found it difficult to find points of connection when many of the conversations were held outside of class. These students were also usually people travelling in from their own homes and some had family commitments which made it more difficult to participate in social or study-related events that might have helped develop a greater sense of belonging.

Constraints on studying and belonging

The technological and systems infrastructure of the university was one area that students highlighted as a challenge. Students who had previously worked and were used to an environment of IT and other work systems reported feeling particularly frustrated with university systems and processes and felt these made their studying lives more difficult. There was also frustration that processes worked differently in different parts of the university, which could be confusing. Others felt that the proliferation of different study related online systems and spaces could make it difficult to know where to go for what. Some of the students also reported difficulties they had in continually updating their own computers due to financial pressures and some of the students (though not all) were using very old laptops or computers. This can lead to a loss of productivity, time spent on problems or more limited access around the university.

Students reported that sometimes teaching styles made it difficult to get help when they needed it. For example, in large lectures, it can be difficult to ask questions if you are not following and also you are often working in groups with people you don't know which makes it harder to ask for help from peers. However this also depends on the subject. Groups are organised differently in different disciplines and in some programmes (especially professional programmes such as Veterinary Sciences, Medicine, Dentistry) cohesive groups work together more frequently throughout the

week. In other subject areas, you might be in a very large group, many of whom you don't know. These factors in addition to the number of contact hours and organised activities per week can make a big difference to the overall sense of belonging that students feel. Unsurprisingly those whose work was more intensively organised felt a stronger sense of belonging, although the intensity of the programme was more challenging and often left little room for other aspects of university life. For those on programmes with large cohorts and more independent working, it was harder to develop a sense of belonging to the subject group.

Most of the students in the study showed a keen awareness of the need to plan and organise their studies and use a variety of strategies; they were enjoying their course and doing reasonably well. However, students on some programmes reported that a lack of understanding and prior knowledge of certain subjects taught at school level (e.g. Latin, Greek or Further Maths) can make it difficult as teaching staff may make assumptions that all students have been taught these subjects. Those that haven't got a background in these subjects may also be too embarrassed to admit that they aren't following the lecturer and can lead to a lack of understanding of some teaching.

Finally, one area of universal concern amongst the students was informal study spaces. There is pressure on physical space but also it appears that students like familiar spaces. The increase in smaller digital devices has made it possible to work in less formal or hybrid social and study spaces but there is also pressure on these and it is challenging for universities to respond to changing working and studying patterns. However, if your student accommodation is small, due to financial pressures or further away from campus or you travel into the university every day, the need for study space may be more acute.

Support and actions to address these challenges

There were many ways in which students addressed the challenges they faced or exploited new or expanded opportunities for learning, collaboration and belonging including through mobilising digital technologies and online spaces. They highlighted joining groups and participating in university life. There was also a strong emphasis on *initiating* action with technology to increase creativity and control. Digital technologies were frequently used for developing and maintaining social connections and for creating, colonizing, occupying space, both physical and digital. The following are selected examples drawn from the documentaries and student interviews:

- *Maintaining social connections within and outside of the university.* Digital communications were critical for all students and particularly those living away from home. This is also a key way in which many students engage in 'being at university'. However this is not true of all students. Some students are not part of online social networks at university, some feel excluded and some choose not to.
- *Surrounding yourself with physical, human and online resources to support the development of social and cultural capital.* Students reported how they used multiple sources of help and expertise including their peers. All the students felt that being in social networks or digital spaces online made it easier to collaborate with others and many were doing this, including with those outside of the university.
- *Finding alternatives to poor or incomprehensible teaching.* This included recording lectures, sharing notes and creating resources on Facebook groups, finding YouTube or other online resources, either during the class itself or afterwards.

- *Validation in private of things you don't know.* This was achieved by being able to check online sources for things that you don't understand, particularly during class, and therefore saving face and being able to keep up with lectures in real time.
- *Surrounding yourself with people you trust and who can support you or people like you in order to increase confidence and sharing.* Many students were also maintaining contact with others (friends or family) connecting to other people who could help them (through Skype, Facebook, mobile communications but also face to face). In some cases this was a form of informal mentoring taking place on a regular basis.
- *Setting up informal academic spaces for whole group interactions such as sharing notes, asking and answering questions, checking understandings.* This was particularly found on Facebook but also Dropbox and other filesharing spaces. This allows for scale where a whole group (even 100+) can be involved and an individual can still be heard.
- *Mechanisms for social, peer to peer action.* This included using online surveys as ways of convincing the Programme, School or University to make changes and garner support from across the cohort.
- *Searching, finding and identifying what you need.* This was particularly through the internet and the rise of 'apps' which enable an individual to think 'what do I need for my learning?' and then to search and assess from a range of possibility. This appeared to give the students more insights into their own learning needs.

In conclusion, WP students are building their academic identities by participating in the university 'figured world' through what they do daily and how they act to overcome obstacles individually, in their peer groups, courses, halls, societies and the university as a whole. Digital technologies are playing an important role in expanding their social encounters and learning activities. However, as WP students expand and reform their identities, university spaces, systems, activities and interactions also play a crucial role in their sense of belonging and learning.

Key References

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Further information

This working paper is a short summary of DD-lab's preliminary findings and is not a comprehensive account of the study. Further updates will be posted on the website as they become available. Please keep in touch with us!

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