

## Widening Participation Research Fund Final Report

**Project Title: Digital Diversity, Learning and Belonging (DD-lab)**

**Principal Investigator: Dr Sue Timmis**

**A brief description of the research project as presented in the original proposal, including the objectives and the research methodology:**

This project was about widening participation (WP) once students have begun their university education. It ran from May 2013 to December 2015 and set out to investigate how digital technologies are impacting on the engagement of diverse and under-represented students whilst studying at the university. It aimed to fulfil 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. WP is importantly concerned with opening up access and uptake to higher education 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. Yet, whilst there are many university-led support mechanisms, far less is understood about how informal networks and interactions amongst peers might contribute to WP students' successful participation in Higher Education.

This research has drawn on previous relevant research from the 'What Works?' programme on student retention and success in higher education (Thomas, 2012) and the 'Paired Peers' project (Bathmaker et al, 2016). In particular, Thomas found that "*a culture of belonging*" is critical to the success and well being of students at university. This is fostered through supportive peer to peer relationships and meaningful interactions between staff and students (Thomas, 2012, p17).

Many studies have shown that students are increasingly using digital media as part of their learning lives (e.g. Ellis & Goodyear 2010; Crook 2011). Timmis (2012) found that undergraduates using instant messaging tools as part of informal studying practices supported peers through exchanges that are private and longitudinal, dipping in and out of conversations over time. However, studies of undergraduate experiences of using digital media do not typically focus on particular groups of disadvantaged students and tend to suggest universal applicability. We aimed to explore the relationship between the digital and diversity and the potential and constraints of digital media for offering additional means of support. In the light of massive increases in student fees, it was also important to investigate the experiences of groups for whom the new economic landscape may have greater impact on their university lives and academic progress.

The aim of this study therefore, was to explore a range of WP students' experiences and interactions across six academic Schools within the University of Bristol in relation to their formal and informal learning lives. We planned to examine the role of digital media in facilitating new learning experiences and a sense of belonging to the University.

The following research questions guided the study:

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?

### **Methodology**

In line with recent work on undergraduate involvement in research (Timmis & Williams 2013, Brew 2006) undergraduate students were invited to participate in the study as co-researchers documenting their learning lives throughout their second year. By inviting students to volunteer for the study, we aimed to ensure that we were not positioning students as 'disadvantaged' or 'needy'. The co-researcher methodology is important for this and for student control over their personal data. It also offers enrichment of their learning experiences. Decisions relating to anonymity, potentially sensitive data to be used in dissemination were agreed with all students taking part. Thirty-two students initially participated and thirty-one continued throughout the project. Many were involved in dissemination activities, for example through participation in presentations or writing their experiences for student blogs on the website. 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, veterinary science, pharmacology, social policy, classics, history, mathematics and aeronautic and civil engineering – 22 programmes in all were represented. The final sample included 17 women, 14 men, 11 mature (over 21), 12 students from Black and Minority Ethnic backgrounds (BME) and 7 locally based in the South West. Whilst the university classifies 'local' as coming from very local postcodes, we wanted to include students commuting into the university from further afield. Local in our sample therefore included those travelling in daily from across the Southwest with the furthest from Exeter (75 miles). 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) (Initially this was planned to be a handheld flip video camera – see section below). 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. Data was analysed thematically using Nvivo software.

We adopted a socio-cultural positioning to investigate the social, cultural and educational activities that university students engage in. In particular, we adopted 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. Through this framework we explored how under-represented 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.

**An outline of any departures from the original objectives and methodology, with reasons.**

There were two areas of divergence from original plans:

Firstly, in the original proposal, we aimed to supply handheld video cameras for student co-researchers to use for creating the learning lives documentaries. However, during early planning, we were made aware of the increased potential of using a mini iPad which would enable the collection of a more diverse range and types of data (text, audio, video, screenshots, images and annotations) and would facilitate easier transfer of the data to the research team. We also felt that offering student co-researchers an iPad in return for their work as researchers on the project would be a more powerful incentive and have longer-term benefit for those involved. We discussed this with

the Director of Widening Participation and agreed to move some funds from other budget lines to purchase mini iPads for data collection and this was agreed. We feel the use of the iPads in the research was a great success and contributed considerably to the richness of the data we collected and the sustained commitment of the co-researchers.

The second area involved operational changes. The original funding had been thought to be able to buy out staff time and our costings were done on this basis. After it became clear in the early months that this was not possible, we put in a request to recruit a research assistant to use the PI and CO-I staff time funding for this purpose. This was agreed and a research assistant was recruited in January 2014. Unfortunately for personal reasons, our first project assistant had to resign in late 2014, only a few months before the original project end date of April 2015. Following the advice of the advisory group, we put forward a proposal to extend the project until December 2015 and re-structure the budget in order to fund and recruit a new research assistant to work on the analysis, dissemination and impact of the findings. This was agreed by the Management Group and a new research assistant (Dr. Bernardita Munoz- Chereau) was appointed in April 2015. Both researchers made an invaluable contribution to the project, in particular in data collection, analysis and dissemination. Dr Munoz- Chereau is continuing to contribute to academic writing.

### **Summary of the 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.

#### *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. These 'wealth and social' divides were reported throughout the second year where the challenges for many in our study of having to do part-time work and afford a decent place to live were contrasted with students who never had to work and who were treated by parents to lavish holidays and resources and where the cost of housing did not appear to be an issue. This was one of the strongest areas of social division experienced and remarked upon by the students in our study.

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, some more mature students 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 sometimes lead to a loss of productivity, time spent on problems or more limited access around the university.

Students reported that some 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. Coming from schools with small sixth form groups is likely to make this more challenging still as students are used to a familiar, small group environment with the ability to ask questions readily.

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 organized, 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 was informal study spaces. There is pressure on physical space but also 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 pressure on these and 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:

1. *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.
2. *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.
3. *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.
4. *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.
5. *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.

6. *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.
7. *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.
8. *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, social media and digital technologies are playing an important role for diverse and under-represented students, in expanding their social encounters and informal learning activities, and in reforming their identities.

- Where, when and how students carry out their studies is changing as digital devices and online spaces 'outside' the university proliferate. However the academic and social potential this offers for under-represented students is not being recognized by the 'formal' university.
- Students' own use of digital technologies beyond formal classes helps to integrate social and academic work and particularly helps under-represented students to make sense of and validate their understanding.
- Online networks such as Facebook expand and maintain social networks within university and at home and create frequent opportunities for collaboration and peer support.
- Whilst these experiences are not confined to students from under-represented backgrounds, they can be more critical and empowering for those whose academic identities may be more fragile or for whom a sense of belonging is more complex.
- While these research findings apply for many students, it is important to recognize that not all students feel empowered by digital technologies and some may even feel disempowered.

**Dissemination activities undertaken and planned:**

Our website was set up early the project and has been widely disseminated including through our twitter account. See: <http://digitaldiversitylab.wordpress.com> Twitter: @UOB\_DDlab

A highly successful dissemination conference was held on 2<sup>nd</sup> November and attended by over 40 people from across the University, our Advisory Group and a few visitors from other universities. Three student co-researchers presented alongside the project team in a series of presentations on key findings and the feedback from delegates was overwhelmingly positive. All presentations are uploaded on the website here <https://digitaldiversitylab.wordpress.com/latest-news/>

An Advisory Group was set up at the outset, inviting both external and internal experts and stakeholders to join. They provided invaluable advice and guidance on relevance and connections to other research, methodology, dissemination, and impact on students, universities, national and international research and policy communities. Professor Patricia Broadfoot, Emeritus Professor in the Graduate School of Education, chaired the group.

A Book chapter (see below) in a major international volume has been published and 3 further journal articles targeted at high impact journals are in near final preparation – one on the main findings, one on mature students in the study and one on the methodology. Many conference presentations and

talks have been given. A further paper in September 2016 will contribute to an EU funded conference on equality, inclusion and access to higher education called Access4All.

A full list of completed dissemination events and publications is set out below:

*Book chapter*

Timmis, S., Yee, W., & Bent, E. (2016). Digital Diversity and Belonging in Higher Education: A Social Justice Proposition. In E.L. Brown, A.Krasteva, M. Ranieri, (Eds) *International Advances in Education: Global Initiatives for Equity and Social Justice*, Volume 10. E-learning & Social Media: Education and Citizenship for the Digital 21st Century. Information Age Publishing, Charlotte, N.C.

*Policy Bristol Briefing paper*

Widening participation in the digital age: can online networks and technologies support under-represented students in succeeding at university?

<http://www.bris.ac.uk/media->

[library/sites/policybristol/documents/Briefing\\_16\\_widening\\_participation\\_in\\_the\\_digital\\_age.pdf](http://www.bris.ac.uk/media-library/sites/policybristol/documents/Briefing_16_widening_participation_in_the_digital_age.pdf)

*Invited Keynotes and Talks:*

Timmis S. (2016) *Digital technologies and participatory research methods*. Keynote presentation to the Southern African Universities Learning and Teaching Forum (SAULT) workshop, Johannesburg, South Africa. 23<sup>rd</sup> – 24<sup>th</sup> August 2016.

Timmis, S (2016) *Overcoming the academic and social challenges of participation for non-traditional students in Higher Education: agency, informal networks and digital practices*. Non-traditional Routes into Higher Education Symposium Western Widening Participation Research Network, 23<sup>rd</sup> June 2016

Timmis, S. (2016) *Digital diversity, learning and belonging: how online networks and technologies can support inclusion and success in higher education*. International Classroom Symposium, Worldwide Universities Network Conference, Maastricht, The Netherlands. 4<sup>th</sup> April 2016.

Timmis, S (2015) '*Changing landscapes in higher education: digital technologies and student engagement*'. Invited keynote at Seminar on the "International collaborative research network on Intercultural learning" project (CIECII – Chile Center – funded by Conicyt). Universidad Catolica de la Santisima Concepcion, Chile. 20<sup>th</sup> October 2015.

Timmis, S (2015) '*Digital diversity learning and belonging: a research study on widening participation and undergraduate student engagement*.' Invited talk at the National Union of Students, London. 9<sup>th</sup> June 2015.

Timmis, S (2015) *Digital diversity in higher education: under-represented students' patterns of participation, knowledge creation and agency across time and space*. Invited seminar at Learning Sciences Research Institute, University of Nottingham, 12<sup>th</sup> May 2015

*University of Bristol events and talks*

Dissemination conference - Digital diversity, learning and belonging project (DD-lab) (2<sup>nd</sup> Nov 2015)

Widening Participation Symposium, GSOE, (18<sup>th</sup> February 2016)

Talk to UK Student Recruitment Office team meeting (16<sup>th</sup> March 2016)

Education Excellence Seminar, School of Biosciences, UOB (21<sup>st</sup> March 2016)

University of Bristol e-Learning Seminar. *Digital diversity, learning and belonging: Students as producers meets widening participation in the digital university*. Arts faculty, UOB. (22<sup>nd</sup> June 2016)

*Peer reviewed conference papers*

Timmis, S (forthcoming) Digital diversity: academic and social capital to support inclusion and success in higher education. *Access4all Conference: Good practices for equity and inclusion in Higher Education*. University of Bergamo, Italy. 27<sup>th</sup> September 2016.

Munoz-Chereau, B. (2016) Digital diversity, learning and belonging: how online networks and

technologies can support inclusion and success in higher education. Symposium paper, *British Sociological Association Conference*, Birmingham. 6th April 2016

Timmis S. & Munoz Chereau, B (2015) The inside–outside university: diversity, participation and empowerment in digital spaces across local and global boundaries. Paper Presented at *Society for Research into Higher Education Conference 2015*, Celtic Manor, Newport Wales, December 2015.

Timmis, S. (2015) Widening participation through online social networking: crossing boundaries, emerging identities and emancipatory practices. *European Conference on Educational Research 2015 "Education and Transition. Contributions from Educational Research*. Corvinus University of Budapest, September 2015.

Timmis, S, Yee, W & Munoz Chereau, B (2015) Too near, yet too far: the challenges for 'local' students of learning, belonging and participating in Higher Education. Contribution to symposium: *Participation and Progression from pre-16 to post 16 to University Education: Case studies from Bristol* (Symposium convenor – R Sutherland). BERA conference 2015, Queen's University, Belfast. September 2015.

Timmis, S., Yee, W. & Bent, E. (2014) Space to belong? Under-represented students' digitally mediated and pedagogic experiences in a research intensive university. Contribution to symposium *Getting in is not the only hurdle: inequalities in student experience of higher education in an era of 'universal' participation* (Convenor – A Bathmaker) Institute of Education, London, September 2014.

Yee, W. & Timmis, S. (2013) *Belonging and diversity: the role of digital media and new forms of learning interactions*. Contribution to Symposium: *A culture of belonging? Identity, class and contexts* (Symposium convenor – S Timmis). Presented at Society for Research into Higher Education Conference 2013, Celtic Manor, Newport Wales, December 2013.

#### **Suggestions for extension of the project or further research avenues:**

We have just heard (August 2016) that the ESRC/NRF (South African funding agency) and Newton Fund proposal we submitted in May 2016 in collaboration with University of Johannesburg on a project that builds on both the methodology and findings from DD-lab has been successful and will begin in October 2016. The project focuses on student experiences of rurality and the impact this has on transitions, learning and belonging and including the role of technology in mediating the experiences of rural students of higher education.

We are still waiting for news on the Spencer Foundation application that has also been submitted. This project would be undertaken in collaboration with Universidad Católica de la Santísima Concepción (UCSC), Chile to conduct a similar study to DD-lab in their university, which has a large proportion of non traditional students and extremely high drop out rates. We were visited earlier in 2016 by academics from a multi faith, multicultural college in Israel who are developing mechanisms for inclusion amongst their Bedouin Arab and Jewish student communities and want to use a similar co-researcher approach to DD-lab. We will be advising them as this project proceeds.

In addition to these international dimensions to extend the work of DD-lab, there is also potential for further research in the UK and in Bristol, for example by investigating the role of digital technologies in the experience of disabled students, who were not included in the sampling for the DD-lab study, although some students self identified as having disabilities and their experiences suggest that this would be a fruitful avenue for further research. Furthermore, focusing on postgraduate students, part-time students and other forms of under-representation or diversity could be considered. In addition, working more directly with academic staff to look at student experience from their perspectives could help to shed light on the pressure points or the areas where miscommunication happens and through this help to uncover the reasons why some students, particularly those from under-represented backgrounds as in the DD-lab study find adjusting to university life so challenging and how some of the emergent issues could be addressed.

#### **Impact of the research findings for the University of Bristol:**



A University of Bristol dissemination conference was held on 2<sup>nd</sup> November 2015 to explore how UOB could take the outcomes forward and how this could influence both policy and practice. Over forty people attended, the majority from the University of Bristol including Education Directors and other academics from the six faculties. Much of the final discussions focused on how academic schools and programmes could respond to the findings.

The findings on learning and belonging has already informed the development of Bristol Futures (<http://www.bristol.ac.uk/university/experience/bristol-futures/>) - an innovative new strategic curriculum development initiative designed to embed transferable skills and attributes to support Innovation & Enterprise, Global Citizenship and Sustainable Futures across all programmes in the University. Our findings demonstrate how students can overcome challenges and develop a sense of belonging to the university and the links this has to successful studying and future employability.

The research findings also have potential to influence the work of the new Bristol Institute for Learning and Teaching (BILT) by raising awareness amongst academics of some of the challenges that students from under-represented backgrounds face after they start at the University of Bristol and the importance of the social side of university life and of students working together collaboratively. There is to be a strand specifically tackling issues of diversity in learning and teaching. Furthermore, in the light of the new foundational degree in Social Sciences and Law that is planned, we intend to engage in dialogue with those involved to ensure that lessons from our research influences the design and implementation of that initiative.

#### **Impact of the research findings for the higher education sector and policy makers in the UK:**

The findings have several implications for UK policymakers. These can be summarised as follows:

- Policymakers and universities should put greater emphasis on the ‘participation’ dimension of the Widening Participation (WP) agenda to improve the retention and success of under-represented students.
- Widening Participation is too often seen as a set of bolt-on policies. Instead higher education institutions should work towards more inclusive teaching, learning, accommodation and facilities policies that will benefit all, without positioning WP students as ‘needy’ or disadvantaged.
- Institutional planning and WP policymakers should pay more attention to the particular needs of part-time, local, and mature students, those with disabilities, and those from diverse ethnic backgrounds and other disadvantaged groups.
- To support retention and success of under-represented groups, institutions should encourage students to develop their social and academic capacity through their own use of digital technologies and networks, beyond university provision.
- Higher education institutions should expand their understanding of independent learning and collaboration and the role these play in higher education during the digital age. Students often collaborate online over their work, sharing resources and solving problems but these practices are often hidden or under-valued.

These are outlined in full in our policy briefing (see link in Dissemination above). The briefing has been widely distributed to UK policymakers including HEFCE, OFFA, National Union of Students, Universities UK, Russell Group, Higher Education Academy, as well as UK researchers/ practitioners.

To develop further impact, we are working with colleagues in the School of Education, University of Newcastle to establish a national website to showcase individual stories of diversity and successful university experience, designed to inspire and encourage potential students from a variety of backgrounds on what the experience of university is like and also to be used within universities as a resource to help raise awareness of diversity amongst staff and students. The Newcastle team will be working with us in November to run a workshop with students at Bristol from diverse

backgrounds on the kinds of online resource that might be useful and how it might be designed. To take this further, we will submit an ESRC IAA impact funding bid at the end of September 2016.

**Impact of the research findings for the higher education sector internationally:**

As shown in sections above, there is a great deal of potential to develop further research and the impact of these findings, particularly in countries where there are more challenges to diversity, retention and success in higher education such as South Africa and Chile and where inequalities in access and participation in higher education are far more pronounced. However, there also needs to be care taken to ensure local contexts and cultural differences are fully acknowledged and understood so that direct translation of findings and recommendations is unlikely. Nonetheless, the influence of digital technologies and living in a digital world is felt in all countries and of direct relevance in higher education worldwide. The research has already received attention internationally through the Worldwide Universities Network ([www.wun.ac.uk](http://www.wun.ac.uk)), a network of 18 universities from 11 countries on 5 continents. Sue Timmis was invited to give a keynote presentation in the Global Classroom strand of their annual conference in Maastricht in April. The work has also been presented in Chile and South Africa.

**Other impacts of the research (e.g. for schools, local authorities, other bodies or sectors):**

Schools could also use the findings from this research to help prepare students for the transition to and participation in higher education and so we will ensure that local schools and local authority contacts receive the policy briefing and links to the website and the planned impact activities.

**Financial summary:**

	Budget	Actual
Staff Costs	47638	45023.57
IT	7697	12325.46
Consumables	651	328.05
Transcription	3781	2801.1
Travel/meeting costs	3211	3494.13
Refreshments	4320	2694.24
Dissemination	350	0
Conference Costs	7000	6003.94
Website Costs	400	0
<b>Total</b>	<b>75048</b>	<b>72670.49</b>