

What is success? Reflections on assisting BTEC students' transitions into higher education

Sandra Huskinson^a, Helen Mackenzie^b, Keith Pond^a, Richard Goodman^a
Loughborough University^a, University of Warwick^b

In 2018, approximately ten per cent of students entering higher education (HE) in the United Kingdom (UK) had studied wholly for a Business and Technology Education Council (BTEC) qualification (Herbert, 2019). These vocational qualifications have played an important role in developing an additional educational pathway into universities for students often associated with under-represented groups and regions of low participation. Whilst widening participation initiatives have contributed to the increased number of BTEC students entering HE institutions (HEIs), it is clear that further challenges and potential barriers remain (Gicheva and Petrie, 2018). Overall, BTEC students who enter university tend to study a narrow range of subjects (for example, Business and Sport and Exercise Science) and are not accessing the more selective universities (Gicheva and Petrie, *op.cit.*). Moreover, HE students with vocational qualifications, including BTEC, are a) more likely to obtain lower degree outcomes and have higher attrition rates and b) less likely to enter higher-paid graduate employment than students with traditional academic qualifications, such as A-level (McCoy and Adamson, 2016).

The 'Transforming Transitions' project is a collaborative project involving four 'selective' universities and partner FE colleges and was funded by the Catalyst Programme of the Higher Education Funding Council for England (HEFCE) – now Office for Students (OfS). The main aim of this project was to address BTEC students' differential outcomes, first by examining the factors that might influence preparation, progress, retention and success (Banerjee and Myhill, 2019) and then by devising potential approaches to supporting BTEC students' academic journeys into and within university. This article reflects upon the development of an online module implemented at Loughborough University to assist BTEC students' transition from further education (FE) into HE. The module was made available for students to study prior to entry, with the main intention of developing confidence, knowledge and skills. It was also hoped that the module would help shape realistic expectations and begin to nurture a 'sense of belonging' (Thomas, 2012) at university. This case study provides a better understanding of the complex issues involved in working with students collaboratively as part of a project and examines what we can, within this context, define as success. Findings are summarised as supportive of further work within this important field.

Introduction

In recent years, there has been a substantial growth in the number of students entering university with a BTEC vocational qualification. In 2015, for example, students with a BTEC qualification accounted for fifteen per cent of Universities and Colleges Admissions Service (UCAS) applicants in the eighteen-year-old group, an increase of fifty per cent since 2011 (UCAS, 2016). However, there are concerns about the differential outcomes of these students. Overall, BTEC students are gaining access only to some universities and are more likely to go to low-tariff universities (Mian *et al.*, 2016). The UCAS data for the 2016 entry cycle shows that only 2.4% of students with a BTEC were accepted at a high-tariff institution (UCAS, 2016, p.25). As a result, many top universities have been recently accused of 'BTEC snobbery' (Savage, 2018). Further, this 'selective' approach has a potentially negative

impact upon BTEC students' transitions out of HE and into employment. This important point was identified in the Social Mobility Commission report (2016, p.91), which found that, while BTECs were a route into university for students from low-participation neighbourhoods, students "*with BTECs [were nevertheless] most likely to access lower tariff university courses, which lead to lower wages*".

As the number of students who hold a BTEC vocational qualification upon entry into HE continues to grow, there are also increasing concerns about their success in relation to their marked differential outcomes on graduation and also their retention. Within HE, BTEC students are a) more likely to obtain lower degree outcomes and have higher attrition rates and b) less likely to enter higher-paid graduate employment than students with traditional academic qualifications (McCoy and Adamson, 2016). To illustrate, evidence suggests that BTEC students are more likely to drop out of university than those on a traditional academic pathway, even when accounting for prior attainment (Round *et al.*, 2011; Hayward and Hoelscher, 2011; Herbert, 2019). At the same time, in terms of degree outcomes, students with BTEC qualifications have been found to perform less well than the sector-adjusted average (HEFCE, 2013, p.25), with A-level students more likely to achieve a first-class degree than vocational students. Set within this wider context, the 'Transforming Transitions' project aimed to explore BTEC students' journeys across the FE and HE divide and, in so doing, improve understanding of how their transitions might be supported, to help close this outcomes gap.

The Transforming Transitions project

Transforming Transitions is a collaborative project, involving four 'selective' universities and partner FE colleges and focused upon three particular subject areas: Sports Science, Business Studies and Computer Science. It should be noted that the project team was aware, both when planning and undertaking the project, that, though the study's focus was upon the experiences of students with vocational BTEC qualifications, students who take vocational qualifications are likely to share the characteristics of the widening participation cohort. At the outset, therefore, the project aimed to "[avoid] *the risk of generating claims which treat students with vocational qualifications (and indeed students in other disadvantaged groups) as homogenous, when they are heterogeneous and diverse.*" (Myhill and Morgan, 2019, p.33). In addition, the project included the perspectives of students with a range of qualifications upon entry to HE which not only acted as a comparative, but also provided greater insights into the different transitions experienced across the student population, irrespective of their prior qualifications. The value of this inclusive approach has been a better understanding of the factors that might hinder or facilitate effective transitions not just for vocational BTEC students, but for *all* students (Herbert, 2019).

The project involved two phases:

- **The first phase** began by exploring both statistical data on access to and during progression across the transition and also qualitative research, the better to understand both student and lecturer perspectives within FE and HE. In HE, students entering with such various qualifications as A-level and IB were also included as a comparative (Banerjee and Myhill, 2019).
- **The second phase** built upon the first phase's findings, to identify better ways to support BTEC students who are transitioning into HE. As a result, four evidence-

based interventions were developed, implemented and evaluated. One intervention involved the creation of an online module deployed in three of the universities taking part in the project. This article focuses upon one of these universities, Loughborough University, as a case study.

Methodology

As indicated above, the first phase's research data reinforced the need to create an online module to support and improve BTEC students' transition into the HE teaching and learning environment. At Loughborough University, the project team brought in the support of a learning technologist and also called on the skills of the central virtual learning environment (VLE) team to create a module called WARM_UP (Welcome and Academic Resource Module for Undergraduate Preparation). During this stage, it was also decided to bring in former BTEC students who were now in their second year at Loughborough (including those who had taken part in the first phase of the project), to help assist the development of the module. This process also built upon the team's previous experience of creating video content to enhance the curriculum for a first-year study skills module delivered within the School of Business and Economics. 'Advice to my first-year self' (figure 1) was created in collaboration with second-year undergraduate students to help all undergraduate students to learn the skills necessary for successful transition to university, based upon personal experiences voiced by their peers.



Figure 1. 'Advice to my first-year self' video

On the basis of interface and multimedia design principles (Alessi and Trollip, 2001), three main development stages were recognised as essential to the process: design stage, pilot stage and live stage. The partner universities also applying this form of intervention used existing modules, re-purposed or re-designed for the project. The target audience was the same in each case, but the practical issues surrounding each instance were different.

Design stage

The work of Jossel and Witthaus (2015) also guided the design, with key benefits recognised in their desk research being utilised. These included: fostering interactions and a sense of

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community between students and their peers and the institution; encouraging reflection; focusing on essential skills; and using the experience for the better design of future induction initiatives.

The module content drew on the first phase's findings and identified key aspects for support in the following areas:

- **transition skills** – key aspects of time management, group collaboration and reflection, preparing for lectures and preparing for employment while studying;
- **writing skills** – key aspects of essay writing, note taking and effective reading;
- **mathematics skills** – perceived to be the biggest 'gap' between A-level and BTEC students – the key aspects of basic algebraic manipulation, graphs and charts and essential statistical processes.

A diagnostic quiz was also created in order to enable students to assess their current knowledge and abilities in each area prior to accessing the content. The quiz also encouraged students to identify the key areas in which they needed support and to adopt a reflective mode of understanding how to manage their own learning process. It gave them control over their own development and helped them to set individual priorities for learning. During both pilot and live stages, PhD students provided help and students had access to a blog page where they could ask questions.

Key online learning principles were used to drive the design of the module (table 1). Earlier institutional cooperation with the UK's Massive Open Online Courses (MOOC) platform FutureLearn (2017) helped to provide knowledge and experience at this stage.

Design principle	Deployment in warm-up
linear narrative	The module had a clear start activity – the diagnostic quiz that participants could return to at any stage. To allow flexibility and for participants to engage with the content in any order, clear navigation was set up to allow return to the main page at any time. At the end of each topic, participants had a further opportunity to reflect and a final topic invited them to gauge their completion of the module and achieve the award of a certificate.
stepped	The options under the three topic headings were stepped and linear in pedagogic style: first read or do something and then engage or reflect.
activity-based	The activities had to be designed for individuals to complete them. Group work or peer interaction was felt to be too resource-intensive for supervising staff during the six to eight weeks of deployment. Activities included reading, completing a survey, reviewing a case study, watching a podcast and taking notes.
reflective	Each topic gave the opportunity to use a reflective blog. A facility to allow participants to download their entire reflection for (possible) future discussion with academic tutors was designed but never implemented.

celebrated	Upon completion of a minimum number of activities and tasks, the participant became eligible for the award of a certificate of completion issued by the University. This acknowledged the value placed upon the learning by the institution.
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Table 1. Deployment of online design principles

To set the tone of the module and to tap into the reported learning preferences of ‘millennials’, a Rapport, Rationale, Research, Relaxed and Relevance approach, based upon the Price (2009) Five Rs, was used and student videos introduced each topic. ‘Competencies’, a feature within Moodle, was utilised within the interface to limit access to some content until other tasks, such as the diagnostic quiz, were completed. This ensured that students did not, without the guidance of the quiz process, jump straight to content which they either preferred or for which they presumed they needed more support.

Generosity, flexibility and teamwork

At the heart of the online module’s design process was the commitment to involve students actively in a co-creation process. The use of video was deemed important to transitioning students in providing them with a sense of community and also opportunity for collaboration, in accordance with the notion of helping them gain at university a ‘sense of belonging’ (Thomas, 2012; Mackenzie and Morris, 2019), which had been identified previously as an important factor in assisting successful transitions. Twelve students, a mixture of former BTEC students, second-year undergraduates and PhDs at Loughborough University, were recruited to help shape, create and develop the content of the online module (figure 2). Tasks included re-writing and editing the video scripts, recommending content, user-testing and suggesting venues to film that they thought appropriate for giving the students who were transitioning a sense of belonging at university. This was an organic process, the twelve students being fully involved with the decision-making as well as enthusiastic, generous with their time, patient and helpful throughout.



Figure 2. University students helped to make the students feel at home and ‘belong’

The design team took the opportunity to glean some insights from these students on what they thought were the main issues relating to transition into HE. Importantly, they identified

that creating within the online module a sense of community and ‘belonging’ was crucial at this stage to students’ successful transition to a university. Being fully involved in shaping content and supporting this community was very important to these students and emerged as a measure of success. The videos were seen as important to module delivery, providing the opportunity for new students to hear the views of their peers rather than those of university tutors, lecturers and staff. These students and university colleagues acted as user testers for the module interface and content. The colourful menu and icons were added to help students know at all times where they were within the interface; the menu was displayed on every page to provide help and support at every point (figure 3).

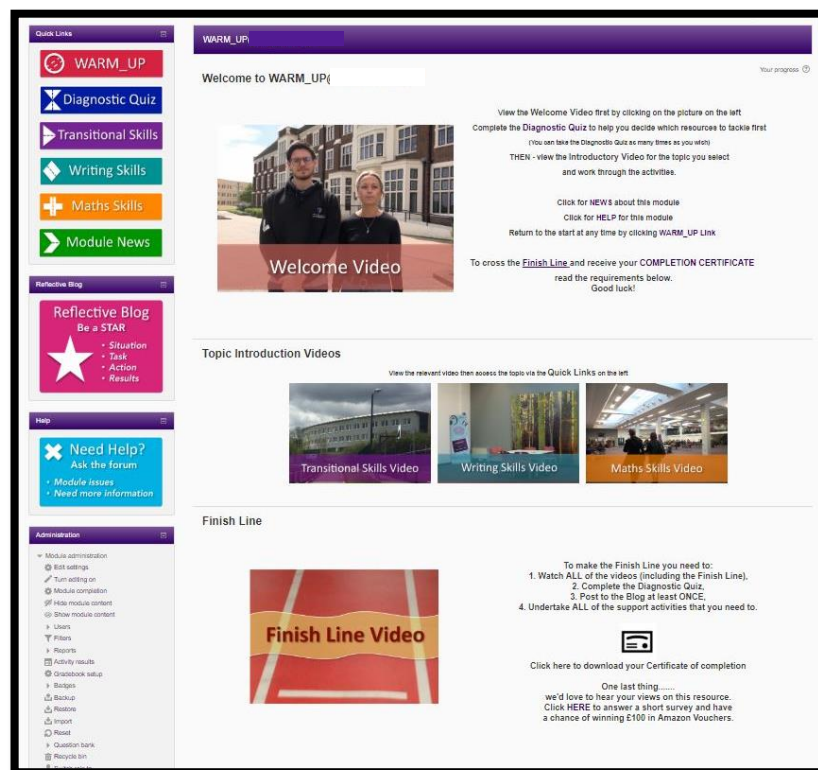


Figure 3. The WARM_UP module's home page

Results

Pilot stage

The module was piloted for two weeks with existing first-year undergraduate students nearing the end of their first year at university. Feedback was collected using the reflective blog and diagnostic quiz as part of the module. At this stage, the feedback was largely positive, with no technical or navigation issues being highlighted. Most negative feedback concerned the clarity of some of the instructions provided and these were amended accordingly. One noteworthy comment by a student said that the module “... gave a sense of care by the university – reaching out to applicants before they arrived.”

The module was then prepared for launch with students prior to their entry to the university. The platform used was the institutional Moodle Virtual Learning Environment 3.6.6., which is called ‘Learn’ and includes a number of activity plugins which are not part of the Moodle core. Some of these are supplied by commercial partners, while others are assessed on a

needs' basis, with a careful balance to be struck between functionality and the long-term sustainability of each plugin. It was considered to be an advantage that the new cohort of students would engage with Moodle prior to the start of their university courses. A link enabled the students participating in the pilot to access the content – these students were asked to provide data about ease of use, areas that did not work and any thoughts on what might be missing from the content. This information fed back into the design process and shaped the final design and content.

Live stage

The landing page and registration allowed pre-entry students to use their personal email addresses, unlike Loughborough University's current student transition and induction process, which requires students to go through the registration process and be assigned a university username, email and password before they can gain access to the system. The central VLE team facilitated this, allowing access some categorisation information that would help with the analysis of data. In addition to stating existing credentials, students were able to peruse the ethics statement and information sheet, which underlined the fact that their participation was part of a research project. Take-up was limited but gave some valuable insights into usage.

Final outcomes

This module was deployed as a pilot at Loughborough University. Although at an early stage, the project may be regarded as having produced many positive outcomes, including conveying the value and viability of including students in the design production process. It has proved possible to engage students successfully with the content creation process even under time constraints and with a limited budget. During the development process, students with BTEC qualifications were able to reflect on their personal experiences of transition and staff were able to discuss with students and colleagues how they might best support new students in the future. The development of an online community to support these students was identified as being a significant measure of success within this pilot. From a design and construction perspective, this development provided the opportunity for students and colleagues to build relationships across different university departments, work collaboratively and develop digital skills. Within a university context, to create a module different from a standard VLE design carries a certain amount of risk. The IT Services team had to collaborate closely with Business School colleagues, providing quick and clear communication and regular testing within a very short turnaround time, but this played an essential role in the successful deployment of the module. To have established good working relationships and communication processes across all areas and between students and staff – including those who left the university during the course of the project – was essential to the successful delivery of the pilot. As colleagues believed in this project and saw its potential, they gave freely of their time to ensure that it succeeded.

Findings

This article set out to reflect upon the development of an online module to support BTEC students' transition into HE and determine what main factors contribute to the success of one evidence-based intervention. Here we conclude with an outline of the key findings from the study:

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- Rather than implement interventions because they ‘might be good’, the Transforming Transitions project aimed to understand the nature of important relevant issues and to draw on student perspectives – essential for determining how the module might assist and support transition to HE – to build an evidence base.
- A review of relevant literature to help to inform the development of interventions was especially useful. In particular, the conclusions of Mountford-Zimdars *et al.* (2015) about the causes of differential outcomes resonate with aspects of this case study – for example, their conclusions relating to: the user-friendliness of learning and teaching practices; good relationships between staff and students and between students; and the extent to which students feel supported and encouraged within their institutions.
- Working collaboratively with students during the development of the online module and creating a sense of community (and thus ‘belonging’) at university was considered vital to students’ transition at this early stage – it could foster subsequent academic success (Mackenzie and Morris, 2019).
- When creating supportive digital spaces designed to build student confidence, attention could be paid to the notion of a ‘facilitative holding environment’ (Winnicott, 1971) that takes into account the need for support provision, including emotional support and comfort. As suggested by Tolley and Mackenzie (2017), in order to facilitate students’ difficult transitions, environmental provision plays a central role: ideally, the environment should be designed to be *just good enough* – that is, not too over-protective and structured, but with sufficient freedoms to allow students to develop confidence, become increasingly autonomous as learners and acquire a sense of self and identity.
- Though there are no plans to continue the development of this particular project at this institution, it is the formation of relationships and processes and the acquisition of new skills by the development team that will be central to assisting the integration and construction of similar projects in the future.
- In terms of project outcomes, the issues identified (BTEC will soon become T- levels in the UK educational system) are still evident and pertinent. As previously made clear, the Transforming Transitions project was mindful to avoid deficit discourses about vocational qualifications and, while the focus has been upon the experiences of BTEC students, the online module has the potential to be set in a wider, more inclusive application. In phase one, it was found that most students (such as A-level and international students) also experienced difficult transitions – a reminder that the student group is highly heterogeneous and that there are dangers of treating any sub-group of the student population as homogeneous.
- Going forward, the Office for Students (OfS, 2019) is encouraging universities to develop the digital skills of students. To provide, therefore, an online module at the beginning of the students’ experience of HE offers an ideal opportunity to refine and develop such skills.
- As with all projects, a clear dissemination strategy is always required. The dissemination of our findings at several conferences show that these issues are important to many institutions and that there is more work to be done in this important area.
- A combined approach to the sharing of knowledge and experiences, setting some basic learning and teaching standards for student induction and transition and

involving a variety of institutions might, overall, be beneficial to the student experience. Whilst this project has concentrated upon the differential outcomes for BTEC students, it is clear that a joined-up approach – to involve student services and student support and disseminate information about how students can access help – would be useful. The provision of an online module therefore needs to be set within the wider context of university support, and beyond.

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Reference list

Alessi, S.M. and Trollip, S.R. (2001) *Multimedia for learning: Methods and development*. Boston, MA: Allyn & Bacon. ISBN: 978-0205276912

Future Learn (2017) 'FutureLearn Course Criteria.' Available at: <https://partners.futurelearn.com/course-creation/pedagogy-and-learning-design/learning-design-guidelines-2/> (Accessed: 4 February 2018).

Hayward, G. and Hoelscher, M. (2011) 'The use of large-scale administrative data sets to monitor progression from vocational education and training into higher education in the UK: possibilities and methodological challenges.' *Research in Comparative and International Education* 6(3), 316-329. Available at: <https://doi.org/10.2304/rcie.2011.6.3.316> (Accessed: 24 February 2018).

Herbert, D. (2019) 'Introduction.' In: Myhill, D. and Banerjee, P. (eds.) (2019) *Transitions from Vocational Qualifications to Higher Education: Examining Inequalities in Widening Participation*. Bingley: Emerald Publishing Ltd., 1-11. ISBN: 978-1-78756-996-6

Gicheva, N. and Petrie, K. (2018) 'Vocation, vocation, vocation: the role of vocational routes into higher education.' Social Market Foundation, London. Available at: www.smf.co.uk/wp-content/uploads/2018/01/SMF-Vocation-Vocation-Vocation.pdf (Accessed: 8 October 2019).

HEFCE. (2013) *Higher education and beyond: Outcomes from full-time first-degree study*. Available at: <http://www.hefce.ac.uk/pubs/year/2013/201315/> (Accessed: 21 May 2017).

Jossel, L and Witthaus, G. (2015) *Findings from a desk research study into online and blended induction for students in UK universities*. Available at: https://www.researchgate.net/publication/319417688_Findings_from_a_desk_research_study_into_online_and_blended_induction_for_students_in_UK_universities (Accessed: 24 February 2019).

Kemmis, S. and McTaggart, R. (2005) 'Participatory Action Research: Communicative Action and the Public Sphere.' In: Denzin N.K. and Lincoln, Y.S. (eds.) *The Sage handbook of qualitative research*. Thousand Oaks, CA: Sage Publications Ltd., 559-603. ISBN: 978-0761927570

Case Studies

Mackenzie, H. and Morris, R. (2019) 'Students' Voiced Experiences of Social Transitions: Facilitating a Sense of Belonging.' In: Myhill, D. and Banerjee, P. (eds) *Transitions from Vocational Qualifications to Higher Education: Examining Inequalities in Widening Participation*. Bingley: Emerald Publishing Ltd., 97-111. ISBN: 978-1-78756-996-6

McCoy, T. and Adamson, D. (2016) 'Building a House on Sand?' In: Steventon, G., Cureton, D. and Clouder, L. (eds.) *Student Attainment in Higher Education: Issues, Controversies and Debates*. Oxford: Routledge, 161-173. ISBN: 978-1138844476

Mian, E., Richards, B. and Broughton, N. (2016) *Passports to Progress*. London: Social Market Foundation. ISBN: 978-1-910683-11-8

Mountford-Zimdars, A.K., Saunders, J., Jones, S., Sabri, D. and Moore, J. (2015) *Causes of differences in student outcomes*. London: Higher Education Funding Council for England. Available at: https://dera.ioe.ac.uk/23653/1/HEFCE2015_diffout.pdf (Accessed: 24 February 2018).

Myhill, D. and Banerjee, P. (eds) (2019) *Transitions from Vocational Qualifications to Higher Education: Examining Inequalities in Widening Participation*. Bingley: Emerald Publishing Ltd. ISBN: 978-1-78756-996-6

Myhill, D. and Morgan, S. (2019) 'Vocational Qualifications, University Access and Widening Participation: Setting the Context.' In: *Transitions from Vocational Qualifications to Higher Education: Examining Inequalities in Widening Participation*. Bingley: Emerald Publishing Ltd., 13-38. ISBN: 978-1-78756-996-6

Price, C. (2009) 'Why Don't My Students Think I'm Groovy?' *The Teaching Professor*, 23(1), 7. Available at: <http://connection.ebscohost.com/c/articles/43672158/why-dont-my-students-think-im-groovy> (Accessed: 24 February 2018).

Round, D., Brownless, C. and Rout, A. (2012) 'The landscape of vocational progression in higher education: understanding the retention and progression of vocational learners through a regional perspective.' *Research in Post-Compulsory Education*, 17(1), 5-19.

Available at:

https://www.researchgate.net/publication/254334782_The_landscape_of_vocational_progression_in_higher_educationUnderstanding_the_retention_and_progression_of_vocational_learners_through_a_regional_perspective

(Accessed: 27 February 2020).

Savage, M. (2018) 'Top universities accused of BTEC snobbery.' *The Observer*. Available at: <https://www.theguardian.com/education/2018/jan/27/universities-btec> (Accessed: 9 October 2019).

Social Mobility Commission (2016) *State of the Nation 2016: Social Mobility in Great Britain*. Available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/569410/Social_Mobility_Commission_2016_REPORT_WEB_1_.pdf (Accessed: 4 April 2019).

Tolley, H. and Mackenzie, H. (2017) 'BIM-Hub Project Evaluation: Principles, Methodologies, Protocols and Outcomes.' In: Childs, M. and Soetanto, R. (eds.) *Online Learning for STEM*

Case Studies

Subjects: Examples of Technologies and Pedagogies in Use. London and New York: Routledge, 85-97. ISBN: 978-1-138-93444-3

Thomas, L. (2012) *Building student engagement and belonging in Higher Education in a time of change: A summary of the findings and recommendations from the What Works? Student Success and Retention Programme*. Available at: https://www.heacademy.ac.uk/system/files/what_works_final_report.pdf (Accessed: 14 March 2019).

The Office for Students (2019) '£13 million in bid to boost digital skills.' Available at: <https://www.officeforstudents.org.uk/news-blog-and-events/press-and-media/13-million-in-bid-to-boost-digital-skills/> (Accessed: 20 October 2019).

The Universities and Colleges Admissions Service (2016) *End of Cycle Report 2016: UCAS Analysis and Research*. Cheltenham: UCAS. Available at: <https://www.ucas.com/file/86541/download?token=PQnaAl5f> (Accessed: 15 May 2019).

Winnicott, D.W. (1971) *Playing and Reality*. London and New York, NY: Routledge. ISBN: 0-415-34546-4