



International Journal of Technology Transfer and Commercialisation

ISSN online: 1741-5284 - ISSN print: 1470-6075

<https://www.inderscience.com/ijttc>

The bridge to higher education - scaffolding the transitional experience of prospective higher educational learners using a small online course

Gianpaolo Vignali, Rachel Studd, Daniella Ryding

DOI: [10.1504/IJTTC.2023.10054833](https://doi.org/10.1504/IJTTC.2023.10054833)

Article History:

Received:	13 November 2020
Last revised:	16 September 2022
Accepted:	02 October 2022
Published online:	21 March 2023

The bridge to higher education – scaffolding the transitional experience of prospective higher educational learners using a small online course

Gianpaolo Vignali*, Rachel Studd and
Daniella Ryding

School of Materials,
University of Manchester,
Oxford Rd., Manchester,
M13 9PL, UK
Email: gianpaolo.vignali@manchester.ac.uk
Email: Rachel.studd@manchester.ac.uk
Email: Daniella.ryding@manchester.ac.uk
*Corresponding author

Abstract: Building on the ‘conceptions of students transitions theory’ identified by Gale and Parker (2012), this paper provides a case-study approach to further understand how the transition from secondary to higher education can be best managed, along with a proposed theoretical expansion to their ‘conceptions transitions model’. Evidence presented in this paper suggests that both social and academic support is required, with various key authors addressing a skills development gap at the transitional stage and the necessity to research into this field (Van Herpen et al., 2020). Using technology to transfer knowledge a small online course (SOC) was developed for a discipline specific course. The theoretical contributions extend Gale and Parker’s (2012) framework, depicting an embryonic stage (T_0) supporting prospective students through the transition creating an early sense of belonging. Practical implications of implementing the SOC demonstrates an increase in student applications and a rise in key information sets (KIS) data for the courses concerned.

Keywords: small online course; SOC; transition; higher education; digital; learning; application; scaffold; self-efficacy; belonging.

Reference to this paper should be made as follows: Vignali, G., Studd, R. and Ryding, D. (2023) ‘The bridge to higher education – scaffolding the transitional experience of prospective higher educational learners using a small online course’, *Int. J. Technology Transfer and Commercialisation*, Vol. 20, No. 1, pp.117–140.

Biographical notes: Gianpaolo Vignali is a graduate from UMIST with his first degree in Mathematics. Later adding a Master’s in Strategic Management, his career first started as a part-time Lecturer and researcher at Manchester Metropolitan University before moving to full-time employment in the Department of Retail at Leeds Metropolitan University. He then became the Program Leader for Fashion Buying and Merchandising at Manchester Metropolitan University until he achieved his PhD and moved to Manchester University working in the School of Materials where he delivers on both undergraduate and post graduate programmes.

Rachel Studd is a reader in Design and Discipline Lead for the Fashion Business and Technology Group in the Department of Materials, University of Manchester. She is a Senior Fellow of the HEA and, as a teaching and scholarship academic, has published and presented in the areas of student transition and their sense of belonging in a higher education context. She received recognition by the University's Institute of Teaching and Learning through a Teaching Excellence Award for her work in this field. Her other research interests are in fashion product development directly linked to her teaching expertise, resulting in various publications.

Daniella Ryding is a Senior Lecturer in Fashion Marketing, and the editor of several fashion business textbooks, including Springer Nature, and Palgrave Macmillan. Furthermore, she is author of over 50 peer reviewed publications. She has been involved with the guest editing of several special issues for ranked journals and enjoys collaborating with a network of international academics. Her passion and specialist areas focus in the field of evolving consumer behaviour, and ramifications for contemporary business development in social media and environmental sustainability contexts. Her recent research interests and involvement, centres on the social aspects of sustainability, where she embraces knowledge contributions and transfer, within the remit of consumer diversity and inclusivity.

This paper is a revised and expanded version of a paper entitled 'The transition into Higher Education – using a SOC as the scaffold' presented at Textile Institute World Conference, Poznan, 25–28 April 2016.

1 Introduction

This paper explores contemporary aspects related to scaffolding the educational experience, by building bridges to support learning for all prospective students, at the initial stages of considering higher education. A fundamental feature when developing the small online course (SOC) is to provide clear linkages between existing knowledge, the academic discipline and future careers by conveying employability as a key skill. Using technology to transfer the knowledge, creating an innovative online environment, was an important factor given the target audience and reach this enabled. It focuses on the importance that all stakeholders need to understand the transition bridge (Briggs et al., 2012). From pre-enrolment to post graduation this study supports the work of Gale and Parker (2012), Taylor and Harris-Evans (2018) and Van Herpen et al. (2020) by addressing the gaps and developing a new transition conception named T_0 – transition as pre-induction.

Evidence suggests there is an increase in how learners adjust to university education and life (Macaskill and Taylor, 2010). The problematic transition between the 14–17 year age groups, is a well-known problem which can be attributed to by the 'narrative' approach to learning pre-university (Marland, 2003). In comparison, university education typically follows a more independent, critical and analytical approach enabling students to work more effectively towards self-efficacy (Dinther et al., 2011). 'Generation Z', otherwise known as 'generation me and generation we', crave a sense of belonging and individuality. Managing the transition (Chambers et al., 2002; Cohen et al., 2012; Gale and Parker, 2012; Brooman and Darwent, 2014; Taylor and Harris-Evans, 2018) of this

generation is thus complex, but there is a need to address the issue. On the one hand there is a need to understand how to develop learners effectively, but also in response managerially, to new institutional targets, driven by the emergence of the transparency requirements through both key information sets (KIS) data and the teaching excellence framework (TEF).

Previous literature (Bandura, 1997), stipulates the need to cultivate autonomous thinkers who are confident in their ability to organise and execute ‘the courses of action required to produce given attainments. As a result, self-efficacy and its relationships with academic success and retention, has been extensively explored in recent years (Brooman and Derwent, 2014).

Building bridges of understanding with the 14–17 year old age groups requires clear linkages from their existing knowledge and their academic discipline, to their future working careers by conveying employability as a key skill so they can see a tangible journey ahead with identifiable steps (Donald et al., 2018). It has been argued that embedding this linkage would be effective through the use of a SOC with a view to building a sense of belonging for the prospective student before they apply to university (Cohen et al., 2012; Van Herpen et al., 2020). The motivation for this study originated from a rationalisation of courses in the Department of Materials at the University of Manchester for a non-traditional academic subject, fashion business, and a commitment to develop a course grounded with a deeper understanding of transitional learning and key skills development within a changing educational environment. It was also seen as important to create and to ‘pass on a spark of inspiration’, to *all* prospective students, including those from a widening participation (WP) sub-group, particularly allowing WP students access and transition to university (Manchester 2020 Strategic Plan). Experiences gained during previous years and prior internal studies also suggested a need for the greater management of students expectations and a move towards better student integration, considering engagement and empowerment.

The main aims of this study were to assist pre-enrolment students in their decision-making of choosing their own appropriate journey, to demystify the transition into higher education, whilst creating a sense of belonging.

2 Definition of transition

Previous studies define transition as “a process of change over time” [Colley, (2007), p.428]. Bonassi and Wolter (2002, p.99) delve further and suggest that transition is a, “multi-dimensional process, extending over a particular time.” This is supported to some extent by Quinn (2010, p.122) who defines transition as “a fixed turning point which takes place at a preordained time in a certain place.” Transition into university has been grounded in international literature (Cohen et al., 2012; Dinning et al., 2015; Anderson et al., 2016; McMillan, 2014). This is exemplified in the work undertaken by Ecclestone et al. (2010) who argue that it dates back to the introduction of compulsory schooling. There is however, a limited offering linked to how adults, rather than children, move in to higher education. The research provided by Gale and Parker (2012), develops a robust framework for managing transition presenting three conceptions: transition as induction (T₁), transition as development (T₂) and transition as becoming (T₃). However, the work from this study concludes a lack of research within the T₃ conception with no single

example of T_3 in practice (Gale and Parker, 2012). A weakness of these conceptions is the limited research into the pre-enrolment stage, and as such a major part of the students pre-experience, knowledge and cognition has been discounted. This gap in the literature needs to take into account the point in which transition commences. The study presented in this paper considers the initiation of the transition period when the potential student first makes contact or engages with the university that they transition into, rather than their arrival day.

There is a continuing change in the diversity of students in the transition group, with the expansion of adults entering UK Higher education based on targets set by the UK Government (50%), Ireland (72%) and the USA (60%). This diversity of the students could affect the retention and engagement of students in their first year experience (FYE) [Gale and Parker, (2012), p.736]. From current statistics, it is these students who are most likely to be less socially integrated into higher education and therefore less satisfied with their experience of 'transition as becoming' (T_3) (Heirdsfield et al., 2008; Hultberg et al., 2009; Gale and Parker, 2012).

3 Theoretical contribution – extending the conception transition theory

- T_1 'Transition as induction', focuses on a smooth transition between secondary school and higher education (Gill et al., 2011; Hultberg et al., 2009). The limitation to research predominantly looks at the FYE [Gale and Parker, (2012), p.739]. It usually discounts the experiences or pre-enrolment students and therefore provides support for a T_0 conception. This notion is vitally important given that students build their relationship with a university way before they attend an induction session. Tinto (2008) argues that without support prior to entry, this is not classed as an opportunity. A lack of understanding the expectations for this target group goes some way in making them less able to socially integrate and can impact on retention targets (Boliver, 2013; Bowles et al., 2014; Kift, 2009). Furthermore Gale and Parker (2012) found that the FYE informs student success or failure, however this does not include the pre-enrolment stage (T_0). A gap that this study will conclude is essential to the transition process.
- T_2 'Transition as development', refers to one's identity (Terenzini et al., 1996). The emphasis is the shift of a student from one identity to another. These researchers share a similar trait to T_1 in that they refer to the process of transition as linear (Taylor and Harris-Evans, 2018). Whereas T_1 focuses on pathways, T_2 consider their route as a trajectory (Gale and Parker, 2012; Baron et al., 1999). Examples focus on students to consider their pathways in terms of future employability (George et al., 2005).
- T_3 'Transition as becoming', Gale and Parker (2012) argued that future research need to be conducted in the students lived experiences. This conception lends itself to a T_3 mentality of transition. Baron et al. (1999) argues that transitions are not always negatively focussed and linked to crisis rather they can be defined as backward and forward movements (Gale and Parker, 2012) and must capture the diversity of student life. Brooman and Darwent (2014) measured the impact of T_1 and T_2 motivations however the gap lay in the T_3 design. Their study focussed on poster projects linked to tutor led seminars built on social integration from the start of the

students induction and the results confirmed that staff relationships played a vital role in the students transition. Their definition of transition included more than just the self but also their immediate reference groups essentially not linked to the university.

In summary it is clear that there are three distinctive conceptions to transition as evidenced in Gale and Parker (2012) and Taylor and Harris-Evans (2018) studies. These form the basis of this study namely:

- The experience and understanding the expectations of pre-enrolment students impact their transition from T_0 to T_3 .
- A longitudinal study into considering an integrated approach of Gale and Parker's (2012) conceptions.

Gale and Parker (2012) present in their research that conceptions can be completed together however this study will look to present the results (as presented in Figure 1) of a longitudinal integrated conception case study example developing T_0 .

Figure 1 The concentric transverse ripple model of transition into higher education-based and extended from Gale and Parker's (2012) conception transition model (see online version for colours)

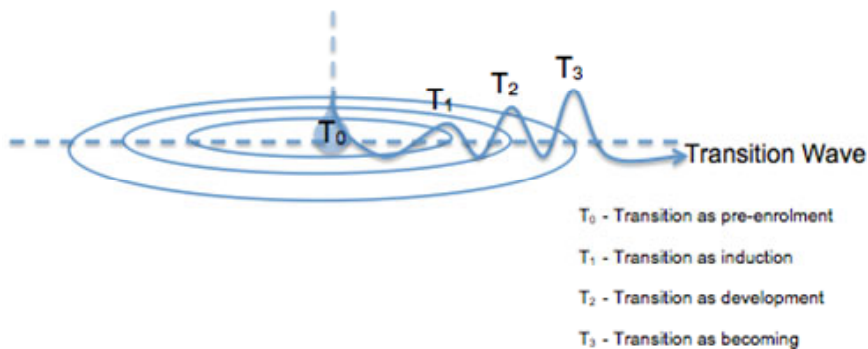


Figure 1 develops the notion of the three separate conceptions from Gale and Parker's (2012) work and extends this to show the 'ripple' and progression through the conceptions. This 'transition wave' supports Gale and Parker's (2012) notion that conceptions can be integrated, however it also suggests that a new conception in T_0 is presented. The concentric transverse ripple model allows for a backwards and forwards movement between the 'waves' by demystifying the process of transition at the T_0 stage. Again this can be supported by T_1 and T_2 researchers that UK WP students can have a very different experience. Taylor and Harris-Evans (2018) considered Deleuze and Guattari's (1987, 1994) philosophy for developing this research however their study did not consider this from a longitudinal perspective. Figure 1 denotes the 'ripple' between conceptions and allows for a flow between each transition wave, something the SOC will highlight. Gale and Parker (2012) highlight a trend in T_2 similar to T_1 in that students entering from a WP or disadvantage background have a very different experience culturally than those who do not. By demystifying this perception using a T_0 conception in the form of a SOC allows for an improved experience.

4 SOC development for fashion business courses

Given the problematic transition encountered by the 14–17 year age groups, the requirement to understand the need for a relationship between the students and the culture of the programme they enter whilst increasing a sense of identity (T_2) related to this (Gale and Parker, 2012) and the social and academic support necessary for successful transition (Chambers et al., 2002; Cohen et al., 2012), the aim of this study was support the development of a SOC:

- To assist pre-enrolment students in their decision-making of choosing their own appropriate journey, to demystify the transition into higher education, whilst creating a sense of belonging.

In order to develop the SOC and review its effectiveness, several key themes were deemed important for deeper exploration. These were to:

- Obtain a better understanding of the target audience (14–17 year olds) and their behaviours online through to academic completion.
- Develop bite sized contact in an appropriate language through course design.
- Evaluate the success of the SOC and its positioning as part of the students transition into higher education.

5 Method

The projects were developed into three stages namely:

- 1 Curriculum review of the courses and the integration of support for T_1 to T_3 transitions including Peer Assisted Study Sessions (PASS) and industrial placements.
- 2 The SOC construction and testing:
 - Desk research to inform the curriculum to assist with the T_1 and T_2 transitions and the pre-enrolled student (14–17 year age groups) commencing their transition (T_0).
 - A mixed method study was adopted for the SOC design project split into collecting both quantitative and qualitative data.
- 3 Final screening of curriculum during their experience and post-graduation support to measure the flow from T_1 to T_3 .

The research was conducted over a three-year period to measure key performance indicators including the NSS student satisfaction scores, DLHE positive destinations results, application to university courses, retention of student in FYE and attainment of the student cohort at graduation in good degrees.

The foresight of the results from part one provided suggested pathways to explore and focus efforts on the future of the SOC construction. After this stage of the research and planning of the future activities, a pilot SOC was created to gain feedback through user testing. The results from this user testing allowed for the development of the final SOC.

Success is rarely measure quantitatively in these types of studies (Edward, 2003). A sample of $n = 116$ user tests was elicited from our target sample (14–17 year olds looking to study in higher education and commencing their transition) to measure 2b above. The sample presented a broad range of responses and specific events were targeted as to gain a true reflection of users at their various stages of preparing for transition into higher education. The questionnaire used for the user tests can be found in Appendix A. The following events were specifically targeted to gain a cross section of these key transition stages.

5.1 Prospective UCAS applicants on visit/interview days (17–18 yrs)

This group of students have already selected their specific courses as part of their transition into university. The results from this sample group were important in determining if the content of the SOC is at an appropriate level and seen as good for confirming if the course is right for them. Measurement of this can be found by looking at unconditional (UF) and conditional (CF) admission offers and enrolment of this sample group onto our fashion courses at The University of Manchester. This target sample is already considering application to courses at university.

5.2 'Discovery day' (16 yrs)

The characteristics presented by this target sample at their stage of transition are at the research and selection stage. The discovery day allows potential applicants to sample a day in the life of a student studying at the university with seminars and activities conveyed on each of the courses. This target sample would be potentially considering studying a course at university.

5.3 'Step into the future' (14–15 yrs)

Mainly geared at WP students, this event presented an opportunity to interact with a target sample at the start of their journey. This target sample as a group are unlikely to know which course to study or if university is part of their thoughts. Results from this sample help to distinguish if the SOC is positioned properly.

The results were analysed using factor analysis and informed the future design of the SOC and a template for the SOC design.

As all these target samples spend time surfing between sites, the design of the user testing only allowed for a maximum of five minutes to be spent by each user on the pilot site to gain their initial impressions of what they were viewing and the relevance to them in relation to their stage of the transition. Gale and Parker (2012, p.735) identified three broad transition models as, 'induction (T_1), development (T_2) and becoming (T_3)'. These conceptions of transition can behave in isolation or in a simultaneous way. However from their findings they argue that little research has been conducted into the T_3 realm and this was more of a proposition.

6 Results

6.1 Stage 1

The first project considered a realigned curriculum in the School of Materials at The University of Manchester. The new courses formed a streamlined approach linked to legacy textile undergraduate courses. Multi-layered strategies are essential to maintain a successful transition (Thomas, 2012), part of this can link to the T_1 conception, where an extended induction week played its part in integrating the students as a cohort more before the traditional approach of lectures, workshops and tutorials commenced. Students who enrolled in the welcome week would have an induction programme that lasted for two weeks. The first week focussed on the pastoral support and the student experience for the students and the second week was a general integration into the first year first semester units as a whole group. This second week did not contribute to the final assessment of units as its main goal was to create a sense of belonging amongst the cohort to assist with their transition. This also supports the notion that those students from a lower socio-economic group assist retention statistics (Yorke and Thomas, 2003). This form of social integration not only influences the engagement but also the self regulated and autonomous learner (Beil et al., 1999; Hausmann et al., 2007; Macaskill and Taylor, 2010; Tinto, 1982, 2003; Vrugt and Oort, 2008).

T_3 can be synchronised with the other areas as Levy and Petrulis (2012) argued students feel more motivated to engage with their course. For a T_3 strategy to really work, one must measure the impacts in a longitudinal way rather than in a short-term perspective. The results of this study show that retention as $x < 4\%$ compared to an average across the sector of 8%–12%.

Furthermore, students were then integrated into PASS where second and final year students act as leaders and mentors to a first year group. This led to not only the sharing of knowledge between years but also supported better integration into the courses.

6.2 Stage 2

The next stage focussed on the creation of the SOC and in particular an understanding of the target audience of pre-enrolled students. The requirements of Generation Z students does require further exploration. In the first study (Vignali and Studd, 2016), desk research allowed for the scene setting for this age group. In particular the needs, behaviours, attitudes and motivations were explored. Table 1 summarises the findings.

These results can be summarised into four main categories, which classified this target sample including employability (needs), digital native (behaviours), understanding and expectations (attitudes) and perceptions and skills (motivate). These assisted with the design of the curriculum to include: an extended induction week in semester 1 week 1 (following the traditional induction week in semester 1 week 0); the development of peer support at year 1 through a PASS mentoring scheme; pathway units in their second year of study to link to their roles in industry; and final year practical projects where their co-created their assessment. The desk research also informed the design of the pilot SOC and questionnaire in Appendix A and also led to the extension of Gale and Parker's conception in Appendix B to also include T_0 .

Table 1 Generation Z requirements

<i>Needs – what they want</i>	<i>Behaviours – what they do</i>
Feel empowered to make decisions about their future	Digitally native, so that they are adept at using the very best resources digital has to offer (Patel, 2017)
To see what choices their peers are making on their future education	Often use digital sources as a first port of call for information
Want to be assured that they are employable following a degree	15–24 spend on average 40 hrs per month online
Information on the reputation of the institution and department	75% of UK 16–24 year olds use the internet on their mobile Three-quarters of 15–24 year olds use social networking sites
<i>Attitudes – what they think</i>	<i>Motivate – what will move them</i>
Unsure about their future	Attention grabbing and engaging content
Anxious about the significant debt university will incur	Clear and concise advice that talks to their needs
Excited to be leaving home	Seeing peer success
Trust their friends and opinions	Honest, authentic engagement – understanding their needs, but not pretending to be like them
University needs to be fun and productive	

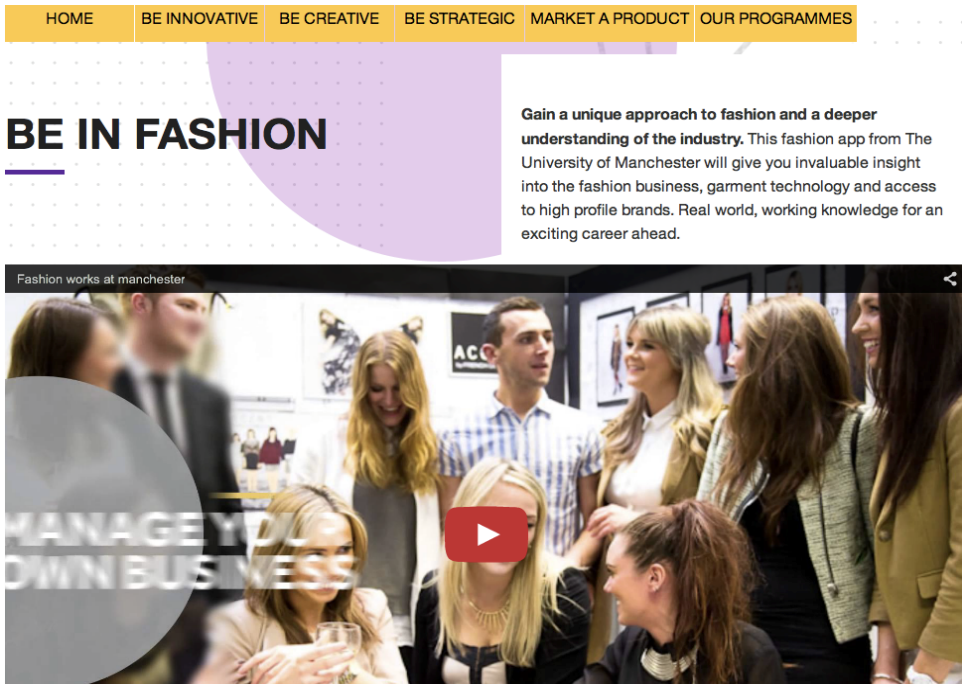
Source: Vignali and Studd (2016)

These initial results helped the researchers to gain an understanding of what is necessary and applicable to this target sample when managing the transition into university. One of the key findings suggested that in a digital narrative you only have three seconds to hook this target sample before they move on to the next website or WebApp, if uninterested in the content. The results also provided an outline as to the pedagogic support and reasoning already outlined in the literature. In particular there needs to be clear linkages from their academic discipline to their future working careers as supported by Briggs et al. (2012). It was important that being able to ‘demystify’ university education (Vinson et al., 2010) and therefore creating a sense of belonging for the prospective student before they apply to university was essential (Cohen et al., 2012). The storyboard and planning that followed these initial results then allowed for the creation of a pilot site for testing the SOC with the target sample as presented in Figure 2.

With the initial results indicating that ‘snackable’ content is created for this quick finger-clicking generation, the pilot SOC provided a platform that was easy to follow with an inspirational film to keep the target sample hooked and to move on through the site.

The highlights of the user testing provided some insights not only with regards to the content currently on the pilot but also for future developments too. A summary of the results found that the school/tutor are very influential in assisting the students in making their decision on entering higher education and the specific courses too. The implication of this suggests that a strategy for outreach activities is essential in the recruitment of students but also brand awareness not only to the prospective student but also their tutors too.

Figure 2 The pilot SOC (see online version for colours)



The average planning age for considering a move into higher education is 15.75 years of age and the suggested age for the SOC to target prospective students is 16.16 years of age. Although the SOC is deemed to be more beneficial after the student has commenced their transition journey this supports the earlier notion that the school/tutor initiates the process supporting the need for a T_0 conception. Successful management of targeting the target sample with the SOC is imperative. Successfully targeting this group of prospective students will aid in the success linked with recruitment but also essential that this is in a digital language.

Following the research this confirmed the sources of information that were identified when searching for the right course, the target sample ranked the following:

- 1 university website (95)
- 2 UCAS (76)
- 3 university prospectus (59).

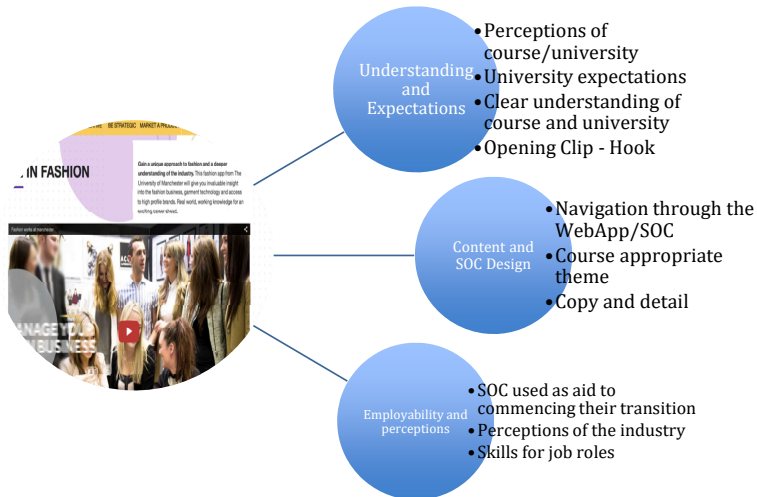
Again this implies that the brand and the digital narrative plays a significant role in the decision making and therefore any future SOC's should display the brand of the university that it is associated with. This also supports that T_3 can start with the university way before the expect it to.

With reference to how they found out about courses at the UoM the results were:

- 1 UCAS (63)
- 2 university website (54)
- 3 school/tutor (45).

Again the digital narrative is the only vehicle here that the university can control and influence.

Figure 3 SOC framework (see online version for colours)



From the user testing it was highlighted that more of an industry focus was required for the SOC for this particular target sample to truly see how the transition pays off after graduation (T_3 and beyond). There were also suggested improvements from the free text comments of the questionnaire focussing on the following:

- 1 more career insights job variety and salaries
- 2 alumni destinations
- 3 day in the life of existing students
- 4 examples of university type projects/work
- 5 a level subjects commonly chosen.

In support of the qualitative data above a principle components factor analysis was conducted to seek out the relationships between the SOC statements to distinguish if there are any components that fit with one another. A KMO and Bartlett's test was completed to test the significance of the data and this is presented in Table 2. From this you can see that the chi-square is at good level and $p < 0.05$. The KMO score of 0.763 places the data between the meritorious and middling categories suggesting that the data is of an adequate level and that an anti-image correlation matrix is not required. Furthermore, a Cronbach alpha test on ten variables yielded a score above 0.7 (Cronbach alpha = 0.778).

The resulting principal component analysis revealed that there are three components associated with this data as presented by the total variance explained and Scree plot in Appendix C. Appendix D presents the component matrix. From this matrix it is clear to see the variables that have a primary relationship to each component and secondary relationship.

Table 2 Kaiser-Meyer-Olkin and Bartlett's test

Kaiser-Meyer-Olkin measure of sampling adequacy		0.763
Bartlett's test of sphericity	Approx. chi-square	296.320
	df	45
	Sig.	0.000

Table 3 Replacement of the tradition dissertation unit

<i>Unit name</i>	<i>Aims of the unit</i>	<i>Assessment strategy</i>	<i>Student support</i>	<i>Transition</i>
Fashion project (40 credits)	Encourage a number of skills required for a career in the commercial world by consolidating the fashion/textiles, management, marketing, buying and merchandising and retailing studies that the students have undertaken to date at level –4 and –5 and exploring how these have been approached by the fashion/textiles industries. Develop an understanding for the importance of design to business competitiveness whilst considering effective practices in industry. Draw attention to the importance of the decision-making process for strategic business plans. Develop specialist knowledge and understanding in fashion textiles marketing. Introduce the theoretical concepts relating to fashion marketing communication. Encourage students to develop a creative appreciation of fashion textiles.	Strategic brand analysis and development plan – 40% Strategic concept output – 60%	Individual and group mentoring	T ₀ to T ₃
Business project (40 credits)	Give students the experience of running a company and the different functions within it, leading to a better understanding of the relationship between effort, team working, good management and success. Small groups of students will setup and run their own small business venture. In running their company, students elect a board of directors from the group, raise capital and market and finance a product or service of their own choice. At the end of the unit the company can go into voluntary liquidation and students present a report and accounts to any shareholders. In running the business the students can draw on aspects of theoretical knowledge gathered during the programme. This unit provides an opportunity to work independently on a long term project culminating in an extended piece of work aimed at applying theory to practice.	Business plan – 40% Reflective essay – 20% Portfolio attributed to skills developed over the duration of their degree and future strategy for the business – 40%	Individual and group mentoring	T ₀ to T ₃

These results suggest that when designing a SOC the following key attributes should be considered as presented in Figure 3. The methodology applied and the results analysed have followed a robust process collating data from all key identified transition stages. The data has been evaluated to present the needs and requirements of this group whilst establishing a generic academic framework as seen in Figure 3.

6.3 Stage 3

The last stage of this study was to consider the final screening of curriculum during their experience and post-graduation support to measure the flow and ‘ripple’ effect from T_1 to T_3 . In doing this the traditional final year dissertation was removed from the curriculum and replaced with two 40 credit option units. These units were designed to prepare the students for industry. The students were able to co-design their assessment. A summary of the two option units is presented in Table 3.

Furthermore support from PASS and the industrial placement year also attributed to the demystifying of the transition to pre-enrolment students.

7 Discussion

In summary the three projects have provided detail to support Gale and Parker’s (2012) transition model but further exemplify in Figure 1 and support that a transition wave exists. The T_0 stage is an essential part to the transition process of students entering higher education and demystifying these transitions allows the students to understand flow between them easily. Table 4 extends Gale and Parker’s (2012) conceptions theory as presented in Appendix B.

In particular the SOC delivered the following results supported by factor analysis in that this forms the basis of a T_0 conception:

- *Students understanding and managing expectations* – Measuring student perceptions of the course/university and managing their expectations of what to expect at university. The requirement to provide a clear platform for the students to understand their course and university and to create a hook that will allow the prospective to search for more information.
- *Content design and navigation through the SOC* – Considerations to the copy and detail within the SOC to be and appropriate course themes.
- *Employability and perceptions* – The SOC must be used as an aid to guide the students through their transition. The demystifying of expectations of industry and the skills required for the job roles that they will lead into.

The development of the T_0 conception presented in this paper is very much supported by the recent studies by Van Herpen et al. in their 2020 research considering the importance of giving students a head start in higher education. They discuss the importance of transitional interventions and the impact this has on the student’s sense of belonging and academic performance.

This SOC is the first of its kind as an innovative pedagogical development. The interactive SOC allowed students to confirm their decisions and to make the transition to

study at university starting their student experience at an early stage. The SOC addresses the current issue of continuity (from a level subject to university curriculum content) by allowing the prospective student an opportunity to, “explore the content, feel, and opportunities they offer in a more personalised way” (Marland, 2003).

Table 4 T₀ as pre-enrolment typology

<i>Conceptions of student transition</i>	<i>Transition metaphors</i>	<i>Types of transitional change: from one to another</i>	<i>Transition dynamics</i>	<i>Illustrative transition activities/emphases/systems</i>
Transition as pre-enrolment (T ₀)	Initiation, self-efficacy, attainment and understanding	Antecedent: understanding there is an inevitable period of adjustment	Formulating needs linked to employability	SOC to demystify the university experience
		From familiarity to self-reasoning and understanding there will be a change	Learned behaviour through a digital native	Snackable content that users may use in their own pathway
			Attitudes to understanding and expectations measurements	Bolt-on activities to help scaffold their understanding of the university environment
			Motivated around perceptions and skills	Self-efficacy supporting academic success (Brooman and Derwent, 2014)

The pedagogy behind the SOC prepares the prospective student for their transitional journey from a narrative to learning to a more independent, analytical approach (Marland, 2003).

The project has been disseminated through outreach activities but also as a University WebAPP, where the end user is comfortable. The supporting framework in Figure 4 highlights the flow from T₀ to T_{1/2} presenting the pedagogic developments of the transition waves.

The outcomes of this project aligns itself with the UoM, Manchester 2020 Goal Two’s key strategy of providing prospective students with a, “motivating environment that encourages curiosity driven enquiry and a critical approach to learning” (Manchester 2020 Strategic Plan), whilst closely fitting into the CHERIL Centre’s Board Aim of Strategic Advice and Educational Research to “promote inquiry into practice in HE teaching, through an evidence-based approach exploring particular issues and creative responses, evaluating the impact of interventions” (CHERIL Centre Aims 2015). It also provides a direct development of a new transition typology in T₀.

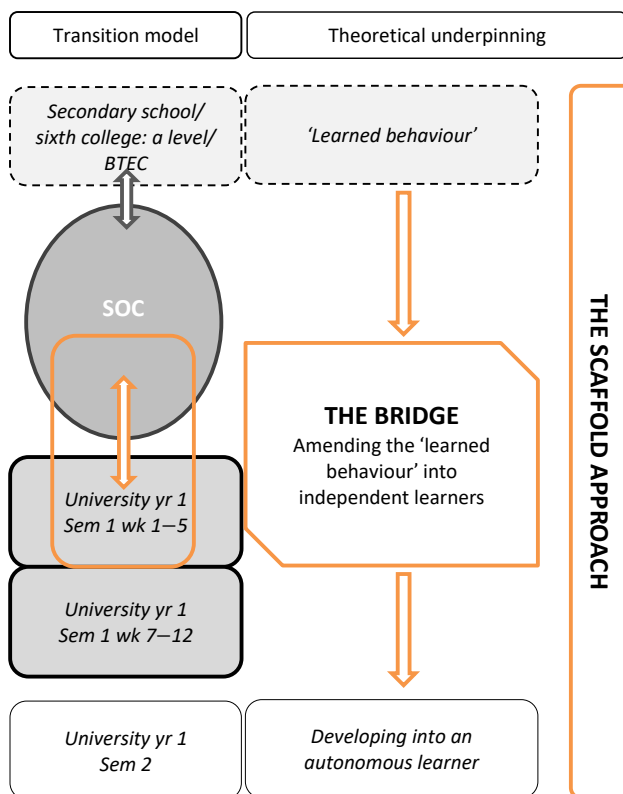
It has enabled a basic framework to be developed in order to support dissemination of the SOC for others to apply when considering an overall design of a SOC. From the results the following improvements were considered and planned into the final construction of the SOC, which include:

- academic theory pods (academic content)
- career maps (employability)

- interactive tasks (academic content)
- ‘fashion snap’ for personal engagement (personalised learning)
- quiz with SoA certificate (achievement).

Following this SOC construction and content for the specific audience target it is perceived, from the primary research carried out, that this WebApp/digital resource is innovative in its construction and content. Feedback from the careers teachers and the audience highlight this and requesting access to detailed information that can support and guide through educational transition.

Figure 4 The bridge to higher education using a SOC as the scaffold (see online version for colours)



The vision of this project therefore is to act as a guide for students pre-entry into the university to support early knowledge of the transition to university. It then aims to help develop those transition skills in order to understand requirements for independent learning and the progression in the university system. The SOC is therefore something that has potential to be rolled out across higher education sector.

8 Further research

As a trigger of pedagogic change from this project ‘transition into university’, there is an opportunity to further research and develop the SOC transition resource to help support transition, bridging the gap between the two sectors, as referenced by Briggs et al. (2012), Chambers et al. (2002) and Cohen et al. (2012). Mapping this project against the research carried out by these academics the project embeds itself and highlights a practice approach in pedagogic development.

Moving this transition project forward ‘demystifying’ university education (Vinson et al., 2010) the project could start to progress into a further longitudinal approach providing an opportunity to monitor student engagement with autonomous and self-directed learning. It is seen as important to support the development of self-reliance in order to progress successfully through their transition into higher education. Increased self-reliance needs to be one of the aims of a successful transition from school to higher education. Bingham and O’Hara (2007) cited in Beaumont et al. (2014), confirm the difficulty that students experience in becoming autonomous learners and the importance of exploration into effective approaches to ‘scaffold the development of self-regulated learning skills’.

References

- Anderson, D., Wason, H. and Southall, J. (2016) ‘Supporting business students’ transition into higher education: the case of marketing downloads’, *Teaching in Higher Education*, Vol. 21, No. 8, pp.978–989, Routledge, Taylor and Francis Group.
- Bandura, A. (1997) *Self-Efficacy: The Exercise of Control*, Freeman, New York.
- Baron, S., Riddell, S. and Wilson, A. (1999) ‘The secret of eternal youth: identity, risk and learning difficulties’, *British Journal of Sociology of Education*, Vol. 20, No. 4, pp.483–499.
- Beaumont, C., Moscrop, C. and Canning, S. (2014) ‘Easing the transition from school to HE: scaffolding the development of self-regulated learning through the dialogic approach to feedback’, *Journal of Further and Higher Education*, Vol. 40, No. 3, pp.331–350, Routledge.
- Beil, C., Reisen, C., Zea, M. and Caplan, R. (1999) ‘A longitudinal study of the effects of academic and social integration and commitment on retention’, *National Association of Student Personnel Administrators Journal*, Vol. 37, No. 1, pp.376–385.
- Boliver, V. (2013) ‘How fair is access to more prestigious UK universities?’, *The British Journal of Sociology*, Vol. 64, No. 2, pp.344–364.
- Bonassi, T. and Wolter, S.C. (2002) ‘Measuring the success of transition: the results of a pre-study in Switzerland’, *Education + Training*, Vol. 44, Nos. 4–5, pp.199–207.
- Bowles, A., Fisher, R., McPhail, R., Rosenstreich, D. and Dobson, A. (2014) ‘Staying the distance: students’ perceptions of enablers of transition to higher education’, *Higher Education Research and Development*, Vol. 33, No. 2, pp.212–225.
- Briggs, A.R.J., Clark, J. and Hall, I. (2012) ‘Building bridges: understanding student transition to university’, *Quality in Higher Education*, 12 January, Vol. 18, No. 1, pp.3–21.
- Brooman, S. and Darwent, S. (2014) ‘Measuring the beginning: a quantitative study of the transition to higher education’, *Studies in Higher Education*, Vol. 39, No. 9, pp.1523–1541.
- Chambers E., Parker, J. and Gregory, M. et al. (2002) ‘“Editorial” arts and humanities in higher education’, *Arts and Humanities in Higher Education*, June, Vol. 1, No. 1, pp.5–9.
- Cohen, L., Ferguson, C., Harman, B., Boyce, M., Harris, A. and Le Clus, M. (2012) ‘The development of a student focused model for transition to university’, *eCulture*, Vol. 5, Art. 6, Berkeley Electronic Press.

- Colley, H. (2007) 'Understanding time in learning transitions through the lifecourse', *International Studies in Sociology of Education*, Vol. 17, No. 4, pp.427–443.
- Deleuze, G. and Guattari, F. (1987) *A Thousand Plateaus: Capitalism and Schizophrenia*, Continuum, London.
- Deleuze, G. and Guattari, F. (1994) *What is Philosophy?*, Columbia University Press, New York.
- Dinning, T., Magill, C., Money, J., Walsh, B. and Nixon, S. (2015) 'Can a blended learning approach enhance students' transition into higher education? A study to explore perceptions, engagement and progression', *International Journal of Advancement in Education and Social Sciences*, Vol. 3, No. 2, pp.1–7.
- Dinther, M.V., Dochy, F. and Segers, M. (2011) 'Factors affecting students' self-efficacy in higher education', *Educational Research Review*, Vol. 6, No. 2, pp.95–108.
- Donald, W.E., Ashleigh, M.J. and Baruch, Y. (2018) 'Students' perceptions of education and employability: facilitating career transition from higher education into the labor market', *Career Development International*, Vol. 23, No. 5, pp.513–540.
- Ecclestone, K., Biesta, G. and Hughes, M. (2010) 'Transitions in the lifecourse: the role of identity, agency and structure', in Ecclestone, K., Biesta, G. and Hughes, M. (Eds.): *Transitions and Learning Through the Lifecourse*, pp.1–15, Routledge, London.
- Edward, N. (2003) 'First impressions last: an innovative approach to induction', *Active Learning in Higher Education*, Vol. 4, No. 3, pp.226–242.
- Gale, T. and Parker, S. (2012) 'Navigating change: a typology of student transition in higher education', *Studies in Higher Education*, Vol. 39, No. 3, pp.734–753.
- George, R., Lucas, J. and Tranter, D. (2005) 'Portfolio entry: alternative university access for year 12 students', in Brew, A. and Asmar, C. (Eds.): *Higher Education in a Changing World. Research and Development in Higher Education, Proceedings of the 2005 HERDSA Annual Conference*, Sydney Australia, 3–6 July, Vol. 28, pp.142–149.
- Gill, B.L., Koch, J., Dlugon, E., Andrew, S. and Salamonsen, Y. (2011) 'A standardised orientation program for first year undergraduate students in the College of Health and Science at UWS. A practice report', *International Journal of the First Year in Higher Education*, Vol. 2, No. 1, pp.63–69.
- Hausmann, L., Schofield, J. and Woods, R. (2007) 'Sense of belonging as a predictor of intentions to persist among African American and white first-year college students', *Research in Higher Education*, Vol. 48, No. 7, pp.803–839.
- Heirdsfield, A.M., Walker, S., Walsh, K. and Wilss, L. (2008) 'Peer mentoring for first-year teacher education students: the mentors' experience', *Mentoring and Tutoring*, Vol. 16, No. 2, pp.109–124.
- Hultberg, J., Plos, K., Hendry, G.D. and Kjellgren, K.I. (2009) 'Scaffolding students' transition to higher education: parallel introductory courses for students and teachers', *Journal of Further and Higher Education*, Vol. 32, No. 1, pp.47–57.
- Kift, S. (2009) *Articulating a Transition Pedagogy To Scaffold and To Enhance the First Year Student Learning Experience in Australian Higher Education: Final Report for ALTC Senior Fellowship Program*, Australian Learning and Teaching Council, Strawberry Hills, NSW.
- Levy, P. and Petrusis, R. (2012) 'How do first-year students experience inquiry and research, and what are the implications for the practice of inquiry-based learning?', *Studies in Higher Education*, Vol. 37, No. 1, pp.85–101.
- Macaskill, A. and Taylor, E. (2010) 'The development of a brief measure of learner autonomy in university students', *Studies in Higher Education*, Vol. 35, No. 3, pp.351–359.
- Marland, M. (2003) 'The transition from school to university: who prepares whom, when, and how?', *Arts and Humanities in Higher Education*, June, Vol. 2, pp.201–211.
- McMillan (2014) "'They have different information about what is going on': emotion in the transition to university", *Higher Education Research and Development*, May.

- Patel, D. (2017) *8 Ways Generation Z Will Differ from Millennials in the Workplace* [online] <https://www.forbes.com/sites/deep Patel/2017/09/21/8-ways-generation-z-will-differ-from-millennials-in-the-workplace/#1d2a886a76e5> (accessed June 2019).
- Quinn, J. (2010) 'Rethinking 'failed transitions' to higher education', in Ecclestone, K., Biesta, G. and Hughes, M. (Eds.): *Transitions and Learning through the Lifecourse*, pp.118–129, Routledge, London.
- Taylor, C.A. and Harris-Evans, J. (2018) 'Reconceptualising transition to higher education with Deluze and Guattari', *Studies in Higher Education*, Vol. 43, No. 7, pp.1254–1267.
- Terenzini, P.T., Rendon, L.I., Millar, S.B., Upcraft, M.L., Greg, P.L., Jalomo Jr., R. and Allison, K.W. (1996) 'Making the transition to college', in Menges, R.J. and Weimer, M. (Eds.): *Teaching on Solid Ground: Using Scholarship to Improve Practice*, pp.43–74, Jossey-Bass, San Francisco.
- Thomas, L. (2012) *Building Student Engagement and Belonging in Higher Education at a Time of Change: A Summary of Findings and Recommendations from the What Works?*, Student Retention & Success Programme, Higher Education Academy, New York.
- Tinto, V. (1982) 'Limits of theory and practice in student attrition', *Journal of Higher Education*, Vol. 53, No. 6, pp.687–700.
- Tinto, V. (2003) 'Promoting student retention through classroom practice', Paper presented at the *Conference on Enhancing Student Retention: Using International Policy and Practice*, Amsterdam, 5–7 November.
- Tinto, V. (2008) 'Access without support is not opportunity', Paper presented at the *36th Annual Institute for Chief Academic Officers*, The Council of Independent Colleges, Seattle, November.
- Van Herpen, S.G.A., Meeuwisse, M., Hofman, W.H.A. and Severiens S.E. (2020) 'A head start in higher education: the effect of a transition intervention on interaction, sense of belonging, and academic performance', *Studies in Higher Education*, Vol. 45, No. 4, pp.862–877, DOI: 10.1080/03075079.2019.1572088.
- Vignali, G. and Studd, R. (2016) 'Transition into university – the fashion SOC', *Textile Institute World Conference*, Poland [online] <http://www.tiworldconference.org/wp-content/uploads/2016/04/TIWC-2016-Preliminary-programme.pdf>.
- Vinson, D., Nixon, S., Walsh, B., Walker, C., Mitchell, E. and Zaitseva, E. (2010) 'Investigating the relationship between student engagement and transition', *Active Learning in Higher Education*, Vol. 11, No. 2, p.131.
- Vrugt, A. and Oort, F. (2008) 'Metacognition, achievement goals, study strategies and academic achievement: pathways to achievement', *Metacognition Learning*, Vol. 30, No. 3, pp.123–146.
- Yorke, M. and Thomas, L. (2003) 'Improving the retention of students from lower socio-economic groups', *Journal of Higher Education Policy and Management*, Vol. 25, No. 1, pp.63–74.

Appendix A

Questionnaire

Fashion small online course questionnaire

Please answer these questions before looking at the WebAPP:

- 1 What made you start your journey into the fashion industry?
-
- 2 At what age did you start planning your journey to university?
- Less than 14 14
- 15 16
- 17 18
- 3 At the age you have stated in the last question what influenced you to apply to university?
-
- 4 How did you find out about the courses at the University of Manchester?
- Please tick all that apply:
- School/tutor advice UCAS
- From the university itself Word of mouth
- University/college fair Google
- University website University prospectus
- University open day Other (please state) _____
- 5 What sources of information did you look at to help you make your decision before applying to university?
- Please tick all that apply:
- University prospectus' Printed material from the university
- University websites Apps
- UCAS Other websites (please state) _____
- 6 Did you plan your 'A' level/post 16 subjects specifically to go into the fashion industry?
- Yes No Unsure
- 7 What resources/information could have helped you start your planning for university better?
-

Please answer these questions after you have viewed the WebAPP:

- 8 Please answer using the grid below to whether you either:
- Strongly agree Agree Neutral Disagree Strongly disagree

With the following statements:

	<i>Str. agree</i>	<i>Agree</i>	<i>Neutral</i>	<i>Disagree</i>	<i>Str. disagree</i>
--	-----------------------	--------------	----------------	-----------------	--------------------------

I could navigate my way through the WebApp course easily.

I could find my way through the information easily.

The WebApp has changed my perception of the fashion industry.

The opening clip set the WebApp into context.

I have a clearer understanding of the fashion industry and the variety it offers.

I have a clearer understanding of what is involved within the academic university system.

I understand what might be expected when entering higher education.

The WebApp has given me a good understanding overall.

The WebApp has helped with my decision-making/planning.

The WebApp would have made it easier for me to decide on which course to apply to if I had seen it at the start of my journey.

9 What else would you like to see on the WebApp that could help you with your future planning when commencing your journey into the fashion industry?

10 At what age do you feel the WebApp will be most useful for prospective applicants?

Less than 14

14

15

16

17

18

By signing this form I agree that the University of Manchester may use my responses for future publication and research.

Signed:

Date:

Appendix B

Table B1 Gale and Parker's conceptions

<i>Conceptions of student transition</i>	<i>Transition metaphors</i>	<i>Types of transitional change: from one to another</i>	<i>Transition dynamics</i>	<i>Illustrative transition activities/emphases/systems</i>
Transition as induction (T1)	Pathway; journey; milestones	Incultation: sequentially defined periods of adjustment From one institutional and/or disciplinary context to another	<ul style="list-style-type: none"> • Navigating institutional norms and procedure • Linear, chronological, progressive movement • Relatively fixed structures and systems • Crisis as culture shock (contextual familiarity) 	<ul style="list-style-type: none"> • Orientation/familiarisation with campus (facilities, etc.) and significant staff • Just-in-time, in formation re procedures, curriculum content, assessment requirements • First-year seminars • Institutionist transition pedagogy (Kift, 2009)
Transition as development (T2)	Trajectory; life stage;	Transformation: qualitatively distinct stages of maturation From one student and/or career identity to another	<ul style="list-style-type: none"> • Navigating sociocultural norms and expectations • Linear, cumulative, non-reversible movement • Discrete, singular, consecutive identities • Crisis as critical incident (identity forming) 	<ul style="list-style-type: none"> • Mentoring programs • Service learning and field placements • Career and research culture development activities/emphasis • Career and research culture development activities/emphasis • Championing narratives of student and career trajectories by successful students and staff • Individualist transition pedagogy
Transition as becoming (T3)	Whole of life; rhizomatic	Fluctuation: perpetual series of fragmented movements Lived reality or subjective experience, from birth to death	<ul style="list-style-type: none"> • Navigating multiple narratives and subjectivities • Rhizomatic, zigzag, spiral movement • Flexible systems/fluid (ephemeral) identities • Crisis as neither period/stage specific nor necessarily problematic 	<ul style="list-style-type: none"> • Flexible student study modes, including removal of distinction between full-time and part-time study and min./max. course loads • Flexible student study pathways, including multiple opportunities to change course and enter, withdraw and return to study throughout life • Curriculum that reflects and affirms marginalised student histories and subjectivities • Connectionist transition pedagogy (Hockings et al., 2010)

Appendix C

Scree plot factor analysis

Figure C1 Scree plot factor analysis

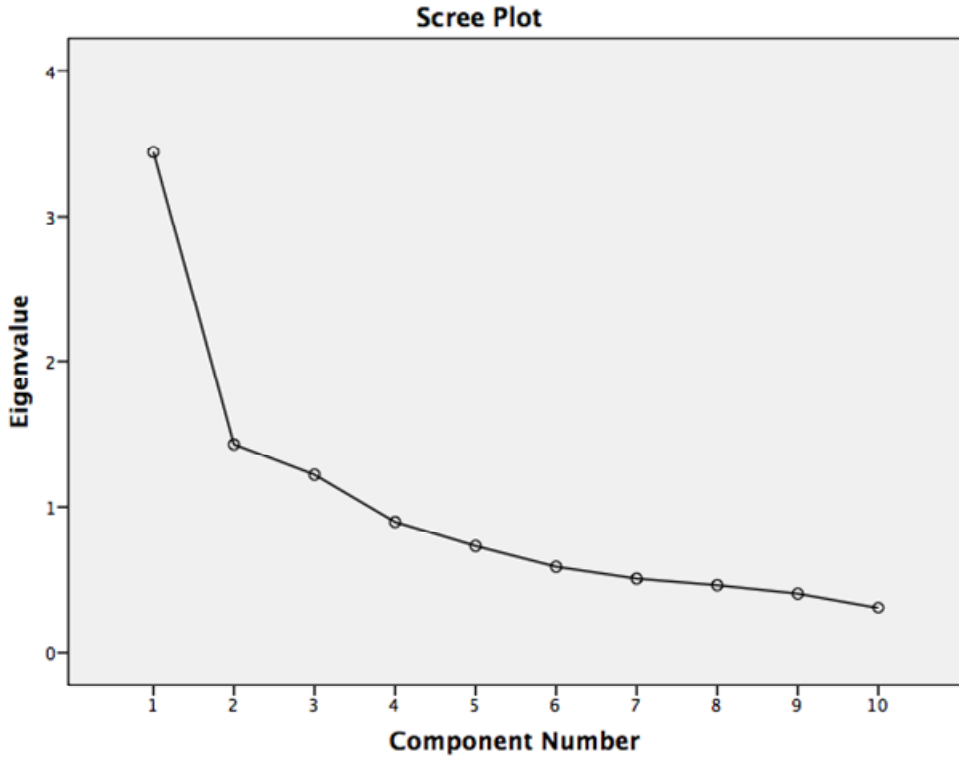


Table C1 Total variance explained

Component	Initial eigenvalues		Extraction sums of squared loadings		Rotation sums of squared loadings	
	Total	% of variance	Total	% of variance	Total	% of variance
1	3.441	34.415	3.441	34.415	2.364	23.644
2	1.430	14.300	1.430	14.300	1.923	19.230
3	1.221	12.208	1.221	12.208	1.805	18.049
4	0.898	8.979				
5	0.731	7.314				
6	0.590	5.900				
7	0.509	5.092				
8	0.464	4.642				
9	0.407	4.066				
10	0.309	3.085				
		34.415		34.415		23.644
		48.715		48.715		42.874
		60.923		60.923		60.923
		69.902				
		77.216				
		83.116				
		88.208				
		92.849				
		96.915				
		100.000				

Note: Extraction method: principal component analysis.

Appendix D

Table D1 Rotated component matrix^a

	<i>Component</i>		
	<i>1</i>	<i>2</i>	<i>3</i>
I could navigate my way through the WebApp course easily.	0.116	0.011	0.901
I could find my way through the information easily.	0.174	0.191	0.835
The WebApp has changed my perception of the fashion industry.	0.227	0.778	0.115
The opening clip set the WebApp into context.	0.023	0.503	0.393
I have a clearer understanding of the fashion industry and the variety it offers.	0.586	0.398	0.143
I have a clearer understanding of what is involved within the academic university system.	0.744	0.224	0.005
I understand what might be expected when entering higher education.	0.748	-0.282	0.251
The WebApp has given me a good understanding overall.	0.657	0.266	0.191
The WebApp has helped with my decision-making/planning.	0.614	0.497	-0.036
The WebApp would have made it easier for me to decide on which course to apply to if I had seen it at the start of my journey.	0.163	0.726	0.030

Notes: Extraction method: principal component analysis.

Rotation method: varimax with Kaiser normalisation.

^arotation converged in six iterations.