

# First-year academic induction and development at Cambridge: a responsive review of literature and a formative evaluation framework

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## Context

The Cambridge Centre for Teaching and Learning (CCTL) has received time-limited funding from the Colleges to contribute to work in support of commitments on behalf of the Collegiate University in the Access & Participation Plan (APP) to:

- ensure that a representative cross-section of society is represented within its student body, who can access the same opportunities and quality of experience and can expect the same outcomes in terms of completion, attainment and progression, and to
- eliminate differentials in assessment outcomes which cannot be explained through factors such as previous education and attainment ('awarding gaps').

The 'problem' of what gives rise to unexplained awarding gaps is complex, that is: characterised by uncertainty and emergence. Sector research (see for example Mountford-Zimdars et al, 2015; Thomas, 2012) indicates the interplay between students' educational outcomes and higher education institutional environments, in particular:

- *students' experience* of their higher education learning, teaching and assessment; the 'curriculum' in the broadest sense
- the *relationships* that underpin students' experiences of HE; that is, relationships among students and between students and staff and their institutional environment
- *psycho-social and identity factors*, such as the expectations which academics have about individual students or student groups and that students have about themselves
- *curricular and social capital*: the curricular and extra-curricular student experience and their engagement in learning are related to perceived access to social, cultural and academic capital associated with feeling that they 'belong' in the institutional environment

Statistical analysis of assessment outcomes in Cambridge over a period of eight years confirmed that being from Black or Asian ethnic backgrounds had a statistically significant effect on attainment; this gap was shown to be larger for Black students than Asian students. The analysis also showed that students with declared mental health conditions were significantly less likely to obtain a first-class degree when controlling for all other factors. Gaps in attainment for these specific students were shown to be persistent when controlling for other factors. Finally, the analysis demonstrated that the results of first-year examination were the strongest predictor of final-year assessment outcomes.

Note that this finding does not indicate that students' final-year assessment outcomes are determined by their first-year assessment outcomes; rather, it indicates that students' experiences during their first year are formative. For this reason, a concerted focus on students' academic induction, education, and experiences during the first year is a priority.

## Intercollegiate Forum: first-year undergraduate academic induction and development

An Intercollegiate Forum was held on 3 March 2023, with representatives from 22 of the 29 Colleges which admit undergraduates and including senior tutors & deputy senior tutors, directors of studies, college librarians, tutorial managers, heads of wellbeing and academic / skills tutors, as well as departmental directors of teaching and academic and professional services staff of the University. The forum was developed by CCTL and aimed to consider ways of making positive differences within the distinctive environments of the Colleges to students' experiences and outcomes, share experiences and reflect on opportunities for enhancement in 2023-24 and beyond.

- What do you think should be the outcomes of undergraduates' first year of study? (What should they know and be able to do by the end of their first year?)
- How does/could the learning and social environment at Cambridge enable students to learn actively, including from each other?
- In your experience, what hinders students from learning actively? What do you think might help address (some of) these issues?
- What 'evidence' do you think informs (or could inform) approaches in your context? (What do you think is the rationale for approaches in your context? In what ways is it possible to gauge whether/to what extent aims are being realised?)

Major themes emerging from discussions was the significance of the anticipated outcomes of undergraduates' first year of study, in particular students'

- acquiring a sense of agency and ownership over their university education
- developing a sense of belonging (academically, socially and culturally)
- developing self-efficacy, self-regulation and reflective capabilities
- learning to work collaboratively with peers, as well as independently

and ways in which these outcomes could be facilitated or impeded by institutions (the collegiate University, colleges, departments, services), staff (academic, professional and support staff), student communities (higher-year students, peers, students as individuals), including enabling students to learn:

- how to engage in Cambridge's teaching, learning and assessment practices
- how to access, explore and use academic facilities such as libraries
- to understand personal wellbeing, to be aware of how to seek support and to be able to access it if needed

This paper contains:

- a responsive review of literature which is informed by thematic analysis of colleagues' responses to the four questions
- a formative evaluation framework
- links to resources and suggested further reading
- reference list

## Responsive review of literature

### The outcomes of undergraduates' first year of study

Colleagues' responses to the question: What do you think should be the outcomes of undergraduates' first year of study? (What should they know and be able to do by the end of their first year?) may be summarised as:

- to acquire a sense of agency and ownership over their university education
- to develop a sense of belonging (academically, socially and culturally)
- to develop self-efficacy, self-regulation and reflective capabilities
- to learn to work collaboratively with peers, as well as independently

Achieving these outcomes (in summary) was felt to entail:

- learning how to engage in Cambridge's teaching, learning and assessment practices
- learning to access, explore and use academic facilities such as libraries
- learning to understand personal wellbeing and being aware of how to seek support if needed

A review of selected publications in English published since 2010 was undertaken to identify: major differences between university-level life and pre-university experiences, and different ways of understanding what is often referred to as 'transition to university'.

### From school to university

*"The individualism of higher education replaces the collective accountability, adult control of physical space and time, and regimented structures of high school that students have grown accustomed to."* (Diaz et al., 2021)

For incoming students, their experience of university is characterised by large, unstructured spaces, unpredictable routines and information, expectations to be proactive, self-advocate and be self-sufficient. Students are expected to embrace unfamiliar experiences while their sense of self is changing: developing their academic and social identity, while navigating financial responsibilities and living on their own often for the first time in their lives. The exploration and discovery of becoming a university student can range from be both liberating and as well as provoking anxiety. Students are learning to navigate physical, disciplinary, and relational structures at the same time as managing an increasing workload. Consequently, it is important to embed an appropriate range of proactive institutional support from first point of entry and throughout students' time at university (Jindal-Snape, 2010).

### Transition as a developmental and transformative process

In recent years, the concept of 'transition' has expanded beyond 'access to education' to include the outcomes of studying in higher education (HE); some scholars question the suitability of the term 'transition', proposing instead an understanding of 'learning' in higher education that includes 'development'. Hordósy (2023) argues for an understanding of a developmental process that is non-linear and multidimensional, rather than transition as an

'event' or 'turning point', through which students learn to navigate change while engaging with and influencing academic and social structures.

Gale and Parker (2014) reviewed the academic literature and identified three broad conceptualisations of 'transition':

- 'transition as induction': Gale and Parker describe this conceptualisation as one that aims at 'inculcating' students into institutional cultures and processes, with little recognition of 'hidden curriculum' and implicitly assumes aim of socialising students into 'dominant norms' (p. 741). Here, they argue, transition is not viewed as a singular experience at point of entry, rather the first-year experience is constituted of important turning points which are critical for students' success in HE. This phase involves different degrees of adjustment to the cultural conventions and disciplinary expectations. Students' integration is supported through "joined-up university" approaches in which there is explicit, timely, and coordinated communication about the curriculum, assessment, and pedagogy.
- 'transition as development': Gale and Parker summarise this strand of research as conceptualising transition as the transformation and development of students' identity from one context to another. Here, the time at university is identified as a linear pathway constituted of different phases during which students' are encouraged to develop their ways of thinking, learning, and knowing. Gale and Parker argue that a major limitation of this conceptualisation is that it does not accommodate the 'recognition that beliefs about learning and knowing [...] are frequently socially exclusive and require students to adopt identities that do not always follow their life trajectories.'
- 'transition as becoming': Gale and Parker summarise this strand of research as challenging the notion of transition as linear, time-bound, and universally experienced. Here, the complex, challenging, risky, and unsettling nature of transition experiences is acknowledged. They argue that such a conceptualisation also normalises the diverse ways in which a university education is experienced by students without identifying those who are deficient or inadequate (Quinn, 2011). Instead, the focus is on accommodating the multiplicity of the students' lives, where learning is mutual and a life-long process of adaptation. They note that this conceptualisation does not identify experiencing 'difficulty' as not something that we should seek to 'smooth away' or protect students from: rather, it is inherent in learning at this level

For Gale and Parker, the conceptualisation of 'transition as becoming' the most sophisticated conceptualisation. They claim that the emphases in the first and second conceptualisations on assimilation and integration are based on a prescribed and expected type of a 'university student'; by contrast, understanding 'transition as becoming' means that students' *'identity is affirmed, honoured and incorporated into the organisation's culture'* (Tierney, 2000). They conclude by advocating for approaches that create collaborative and inclusive spaces; developing student-centred strategies; connecting with students' lives; are culturally aware (p. 747-8):

it is about the need for a curriculum that provides room for different ways of thinking about, and different ways of engaging with knowledge, and indeed inserting different kinds of understandings that perhaps have not been part of ... higher education before. It is about how we structure the student learning experience in ways that open it up and make it possible for students to contribute from who they are and what they know. (Gale 2012, p.252)

A recent paper by Hordósy (2023, p.191) endorses Gale and Parker's (2014) conceptualisation of transition as becoming by setting out key dimensions of the process:

- more than a process of change over time, their non-linearity means tumultuous moments, quieter periods, dead ends, and re-starts throughout the university time and beyond;
- multidimensional, with changing foci and weight given to the different aspects of (university) life; becoming someone with the capacity to produce knowledge being key;
- a diverse range of experiences, based on self-reflective internal conversations relating to the past, present and imagined futures; resulting in assimilation, adaptation, and becoming; with happenstance playing an important part;
- embedded a) socially, in relation to natal contexts, relation- and friendships, and broader social groups, b) institutionally, within a complex university system with enabling and constraining capacities, and c) locally/nationally through school-university-work transition systems.

### Starting university: 'blank slates' and the 'hidden curriculum'

A systematic review by Haas and Hadjar (2020) found that students' experience of their higher education is strongly influenced by their experiences with peers, familial contexts, neighbourhoods, and by the experiences of the organisational structures of their institution as well as wider national educational structures. Students' experiences of the academic and social spaces are influenced by implicit cultural expectations, as well as parental involvement, material wealth, and social and cultural capital and may result in significant differences in how students experience these spaces (Hordosy, Clark and Vickers, 2018; (Singh, 2009). Further, students bring their own aspirations, knowledge, lived experience and strengths to their educational journey (Diaz et al., 2021) and mobilising their background and histories can be mutually enriching, for example affirming and valuing the differences and diversity brought to an institution by its students (Diaz et al., 2021).

Ashwin, Abbas, and McLean (2016) demonstrate that students' sense of selves transforms as they engage with knowledge, shifting from a focus on self to a focus on the world. They argue that students' engagement with their studies is improved where students are able to see a relationship between their studies and their personal aims, values and ambitions (their own 'personal projects', p.964). Pfund and colleagues (2020) expand on this by emphasising the importance of developing a sense of purpose, both through 'purpose exploration' and 'purpose commitment.' They argue that universities and colleges can catalyse this process by providing opportunities for students' to self-organise and explore and affirm the value of their backgrounds and current education to who they become beyond HE.

The 'hidden curriculum' is a term used in a variety of ways (see for example Koutsouris and colleagues, 2021). Arguing that 'what it means to be a learner' is different in different contexts, studies within Cambridge and Oxford have demonstrated that students prior educational experiences can constitute significant advantages or disadvantages unless active steps are taken to enable students to learn how to engage in teaching, learning and assessment practices at Cambridge (Attridge, 2021; Gaston and Dushinsky, 2020; Perez-Adamson and Mercer, 2016).

### Designing induction and development activities and initiatives

Stevenson et al (2019, p.5), in a report to the Office for Students on 'understanding and overcoming the challenges of targeting students from underrepresented and disadvantaged ethnic backgrounds', propose two definitions of targeting: inclusive interventions which are developed to benefit all students but in particular one or more ethnic groups (for example) and / or exclusive interventions explicitly directed at one or more minority ethnic groups.

Mountford-Zimdars et al (2015) recommend that institutions should:

- encourage 'pedagogy-driven approaches', underpinned by 'a policy framework at the institutional level which rewards staff for innovating' (p. 53)
- encourage a move away from 'approaches that aim at "integration" of "non-traditional students" towards a broader concept of "inclusive" HE' (p. 56), with 'targeting' in individual circumstances rather than at 'groups', in order to avoid perceptions of stereotyping or stigmatising
- encourage students as partners to be involved in finding barriers and enablers for inclusive educational practices and experiences (p. 101)
- acknowledge that identities and experiences are complex, as are the interplays between structures, experiences and outcomes. An intersectional approach enables exploration of complexity (Office for Students, 2019); qualitative methods are an important counterpoint to quantitative analysis as a means of gaining insight into experiences which are associated with negative as well as positive outcomes (Cohen et al, 2018; Mountford-Zimdars et al, 2015; Attridge, 2021).

Reflective questions when designing initiatives:

- What do we envisage to be the outcomes of an education at Cambridge? What should students know and be able to do by the time they complete their studies?
- What do we know about the prior educational and socio-cultural experiences of Cambridge students? How does this inform the design and practice of education at Cambridge?
- From your own experience, how do you think students make sense of practices and processes which are important in your discipline?
- What opportunities are there to make these practices and processes explicit and to model them for and with students?
- What opportunities are there for students to try out these practices and processes, to gain feedback and learn from feedback so that they can develop these practices and processes further?

- How does the learning and social environment at Cambridge enable students to learn actively, including learning from and with each other?
- How does the learning and social environment facilitate inclusion without assuming assimilation?
- What do students learn from supervision (including preparing for supervision, during the supervision and in following on from supervision)? What do supervisors learn?
- What opportunities are there for staff who teach / support the learning of Cambridge students to develop, extend and share expertise?

## Improving first-year academic induction and development: a formative evaluation framework

In this section, we understand 'evaluation' as:

- a purposeful approach to gaining knowledge in order to improve experiences, effects and outcomes
- an iterative approach, rather than an activity carried out at the 'end' of an initiative or period of time

Further, we propose considering:

- what existing sources of information are available
- designing 'information gathering' into an initiative from the outset
- involving students and staff in developing evaluative activities
- what opportunities exist to share information and / or analyses

The approach to designing and conducting evaluations in this section is derived from Saunders (2000).

### Why evaluate: potential 'drivers' and outcomes?

When designing an evaluative approach, take time to reflect on the reasons and purposes for evaluating:

- what do you want or need to learn and why?
- what you hope to happen or give rise to as a result?

For example:

- to develop contextual understanding of factors associated with increased equity in educational experiences and outcomes
- to identify where initiatives have been informed by evidence
- to track changes in workload / demand on / engagement with services or staff
- to contribute to institutional self-scrutiny

### How do you want to use what is learnt through evaluation?

Potential 'uses' of an evaluation include identifying good practice, informing strategic planning, contributing to professional development.

For example:

- improving services by identifying accessibility
- sharing working examples of practice and building case studies across the collegiate university
- encouraging reflection in students and / or staff (for example: what do students learn from supervision?)



### **What should be the focus for evaluation?**

A focus could be an activity / range of activities, an aspect of culture, engagement with and / or perceptions of facilities or services.

For example:

- how do students perceive learning and social environments? Do they think these enable them to learn actively, including with and from each other?
- what opportunities are there for staff who teach / support students to develop, extend and share expertise?

### **What data and evidence can be used / is needed?**

'Data' and 'evidence' can be (for example) qualitative, quantitative, observational, professional or academic literature.

For example:

- College current student feedback / evaluation surveys
- anecdotal data from students, DoS, supervisors, librarians, tutors and others
- formative assessments
- institutional data ([Tableau server](#), institutional surveys, annual reports)
- student progression as well as retention
- interviews, focus groups, (with consent) informal observations

### **Who is the 'audience' for an evaluation?**

For example:

- participants in the activity (students? staff?)
- decision makers?
- practitioners?
- the public?

### **Timing: when can data be gathered? When are findings needed?**

For example:

- is it possible to gather data from existing sources, rather than creating new ones?
- are findings needed to inform particular decisions?

### **Agency: who will conduct the evaluation?**

For example:

- participants in the activity (students? staff?)
- you?
- external evaluators?

## CCTL resources

- [Inclusive Teaching & Learning: Guiding Principles](#)
- [Inclusive Collegiate Education: Co-Developed Principles](#)

## Suggested reading

- [Enhancement Themes: Transition to and during the first year](#)
- [Enhancement Themes: Transition models and how students experience change](#)
- [Transition skills and strategies](#)

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