Measuring educational gain: University of Birmingham case study

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The lack of a widely accepted conceptualisation of *educational gain* has led to it being variously described as 'dark matter', 'inside a black box' and 'the hidden curriculum'. At the University of Birmingham (UoB) we have worked with students to learn about how they understand *Educational Gain* as well as how we can support them to evaluate and articulate the gains they make during their time with us. The focus, in particular, is on students recognition of the educational gains that extend beyond their degree classifications.

In its 2023 TEF return, UoB partly defined *educational gain* in terms of our Graduate Attributes. UoB is prioritising, after extensive consultation with students, staff and employers, nine Graduate Attributes that fall under three headings: intellectually curious, future-focussed and practically-wise. Students were involved, from the outset, in the selection of the attributes – helping to shape the final list and the language used to describe and define them.

We believe there are a number of advantages in viewing *Educational Gain* through the lens of these Graduate Attributes. Firstly, a focus on attributes makes it clear that Birmingham is prioritising more than solely assessment performance – something that both students and employers tell us is important. Secondly, through explicitly prioritising attributes we are demonstrating our commitment to offering a transformative, inclusive and socially engaged vision of higher education. Thirdly, the cultivation of attributes cuts across key areas that our university is known for: research, education and civic engagement and our responsibility to help students be prepared for study, work and life. Finally, and perhaps most importantly, the attributes offer us a clearly articulated and tangible set of qualities that core, extra and co-curricular activities can be directed at – they make it possible to see inside the black box, demystify the dark matter, and move the hidden curriculum into the core curriculum. They enable the University of Birmingham to be consciously explicit and reflective in how we go about supporting students to recognise, understand, value and cultivate the attributes. They also provide a framework for identifying, measuring and collecting data about the broad educational gains made by our students.

An Emerging Framework

We have developed a Framework to guide how we organise activities that support students to learn about, value and cultivate the Graduate Attributes. This Framework has been developed alongside students and builds on and adapts the Jubilee Centre's Framework for Character Education, which won the 2023 overall QS Reimagine Education Global Award. The elements of our emerging Framework (see table 1 below) are organised under three headings: Components (GAs sought); Culture (GAs caught); and Curriculum (GAs taught).

Table 1: Emerging framework for evaluating educational gain through the Graduate Attributes

Components (GAs Sought)	Culture (GAs Caught)	Curriculum (GAs Taught)	Evaluation Question
Knowledge and Understanding *I know what the Graduate Attributes are and understand how they will benefit my own and others' lives.*	**Prioritisation** *Establishing the University commitment to the Graduate Attributes and providing a shared language to help students know and understand them.*	**Master Classes** *Specialist classes designed to develop knowledge and skills that enhance employability and personal development.*	What do students know and understand about the Graduate Attributes?
Attitudes and Values *I value the Graduate Attributes and I am motivated to develop those that will benefit myself and others.*	**Role Modelling** *Leading and inspiring others to develop the Graduate Attributes through example.*	**Personal Tutoring** *Encouraging students to develop the Graduate Attributes through tailored and reflective group/ individual tutoring, coaching and mentoring.*	What do students value about the Graduate Attributes?
Habituation Through Practice *I participate in activities and experiences will develop the Graduate Attributes in ways that are beneficial to myself and others.*	**Recognition** *Appreciating, rewarding and celebrating students who have demonstrated progress in developing the Graduate Attributes.*	**Experiential Learning** *Active and participatory experiences that seek to develop the Graduate Attributes.*	Do students make progress in their development of the Graduate Attributes?

A founding principle reflected in the Framework is that students are empowered to participate in and reflect on aspects of their student experience that are most relevant to their own study, work and life goals. We encourage students to apply critical reasoning to think about the attributes in terms of their own lives and aspirations for their studies and future careers and lives. We also encourage them to balance these more individual concerns against those for others and focus on cultivating attributes that are more pro-social in nature. So, whilst we aspire that students will learn about the attributes, value them and be motivated to take part in activities that cultivate them, this endeavour is undertaken on their own terms. Our responsibility is to provide a rich culture that prioritises, exemplifies and recognises the importance of the attributes, and core and co-curriculum activities through which our students gain opportunities to develop them (see the six practices in the table under 'taught' and 'caught'). Overall, we aim to ensure that all our students, regardless of starting point, need or ambition, can recognise the educational gain delivered through their personal academic journey at Birmingham, and seek out learning experiences for personal development.

Student Centred Self-Evaluation

The *Framework* guides our approach to evaluating *Educational Gain* through the lens of the Graduate Attributes**.** There are multiple ways in which we embed not only opportunities for us to assess student engagement with the GAs, but also multiple opportunities for students themselves to reflect upon how they are doing so and how they are developing as a Birmingham Graduate as a consequence. The framework also underpins our methodology for measuring educational gain. We use qualitative and quantitative measures to measure students awareness of the attributes, their attitudes towards them, and if they participate in

activities that develop them. Student centred self-evaluation is an important aspect of this overall approach as demonstrated in the following two examples.

Example 1: The Birmingham Award

The Birmingham Award is an optional co-curricular programme that undergraduate students take alongside their degree to develop, recognise, and articulate the attributes they have developed from engagement in student life at Birmingham. The Birmingham Award was developed in conjunction with students through a combination of focus groups and questionnaires. Students are also given the opportunity to give their views on the programme development each year, The programme offers a flexible approach to developing graduate attributes through the recognition of engagement in extra-curricular activities. Students can choose from a portfolio of c.250 activities that are part of student life, each mapped to the graduate attributes. The Award has a quality-assured structured education programme that allows a learner to explore and develop a deeper understanding of their attributes through online and classroom-based teaching sessions, co-produced with graduate recruiters. Every year round 2000 students enrol onto the award, from a range of undergraduate year groups and disciplines. The most recent post-evaluation self-assessment indicates that of the students who completed the programme in 2022-23 87% were motivated to undertake further action to enhance their employability as a direct result of undertaking the award. Individual student reflections also show that the award has helped them to develop their attributes gained and to articulate them, particularly within an employability context.

Example 2: Personal Academic Tutoring

Student-responsive personal academic tutoring is essential to helping our students learn about, value and develop the attributes. Regular personal tutoring conversations are an opportunity for students to pause then reflect on and evaluate the attributes they think they need to develop to be prepared for life after university. A newly developed and piloted UoB e-portfolio (co-constructed with students) includes a diagnostic tool to help students self-assess their personal development needs and directs them to appropriate means of support or to development opportunities. In consultation with personal tutors, students review and reflect on their academic and wider skills development, and agree targets and recommendations for the short-, medium- and longer-term future. In time, our ambition is for students' reflections (taking into account ethical implications) can be utilised in our wider university evaluation of educational gain.

Conclusion

Defining and evaluating *educational gain* brings with it many challenges. The two examples above demonstrate how students themselves can be empowered to reflect on and develop the confidence to articulate aspects of their student experience most relevant to their own educational goals. We show how these examples, and other data collection methods, can be used as a form of evaluation data. We believe that in time, and building on these examples, the Graduate Attributes Framework will underpin a valid, rounded and future-ready approach to the evaluation of students' development of the graduate attributes and, by extension, their *educational gain*.