# Reflection Toolkit: creating and valuing reflection as evidence beyond numbers

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## Abstract

Reflection is a powerful process that can provide evidence of learning and development, and can inform decisions and future actions for individuals and institutions.  It is relevant across institutional departments but therefore can lack a clear 'home'; where can staff or students go for support in reflecting and designing relevant activities that provide appropriate evidence?

At the University of Edinburgh, we recently explored this challenge and created an online resource to provide practical advice for staff and students in reflecting and in facilitating reflection to evidence and support learning, growth and employability.  This paper looks at the drivers for this work, its development, reception and impact, and using reflection as evidence of learning and evidence for enhancement.

The outcome of this work - the Reflection Toolkit - is available at www.ed.ac.uk/reflection.

## Introduction

There are often diverse reactions when the term 'reflection' is mentioned within academia.  Sometimes, but importantly not always, these reactions align with discipline types.  For those in person-centred disciplines, reflection is often very familiar, where regular reflective journals or

portfolios are standard practice, such as in nursing, medicine and education.  In contrast, historically reflection is less common in STEM disciplines and some colleagues flinch away from the term, remembering a handful of poorly executed reflective assignments and being cautious about any attempt of increasing reflective tasks in their discipline.

Despite these diverse reactions, our experience is that, when done well, the reflective process is valuable across disciplines in higher education, creating a positive learning experience for students and staff, and can serve as evidence of learning that moves away from outcomes to focus on students' approach, thinking, and willingness to adapt their strategies.  Furthermore, depending on how reflection is incorporated into a course or programme, it can offer a tool for institutional enhancement that supplements and gives deeper insights than 'snap-shot' feedback from mid- and end-of-course questionnaires.

Adopting reflection effectively and meaningfully into the curriculum or professional practice might not always seem easy.  We therefore developed an open-access resource, the Reflection Toolkit, to support both practitioners and facilitators of reflection.

## What we mean by reflection

One challenge that arises when discussing reflection is how the term itself is understood. 'Reflection' has been used to cover a series of cognitively different and philosophically distinct methods and attitudes (Van Manen, 1995) and is often used differently depending on what theorist you are reading or to whom you are speaking (Finlay, 2008).  This can frequently lead to confusion and when people are criticising reflection, often they are in fact criticising one particular experience of it.

To be clear about what we mean by reflection in this paper, we first highlight the two main ways in which reflection is used in the literature, as noted by authors before us (e.g. Bradley, 2013, Grossman, 2009):
- reflection on experience – using experience as a foundation for learning and updating personal understanding of existing theories; and
- reflection as metacognition – critically evaluating and focusing on a problem, conception, or idea.

These are two ends of a spectrum and most theorists incorporate elements from both. Crucially, however, both conceptions see reflection as something distinct from 'just thinking', or 'noting down things that happened during an event', and share the notion of improving learning or practice (Dewey, 1933; Mezirow, 1991; Schön, 1983).  To delve into a more detailed discussion about the history of reflection, we encourage readers to access the literature section of the Reflection Toolkit for a literature review (Thejll-Madsen, 2018).

Drawing on these conceptions and other descriptions, we arrived at the definition for reflection used throughout the Reflection Toolkit:

> *Critical reflection is the conscious examination of past experiences, thoughts and ways of doing things. Its goal is to surface learning about oneself and a situation, and to bring meaning to it in order to inform the present and the future. Reflection challenges the status quo of practice, thoughts and assumptions and may therefore inform our decisions, actions, attitudes, beliefs and understanding about ourselves.*

With this definition in mind, we turn to how reflection might serve as evidence of development beyond numbers, before exploring the context at the University of Edinburgh and in higher education that led us to develop the Reflection Toolkit as a support for reflective practice.

## How reflection provides evidence of learning

There are many ways to argue for the value of reflection.  One line of argument follows the perceived benefit that practitioners report across a series of disciplines (e.g. Roberts & Faull 2013; Ashby, 2006; Cunningham & Moore, 2014; Ferriera, Keliher & Blomfield, 2013; Kori, Mäeots & Pedaste, 2014; Chretien et al., 2012).  Another perspective follows philosophical, educational and professional arguments, such as writings by Dewey (1933) and Schön (1983), who both describe how practice and theory benefit when one informs the other through reflection.  For readers interested in these arguments and the research on benefits from reflection, we highly recommend diving into the literature further – the Reflection Toolkit includes helpful starting points.  For the remainder of this section, we provide some practical examples that, in addition to the existing literature, highlight how reflection is not only valuable but can also effectively be used to evidence learning and development.

Reflection can support moving away from viewing outcomes, such as examination results, project outcomes, or dissertations, as the only evidence of learning and success.  This is perhaps seen most clearly in experiential learning where students' learning is achieved by engaging in an experience and then reflecting on it (e.g. Andresen, Boud, & Cohen, 2020). In this pedagogy, learning is seen as holistic and includes the students' intellectual and emotional lives.  Typical examples of experiential learning include community projects, placements, or outreach activities.  These are all situations where many external factors can influence the success of students' final projects (e.g. a community partner withdrawing at short notice).  It would, however, be naïve to suggest that just because a student's final project might not be delivered, or that their contribution may have been in intangibles (e.g. outreach activities), that they have not learned immensely from the experience, and that they are unable to evidence this learning.  In situations like these, we suggest reflection as a key activity in providing evidence. Students can keep a record of critical learning experiences and use reflection to evaluate these by drawing on their previous experiences and relevant theoretical perspectives.  In these situations, even projects that are not 'successful' in terms of output, may be extremely successful in terms of students' development.  A purposefully reflective approach captured for example in a logbook, essay or multimedia portfolio, can help students evidence learning that otherwise may seem intangible.  This idea, central to experiential learning (e.g. Andresen, Boud, & Cohen, 2020; Kolb, 1984; Association for Experiential Education, n.d.), is not new, and many readers will likely be familiar with such approaches.

One possible criticism in this situation is that reflection is merely another way of getting a written product that can be assessed and assigned a numerical mark.  This is a fair point and often this is appropriately part of what happens with written reflections in education.  However, reflective assignments go beyond standard non-reflective assessments by supporting students' reflective skills and the abilities and insights that come from having to articulate personal development, challenges, and approaches to engaging with these.  Doing this also provides a fresh basis for students or professionals when evidencing their learning, development, employability, skills and attributes.  Employability is often defined as 'a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations…' (Yorke, 2004).  Supporting students and professionals in the ability to recognise and articulate these achievements through reflection allows them to develop their reflective ability and can support an explicitness around skills and attributes that is not easily

surfaced through a non-reflective approach.  The reflective process also supports another key aspect of employability: taking ownership of one's own learning.

Additionally, staff looking to evaluate and enhance their curricula can use reflective tasks to gain deep insights and potential evidence of the effectiveness of current provision.  Traditional mid- and end-of-course questionnaires often yield limited response by self-selected students.  Such questionnaires can provide insights, however they can be limited in their depth especially where free-text fields are not completed – suggesting *how* the course is performing but not *why*. Courses that include reflective activities, particularly when these are regular and spread throughout the course and designed to surface key aspects, can gain access to supplementary information about how students are progressing, what they are finding easy, and where they are struggling.  In this way, incorporating reflective activities gives the lecturer another tool in gauging what elements of a course are effective and what elements may need reworked, as well as allowing staff to more easily evidence what elements students deem helpful and meaningful.  It is important to note that we do not argue that all assignments should be reflective, or that student satisfaction with teaching activities is the only way to see what parts of teaching is effective.  Indeed, sometimes students will dislike a course component that is essential for their development as researchers or professionals.  However, including reflective activities can diversify assessments, and provide new perspectives on an individual course or programme that traditional assessment and feedback structures do not capture.

Hopefully the examples above have showcased some ways in which reflection can evidence learning and development, and can provide evidence for enhancement activities.  However, it is one thing to identify that reflection can be useful; it is another to successfully engage with and implement it.  To support this, we developed the open-access Reflection Toolkit.

## The identified need for a comprehensive resource

The interest in and need for support around reflective practice was clear when looking within and beyond higher education.

Internally at the University of Edinburgh the number of reflective activities has increased both in quantity and in popularity over the last few years, and we see this in both the student and staff experience.

In the student experience, co-curricular reflective activities and frameworks such as the personal and professional development scheme The Edinburgh Award (McCabe & Stewart, 2014) have grown in size and spread.  Equally for curricular provision, more courses are including reflective activities or assessments, new versions of the Student-led, Individually-Created Courses are being created based around a reflective portfolio (SLICCs; Riley, McCabe & Pirie, 2017), and there is an enhanced focus on experiential learning within the University (CFEL, n.d.).  As a result, reflection has become something that many more students experience throughout their university journey.

Reflection is not just valuable to students, it is also a key part of continuing professional development for staff (CIPD, n.d.) and it is central to professional accreditations and memberships such as the fellowships with Advance HE, the CMALT Accreditation Framework, and CILIP professional registration, which require meaningful reflections showcased in a portfolio or blog (Advance HE, n.d.; Association for Learning Technology, n.d.; CILIP, n.d.).

This clear appetite and growing interest in reflection is not limited to the University of Edinburgh or higher education (University of Edinburgh, n.d.(a); University of Edinburgh, n.d.(b)).  As mentioned earlier, reflection sits at the heart of employability and is a key meta-cognitive skill - both of these areas are highlighted by the Scottish Government and Skills Development Scotland as a critical part of effective education, learning and development (Scottish Government, 2018; Skills Development Scotland, 2018).

While growing in popularity, in higher education reflection often does not have a natural 'home' within an institution, instead spanning multiple areas, interests and agendas.  As a result, each reflective initiative often has to rely on decentralised support, requiring each facilitator or course organiser to source their own materials and guidance, as well as developing their expertise and confidence sufficiently to be successful in running a reflective initiative.  At the University of Edinburgh, we were keen to increase the efficiency and effectiveness of support.

Reviewing the support available online, internally and externally, we found a wide range of good resources, however very few that targeted both those teaching or facilitating reflection, and those reflecting themselves.  Resources that did exist typically had a narrow focus and limited examples, and so lacked the breadth required to effectively and comprehensively support a

diverse range of people and settings across an institution.  We saw this as a challenge, particularly as the corresponding author leads two internal reflective frameworks (The Edinburgh Award and SLICCs), which previously had individual systems to help students with reflection.  This highlighted the opportunity to centralise the materials, make them context-free, practical, and freely available online in non-expert language.  Creating the Reflection Toolkit as a centralised resource, therefore had two separate but equally important goals: to support people who are reflecting, and to support people who wish to facilitate and incorporate reflection into their provision such as courses or workshops.

One further and important line of evidence suggested the importance of developing this resource.  Earlier we highlighted how the term reflection is often used differently by different people (Finley, 2008).  Add this to the reality that many students will not have experienced creating formal reflections prior to coming to university, means that many students we interviewed had previously often found themselves confused and unsure how to approach reflective assessments.  Further, when we interviewed both academic and professional services staff, we often heard that people were hesitant to provide clear guidance or criteria when using reflections in assignments.  This came from a positive desire to allow students freedom in how they produced reflections.  However, in such situations students will often not create entirely open and honest reflections, rather they will be performing (Ross, 2014) what they expect the lecture will want to see.  This then becomes problematic when students do not have previous positive experiences of reflection to fall back on, and often leads to diary-like submissions that praise the lecturer.  This can be frustrating for staff and students alike, and we heard repeatedly of students' hesitation to take part in initiatives that involved reflection because of negative past experiences of reflection.

While reflection does not have to be hard to facilitate, it can clearly be done ineffectively leaving people with poor understandings of reflective practice and a dislike of it.  The Reflective Toolkit therefore needed to be a place where reflectors (often students) who are given limited or no guidance on reflection can go for tangible tools and examples, as well as clearly providing facilitators (often staff) with tools to specify exactly what they hope to get from reflective activities, how to communicate these expectations to students and how to guide students along the way.

# Developing the Reflection Toolkit

In developing the resource, we drew from three main sources:

- literature on reflective practice both from within and beyond education, and on educational theory;
- expertise and experiences from around the University of Edinburgh; and
- students who partook in reflective frameworks like The Edinburgh Award and SLICCs.

The expertise and experience of both staff and students was critical in surfacing both the range of needs to be addressed and the importance of distinguishing support for 'reflectors' and 'facilitators of reflection'.

While students and staff often fill the 'reflector' and 'facilitator' roles respectively, it is important to recognise the multiple roles individuals can fulfil in their lives.  The terms 'students' and 'staff' are therefore deliberately not used in the Reflection Toolkit – instead it has two distinct components: the Reflectors' Toolkit and the Facilitators' Toolkit.  This easily allows professional accreditation schemes or line managers to guide staff to the Reflectors' Toolkit, and similarly if students run reflective workshops for peers, they can feel at home in the 'Facilitators' Toolkit.

As mentioned, the advice in the Reflection Toolkit is based on literature and experiences from experts and practitioners.  We wanted to ensure that those using the Toolkit would also be able to access the same literature that laid its foundation, and therefore the third component of the Toolkit is a literature review and a reference list divided into relevant topics, guiding interested readers to further materials on reflection.

The initial version of Reflection Toolkit covers a range of the essential starting points identified through our research.  In the Reflectors' Toolkit, topics include:

- reflecting on experience – including classic models such as Gibbs' model of reflection (Gibbs, 1988);
- different ways of producing reflections – including guides on writing reflections for academic assessments;
- reflecting for self-awareness;
- reflecting for employability;
- building a reflective habit; and
- reflectors speaking about their experiences of reflection.

For the Facilitator's Toolkit, topics include:

- identifying if reflection is right for your initiative;
- how to introduce reflection;
- whether and how to assess reflection;
- a modular approach to building reflective tasks; and
- case studies from reflective initiatives around the University of Edinburgh.

Based on discussions with early users, we have created typical journeys through both the Reflectors' and Facilitators' Toolkit, picking up some of the key topics and allowing all users to identify a suitable starting point.

## Reception and impact of the Reflection Toolkit

Since launching the Reflection Toolkit in December 2018, the feedback and uptake has been very positive. At the time of writing, twenty months after launch the Reflection Toolkit has been visited over 1,100,000 times. But perhaps more importantly, qualitative feedback shows usage has been strong both internally at the University of Edinburgh, and externally at academic and non-academic organisations within the UK and abroad. The Toolkit has been used to support individuals' reflective practice, to supplement existing materials, in teaching, to inform and drive changes in practices, and to shape the development of new practice and provision. The demand addressed by the Reflection Toolkit is clear and we aim to evolve the Reflection Toolkit over time in response to need.

Our resource is far from perfect and there are many aspects that can be improved and further developed. We are always keen for feedback and want to utilise expertise to make it a growing and developing resource that can support reflective practices both within and outwith higher education.

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