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Evidence-based Insights About Impact in Teaching and Learning

There is a wide range of thinking in terms of how impact can be identified, captured and communicated effectively. This *Forum Insight* introduces some key evidence-based considerations regarding impact within the context of teaching and learning in higher education. The Insight is based on an extensive review of the literature related to impact, key examples of which have been included.

What is Impact?

Impact can be described as something which occurs as a result of the outcomes of an intervention. Impact results from the influence of outcomes on the context in which the intervention has taken place. Impacts may be direct or indirect; a direct impact is often intended, predicted from the outset and linked explicitly to the purpose of an intervention, while an indirect impact is usually unexpected, often emerging during or after the intervention. Recent thinking suggests that impact isn't about providing answers, but about raising more questions, challenging thinking and supporting the formulation of new knowledge. (Bamber, 2013b; Bamber & Stefani 2016; Weir et al., 2014)

What the Literature Tells Us About Impact

A review of the related literature demonstrates that impact is inherently complex and 'messy'. It can be difficult to describe and evidence in such a way that the value of an intervention is captured and communicated clearly and effectively. However, understanding the nature of impact in teaching and learning, and how it occurs, is a key first step in ensuring that resources and efforts invested by those in the higher education community result in positive changes to learning, practice, culture, structures and/or policy.

Ten key insights from the literature which are important to bear in mind when attempting to realise or evidence impact are now detailed.

1. **Impact can be both intended and unintended.**
   Impact can be described as either intended or unintended. The intended impact of any teaching and learning enhancement should be determined from the outset and linked to the original purpose of the intervention. While impacts can be positive, this should not be automatically assumed; unintended undesirable impacts ('grimpacts') may also emerge from an intervention. (Hicks, 2016; McCowan, 2018; Donovan, 2019)

2. **Impact is multi-layered.**
   Impact is often described according to a series of layers or levels. The first level may encompass impact which is easily captured but somewhat superficial, e.g., feedback forms measuring participant/student satisfaction. As the levels build up, each one identifies deeper or more significant impacts, e.g., changes to teacher practice, changes to institutional culture. (Guskey, 2002; Kirkpatrick, 2007; McCowan, 2018)

3. **Impact is not an outcome or result at the end of an intervention, it is linked to ongoing change.**
   Outputs or outcomes, such as resources, publications or changes to policy/structures may be a means through which impact occurs, but they do not, in themselves, represent impact. This is because outputs/outcomes do not demonstrate the consequences of change, and they rarely take account of what may have occurred during an intervention. (Collini, 2012)

4. **Impact is non-linear and context-dependent.**
   The occurrence of impact is not often a simple linear process, and it is agreed that a tailored approach has to be taken in its capture and evaluation. This is because the evidencing of impact is context-dependent, requiring consideration of the specific dimensions of the given intervention and of the environment in which it occurs. Environmental influences may be cultural, political, economic and/or demographic. (Beerkens, 2016; Leiber et al., 2018; Stufflebeam, 2014)

5. **Impact is time-dependent (but not time-framed).**
   Impact is an ongoing process which is not time-bound. Some impacts may be expected, becoming apparent both during the intervention and immediately after its completion. Others may not be anticipated and may emerge as the intervention develops, and, most particularly, after it has finished, as the effects of the intervention outcomes begin to 'ripple out' to influence and trigger changes in the context and in those affected by the intervention. Some impacts have been shown to emerge a number of years after an intervention is completed. Attempting to capture such impacts immediately after completion may prevent the full value of an intervention becoming apparent. There is also 'the butterfly effect' which suggests that while initial impacts may look trivial, these can gain momentum over time, becoming increasingly significant. (McCowan, 2018; Parsons et al., 2012; Jonkers et al., 2018)

6. **Impact is evidence-informed, captured through a range of evidence.**
   Impact is best identified through a range of evidence broad enough to provide robust verification for enhanced knowledge, behaviours and practices. A one-off event does not provide sufficient evidence of impact – these may be referred to as 'impact incidents'. Additionally, every effort should be made to determine whether the impacts that occur are a result of the intervention, i.e., would they have occurred without it? The evidence needed to identify and capture impact should be a mix of scientific and professional (reflecting practitioners' expertise and judgement) evidence. It should include a mix of qualitative and quantitative data comprising, for example, both relevant metrics and case studies. (Bamber, 2013a; Bamber & Stefani, 2016; Beerkens, 2016; Hicks, 2016; Jonkers et al., 2018; Lamy, 2017; Leiber et al., 2018; Stufflebeam, 2014)

7. **Evidencing impact is dependent on the use of valid forms of measurement/evaluation.**
   It is essential that any forms of measurement used to evidence impact are 'fit-for-purpose' and are not selected

simply because they are the easiest to use or most easily communicated. Measures used should reflect what is important to measure, as reflected in the original purpose of the intervention. Whether any given form of evidence is considered valid may also vary according to the standpoint from which the measurement has taken place and the standpoint of the audience. (Fink, 2013; Henard & Roseveary, 2012; Kneale et al., 2016)

8. **Impact is a process which triggers change intended to be sustainable.**
In planning for the sustainability in the context of teaching and learning enhancement, it is the sustainability of the impact that should be prioritised. In aiming for sustained impact, it is important to remember that impact is a process that plays out over time. The tension that can be created by a demand for return on investment may put an emphasis on immediate evidence and a preference for quantitative data. It takes time to capture impacts, determine what exactly they are, who 'owns' them, and how to best communicate them to ensure they are well-understood. A key to enabling the sustainability of impact is to ensure that it is meaningful, accessible and applicable to the needs of beneficiaries and stakeholders. (McCowan, 2018; Stufflebeam, 2014)

9. **Impact can be vulnerable to political agendas.**
In order to ensure that impact is not misused or miscommunicated, an ethical approach to impact is recommended. Some stakeholders may exert pressure on evaluators to enable evaluation and reporting of impact which suits political agendas or encourages certain behaviours. As the study of impact itself has become a formal field of research, tied to funding, this may exert a pressure to define and represent impact in a particular way which needs to be prevented through a clear policy approach. (Bamber & Anderson, 2012; Bamber & Stefani, 2016; Beerkens, 2016; Donovan, 2019)

10. **Impact can be creative, peer-oriented and powerful.**
Impact can result in new knowledge and prompt change, made powerful because it has been created collectively, often across disciplines or institutions. Change can be unsettling; however, positive change is invaluable because it fosters reflection and inquiry and stimulates new thinking. The process of striving towards positive, sustainable change can have an affective dimension, nurturing collegiality, teamwork and peer learning, which is impactful in itself. (Bamber, 2013b; Weir et al., 2014)

In Conclusion

The literature related to impact indicates that identifying real world impact(s) is not solely about counting numbers or metrics from which to make inferences. Capturing impact effectively involves various sources of objective and subjective evidence, including those of affective response and professional experience. Taking a considered approach may lead to a better understanding of the profound and ongoing nature of impact and its 'ripple' effects. This understanding of impact helps us to appreciate its strength, reach, relevance, influence, and its importance for the enhancement of teaching and learning in higher education.

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