

## ACU Spotlight

# Evaluating impact: measuring the impact of HE development

Policy and Programmes Unit

No 3, October 2012

*Investment in higher education in low and middle-income countries (LMICs) is often justified in terms of economic and developmental impact. There has been extensive debate, especially among the donor community, on the relative costs and benefits of investing in higher education relative to other types of development intervention. Consequently the pressure to measure outcomes of higher education interventions has intensified in recent years. It is also part of a wider shift towards a culture of accountability, quantification and target-setting, leading to the fundamental question of whether higher education interventions can be effectively and convincingly measured in terms of their development impact. This paper highlights some of the issues and complexities associated with this question drawing on the proceedings of a seminar held in March on Measuring the Impact of International Scholarships (MIIS) and a more broadly themed conference on Measuring Impact of Higher Education for Development (MIHED), organised by the London International Development Centre (LIDC) in partnership with the ACU.*

### Key points

- The 'market' for impact evaluation is growing but the methodologies that underpin evaluation are, to date, relatively under-developed with few sophisticated and truly independent evaluations of HE interventions.
- Good policy and practice should be informed by independent evaluation, identifying what works and what is sustainable.
- Longer term evaluation of higher education development impact should be distinct from short-term monitoring requirements. Impact should be assessed over a short, medium and long-term horizon.
- Where possible evaluation of higher education development interventions should incorporate and adapt methodological tools used in other disciplinary fields of evaluation, such as theories of change, meta-analysis, counterfactual comparison, econometric analysis, regression studies among other tools. Cross-cultural experiences of evaluation should also be shared among evaluation practitioners.
- Evaluation should address whether or not multiple interventions work together to complement and reinforce each other. In particular it is important to look at the alignment of individual, institutional, systemic and societal benefits.
- Evaluation should not only (or even primarily) be shaped by the priorities and perspectives of donors/funders (often focussed on value-for-money and cost-benefits) but by the perspectives of recipients and how interventions measure up against their needs. There should be consultation with and ownership by beneficiaries in devising the measures against which interventions are assessed and evaluated.
- Evaluations should be guided by autonomous and independent steering groups who are experienced and able to cast a critical eye over the methodological approach.

## Types of intervention

The role of higher education in sustainable development has a long history, but came into sharp focus during the post-colonial era of the 1950s and 1960s when the university was seen as a core element of the national (and nationalisation) project. The university and higher education more generally was seen as a driver of national development through building much needed indigenous human resource and knowledge to support the foundations for sustainable infrastructure growth.

External support for higher education remains rooted on this premise and schemes such as the Commonwealth Scholarship programme, which dates back to the 1950s, have an explicit mandate to contribute to the development and poverty reduction needs of the home countries.

Debates about the developmental benefits of supporting HE have ebbed and flowed in the last half century, notably ebbing in the 1980s following the World Bank's position that the benefits of higher education were mainly private and support for primary and secondary education would achieve a far better return on investment. In recent years, however, recognition of the developmental benefits of higher education have been somewhat revived, but with this revival has come demands to provide evidence of those benefits.

A baseline study prepared in advance of the MIHED conference identified three principal categories of development intervention in higher education:

- Education and training (typically through scholarships and fellowships)
- Consortia and networks (supporting partnerships and HE communities of practice)
- Institutional and systemic development (this includes capacity development of individual institutions, as well as national and in some cases regional/international systems)<sup>1</sup>

## Types of evaluation

Demands for evidence have attached greater importance on recording, measuring and evaluating the impact of development and capacity-building investment in HE.

Within this context there are two main types of evaluation:

- Impact: which assesses whether a particular intervention works in relation to its defined objectives

<sup>1</sup> Typology drawn from Creed, C; Perraton, H. and Waage, J: *Examining development evaluation in higher education interventions: a preliminary study.*

- Process: which assesses the conditions under which an intervention works<sup>2</sup>

When trying to establish guidelines for whether and how a particular intervention has worked the role of a well-constructed 'theory of change' can prove critical. The theory of change defines the objectives, outcomes and impact of an intervention and how these are to be achieved by specifying:

- Inputs – what we use to do the work
- Activities – What we do
- Outputs – What we produce
- Outcomes – What we wish to achieve
- Impacts – What do we aim to change

It is important to note that impact is not a static concept and there are usually multiple impacts that are applicable over different time horizons. Moreover, impact means different things to different stakeholders who operate within different contexts and may have differing priorities.

## ***There is little evidence of the utilisation of planned statistical measures in evaluating HE development impact***

By definition, impact evaluations rely on methodologies that can attribute particular outcomes to the intervention. There are various methodologies that can be utilised to undertake the evaluation, however, the baseline study for the MIHED conference found little evidence of systematic evaluations and use of statistical measures to evaluate HE investments in LMICs. These methods might include, but are not limited to, randomised control trials, matched comparison designs, regression continuity designs and propensity score matching. The viability and utility of adapting some of these quantitative approaches for HE impact assessment, which tends toward a more qualitative approach, is something that requires further research and experimentation.

## Evaluating scholarships

Scholarships are more widely evaluated than other interventions, largely because their outputs are much easier to measure than other types of HE intervention. Even here, however, the focus tends to be on outputs and much less on clearly attributable outcomes and impacts. One of the more ambitious scholarship evaluation exercises was initiated by the Commonwealth Scholarship Commission in the UK in 2007. In the first five years of its evaluation programme it invested

<sup>2</sup> See Philip Davies presentation on *Impact evaluations and HE interventions for development:* [www.lidc.org.uk/assets/P%20Davies.pdf](http://www.lidc.org.uk/assets/P%20Davies.pdf)

further resources in building up its core alumni database and membership before distributing an extensive impact evaluation survey to over 5,500 alumni. The 2,226 responses received enabled the CSC to undertake a series of reports analysing both the broad impact reported by alumni and also focusing on sectors such as Health or Higher Education. Now in 2012 the CSC is researching and reviewing new methods to further evidence and quantify the impact of its various programmes. As part of this new phase of activity in March 2012 a seminar organised by the CSC brought together scholarship and fellowship providers from various sectors and countries as well as administrators, funders and beneficiaries with the objectives of:

- Sharing knowledge and experience relating to existing impact evaluations of scholarship and fellowship programmes.
- Discussing the challenges of evaluating scholarship programmes and similar capacity building programmes and identifying potential benchmark indicators for future comparisons.
- Learning more about the various evaluation methodologies that can be utilised by such programmes and identifying which are the most appropriate.
- Exploring the possibility of establishing a forum of like-minded professionals that allows for future collaboration between different organisations to share best practice and experiences.

## Methodologies

The main methodology associated with scholarship programme evaluation to date centres on alumni tracer studies. These studies rely heavily on the self-perception of impact among individual alumni rather than a scientific comparison of the post-award achievements and the differential pathways of beneficiaries and non-beneficiaries. The CSC evaluation is funded by the UK Department for International Development and as such focuses on ascertaining the development impact of the scholarships, it involves monitoring:

- **Outputs:** e.g. number of awards by gender, completion rates
- **Outcomes:** e.g. qualified postgraduates working in development-related fields; qualified postgraduates in leadership positions
- **Impact:** Increasing technical capacity of recipient countries in identified sectors; enhancing research capacity of academic institutions; attitudes towards host country

Within the seminar the lack of counterfactual evidence was a particular area of focus, with acknowledgement that the use of counterfactual data in scholarship evaluation is very limited.<sup>3</sup> The

<sup>3</sup> In this context counterfactuals refer to those individuals who meet the eligibility criteria for the scholarship (e.g. similarly educated) but did not receive a scholarship.

Rhodes scholarship programme was the only scheme identified that had made an attempt at counterfactual (or control group) analysis. Suggestions for tackling this perceived short-coming included the use of comparative studies, such as surveying unsuccessful applicants and then using regression analysis or matching methods. Propensity score matching was another potential tool put forward.

## *The main methodology associated with scholarship programmes centred on alumni tracer studies.*

Another key challenge of understanding and evaluating development impact, beyond the question of attribution, is the timeframe in which development impact is measured. Development impacts often take place over a long timeframe and the extent to which a single evaluation can track that long-term impact is often limited given the constraints on resources.

Linked to this is the challenge of capturing the relationship between investments in individuals and the environment in which they operate. It is difficult to evaluate the potential development impact that could be achieved in optimal conditions against the sub-optimal conditions that individuals often return to. This requires in-depth analysis of the context in which the beneficiary operates and is able (or unable) to apply their knowledge and skills. The ability to understand the connection between investment in individuals and the corresponding effects at the institutional and societal level was an area of particular focus and concern at the conference that followed on from the seminar.

## Measuring the Impact of HE for Development (MIHED)

While the CSC seminar focussed on evaluating scholarships, the MIHED conference was more broadly focussed on evaluating the development impact of different types of higher education intervention. Hosted by the London International Development Centre (LIDC) in association with the ACU, the conference was prompted by the apparent paucity of robust and independent evaluation of HE development interventions (especially outside of the scholarship sphere). A range of stakeholders from the academic and donor communities together with evaluation specialists came together to examine the current status and some of the conceptual and

methodological challenges of evaluating development impact.<sup>4</sup>

The three principal questions underpinned the conference:

- What has been, and should be the, the development intention of HE interventions?
- How should development impacts be measured?
- What are the methodological gaps and what research priorities emerge?

There was consensus that evaluation is a valuable process in improving and targeting resources but much work needs to be done in strengthening evaluation methods. Investment into HE in LMICs often has a wider set of objectives than simply development (however defined) and trying to define, extrapolate and evaluate the development impact of a particular intervention in isolation presents a considerable, if not impossible, challenge for scientific evaluation methods. Thus a big question looming large over the conference was whether it is really possible to measure impact and attribute it to a particular intervention in the complex and multi-dimensional sphere of HE.

The importance of a strong 'theory of change' was emphasised but this remains a relatively new and under-developed practice in the field of HE. The complications of defining measures of impact, the time-lag between intervention and impact and the attribution of impact to a specific intervention generate obstacles to developing an unambiguous and effective theory of change. However, HE development projects are increasingly building this into their planning stage with a view to shaping the future evaluation and sustainability of the project.

### ***Evaluation needs to take into account the coherence of individual, institutional, systemic and societal impact.***

Another critical point emerging from the conference was the need to evaluate the cross-cutting impact and coherence of multiple initiatives. Just as the CSC seminar noted that development impact of individuals was often shaped by the context they operate in, the MIHED conference emphasised the need to evaluate the inter-relationship between interventions at the individual, institutional, systemic and even international levels. Understanding how multiple interventions can work together and reinforce each other is an important dimension of evaluating what works.

<sup>4</sup> [www.lidc.org.uk/news\\_detail.php?news\\_id=149](http://www.lidc.org.uk/news_detail.php?news_id=149)

## **Conclusion**

Both events came to the similar conclusion that more rigorous work is required on what constitutes effective evaluation and how it can embrace local contexts and needs. They both served as a point of departure for the host organisations to engage more fully in the understanding and development of effective and robust forms of evaluation.

The CSC will use the seminar to help develop the next stage of their ongoing evaluation and to work more collaboratively with other organisations in this area. Suggested areas for future activity included:

- Developing a network of scholarship providers engaged in evaluation
- Sharing instruments such as surveys or data collection tools
- Developing a common approach to data policy
- Joint research publications
- Sponsoring a PhD in scholarship evaluation
- Devising a comparative study on tracer surveys and current practice.
- Identify common parameters to benchmark activity against each other

LIDC intends to construct a programme of activity that helps identify, cross-reference and build upon the existing evaluation frameworks, contributing to the development of an evidence base for the role and function of higher education in sustainable development. The overarching aim will be to generate a better understanding of what works in particular contexts and how different interventions can work together to achieve complementary objectives. This, in turn, is intended to inform the post-Millennium Development Goals (2015) development landscape and situate higher education firmly within the emerging set of international development priorities.

To find out more, contact:

Jay Kubler  
Senior Research Officer  
[jay.kubler@acu.ac.uk](mailto:jay.kubler@acu.ac.uk)

Rachel Day  
Senior Programme Officer (Evaluation)  
[rachel.day@acu.ac.uk](mailto:rachel.day@acu.ac.uk)

## **The Association of Commonwealth Universities**

Woburn House, 20-24 Tavistock Square  
London WC1H 9HF, UK  
[www.acu.ac.uk](http://www.acu.ac.uk)