

# The role of higher education institutions in knowledge generation to support Education For All

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## Abstract

*This paper explores the role of higher education in developing research capacity and conducting research in support of the United Nations' goals of Education for All (EFA). This is set against the backdrop of the EFA target year of 2015 approaching ever nearer. The paper is structured in three parts. In the first part, following a look at the changing image of higher education with time and a scan of the EFA Goals, examples are given of the kind of research-based knowledge that is needed to ensure the effective and efficient implementation of EFA. In the second part, the obstacles that currently exist in trying to generate this knowledge are identified. The third section then explores how these obstacles can be overcome – not just theoretically or over time, but now using simple and straightforward strategies and approaches.*

The paper emphasizes the importance of strengthening the link between national governments – in the form of their Ministries of Education – and the higher education sector. This is considered an essential precondition if qualitative improvements are to be made in the contribution of the universities to the achievement of the EFA Goals. Establishing informal, joint advisory-groups focused on education – including membership from both Ministry of Education and university – is proposed as one simple, but effective way to facilitate this process. Here, the universities are well positioned to take the lead and in this way to overcome at least one major obstacle – i.e. the lack of regular dialogue between key players. The varied and multifaceted character of the knowledge that needs to be generated, and the range of different players who need to come together to achieve successful final outcomes, make the task more challenging than it might otherwise be – though, in the view of the authors, this is a challenge that can be successfully overcome. The prize for success promises to be high, with primary, secondary and tertiary levels of education all standing to benefit.

## Background and the Need

### **The fluctuating image of higher education**

Having gained independence in the 1960s and 1970s, most formerly colonized nations found themselves faced with a lack of national development and a shortage of skilled human resources.

During these early years of independence, new national universities tended to be viewed as the natural and obvious answer to this critical need; this nation-building role rewarding them with a significant share of aid funds and national budgets. However, this rosy view of higher education and its role in national development did not necessarily remain unquestioned or unchallenged in the decades that followed.

The adoption by the nations of the world of the Universal Declaration of Human Rights, as far back as 1948, included the commitment that everyone has the right to education. Yet by 1990, 900 million adults and 100 million children still did not have access to education. Observers were by then expressing concern at the marked contrast between (what was increasingly being viewed as) the sheltered, cosseted and over-funded higher education sub-sector and the serious under-funding of primary and basic education of that time. In particular, there was concern that many school-age children had no access to any education at all, while those who were fortunate enough to find a school place were often failing to receive education of quality and relevance. Once economists joined this discussion, arguing that the economic rate of return from primary education is significantly higher than that of higher education, moves to change the order of the day gathered pace. In 1990, in what has proven to be one of the most significant changes of recent times, world leaders met in Jomtien, Thailand and adopted the World Declaration for All: Meeting Basic Learning Needs and articulated the Framework of Action to Meet Basic Learning Needs.

Thus, from once being considered the darling of the donor community and national governments alike, higher education began to be perceived as guilty of seizing a disproportionate share of the national education budget at the expense of millions of primary school-age children. More than a decade then followed in which the different levels of education experienced a strong and increasing degree of polarisation. Primary (basic) education attracted greatly increased attention and financial support. Funding for higher education was, on the other hand, significantly constrained during this period. That a degree of polarisation took place during the 1990s and into the 2000s is reflected by the fact that as late as January 2007, the International Association of Universities (IAU) convened a working group of experts in Maputo, Mozambique, under the workshop title Higher Education and Education For All: The Case of Two Solitudes? (IAU, 2007). It is one of the arguments of this paper that a better approach would have been (and remains) to support both sub-sectors – and that a partnership approach (rather than polarisation) would have proved more effective for all, not least the children at basic education level.

Encouragingly, analysis and reflection over more recent years has led to higher education once again becoming embraced as an essential and indispensable element in national development and also in supporting such key development goals as EFA and MDG.

### **Understanding the relationship between higher education and EFA**

Discussion on this issue took place during the 2007 Maputo meeting of experts on higher education and EFA (IAU, 2007). An important conclusion was that there are already very large numbers of individuals within universities and other higher education institutes who are promoting increased access, equity, quality and relevance in education without necessarily using the EFA banner. These do not always get counted in. Thus, to understand more fully what is really happening in higher education in relation to EFA, it will be essential to learn more of what this wider group is doing, in addition to those working under recognisable labels such as EFA, fast track, and MDG.

For working purposes, EFA can be considered conceptually as any and/or all of the following: a vision; a goal to be attained or strived for; a rallying cry for increased access, quality, and equity in education, to be provided to all – particularly in basic literacy, numeracy, essential life skills, and at primary level more generally.

The re-commitment of the world's nations to EFA at the Dakar meeting of 2000 led to the framing of 6 Goals – and it is these Goals that provide a better, more comprehensive and more concrete understanding of EFA. Anyone who is active in promoting any one or more of these Goals can justifiably be described as supporting and contributing to EFA. These Goals are provided in Box 1.

Looking more closely at the individual EFA goals helps to make clearer the diversity of players who are already active in promoting EFA. It also considerably expands the numbers of persons in higher education who can be considered to be making a contribution. Essentially, it is all those who are active in training teachers, in curriculum development, in educational research or in seeking in a multitude of other ways to improve the quality, relevance and equitable delivery of education. Such a definition inevitably has important implications for information gathering – particularly when looking at what universities and other higher education institutes are doing to support EFA.

*Box 1: The EFA Goals***Goal 1**

Expanding and improving comprehensive early childhood care and education, especially for the most vulnerable and disadvantaged children

**Goal 2**

Ensuring that by 2015 all children, particularly girls, children in difficult circumstances and those belonging to ethnic minorities, have access to, and complete, free and compulsory primary education of good quality.

**Goal 3**

Ensuring that the learning needs of all young people and adults are met through equitable access to appropriate learning and life-skills programmes.

**Goal 4**

Achieving a 50 per cent improvement in levels of adult literacy by 2015, especially for women, and equitable access to basic and continuing education for all adults.

**Goal 5**

Eliminating gender disparities in primary and secondary education by 2005, and achieving gender equality in education by 2015, with a focus on ensuring girls' full and equal access to and achievement in basic education of good quality.

**Goal 6**

Improving all aspects of the quality of education and ensuring excellence of all so that recognized and measurable learning outcomes are achieved by all, especially in literacy, numeracy and essential life skills.

**Two solitudes or simply silent partners?**

As already noted, during much of the 1990s and into the 2000s a somewhat cool relationship developed between those who focused mainly on basic education and their counterparts in higher education. Meanwhile, higher education continued to provide support to basic education through training, knowledge production and community outreach, although few would argue that this was an optimal contribution during this period.

### **How higher education can support EFA**

The literature identifies three broad categories of support that higher education is well positioned to offer in terms of its role (or potential role) in supporting EFA – i.e. through training, through knowledge production and through community outreach or service. Whilst all of these are important, the main focus of this present paper is on knowledge production or research.

Before we look more closely at the research that is needed, we look first at how sector-wide planning works. For convenience, the basics of this are included in Box 2 below. Sector planning within education has greatly improved over recent years, with a more holistic approach now being adopted by most countries (even if not always completely so).

#### *Box 2: The Education Sector Development Plan*

Planning within the education sector in most countries is usually in the form of an Education Sector Development Plan (ESDP), or similar, prepared by the Ministry of Education in line with wider national poverty reduction strategies. The preparation of the ESDP plan usually includes dialogue with the international donor community when external funding is needed to support its implementation. ESDPs invariably include basic baseline statistics together with targets to be met (or at least strived for) – both annually and over the period of the plan. These performance indicators are usually grouped under a set of standard sub-headings including: budget and expenditure; access; quality; efficiency; and equity. The progress made with respect to the various performance indicators is then kept under annual review – usually carried out by a joint team of government and donor representatives.

Education management information systems (EMIS) – most of which have improved considerably over recent years with the much wider availability of computers and improved methods of communication and data gathering – have the challenging task of providing accurate, meaningful and up-to-date statistics on many different aspects of the delivery of education. Whilst the quality of the data generated by these EMIS systems is generally increasing with time, high levels of accuracy and meaningfulness are by no means achieved yet in all cases.

As described in Box 2, modern approaches to educational provision – including the monitoring and evaluation of progress through EMIS – represent a major step forward from earlier less coherent and more fragmented approaches. EMIS systems tend to be successful in capturing data covering a sizeable number of key indicators of progress, but less good at looking behind these same data by way of much deeper analysis into their true meaning. That is, they fail to investigate the root causes of identified problems or the implications of the data

for education policy formulation and refinement. This is where higher education is well positioned to provide much needed assistance.

An example of an area needing to be explored and addressed in many countries is the following: faced with low enrolment ratios, primary and secondary schooling have devoted much time, effort and funding to the raising of enrolment rates. This is laudable – however, simply cramming more and more children into a classroom (over 100 in one small, poorly resourced classroom is not uncommon) clearly has a cost in terms of the reduced quality of the learning taking place. However, such overcrowding is not always captured properly in all of its dimensions in Joint Review Missions since indicators of quality are rarely direct measures as might be achieved through classroom observation or by standardised measures of attainment. They are mostly so-called proxy indicators such as the share of the teachers qualified or the student : textbook ratio. Whilst these indicators provide some information, they are a long way away from being able to give a true and accurate measure of the learning actually taking place – region-by-region, district-by-district, school-by-school and child-by-child.

What is needed is research; and the knowledge that it generates in relation to policy development, curriculum development and programme delivery. A number of illustrative examples of the kind of research we are referring to can be found below. These cover a wide spectrum, including (amongst others) the following:

- Research to support education policy development and planning, including studies into the economics of education provision
- Access – including alternative approaches to basic education
- Quality – including
  - The school curriculum and assessment
  - Issues of mother-tongue teaching and the process of transition from mother tongue to the use of a different national language (or a foreign language such as English, French, Spanish, Portuguese etc.)
  - Models of teaching and learning and promising practice for individual local circumstances and conditions
  - The use of computers in teaching
- Classroom-based studies
- Issues related to teacher education
- Efficiency (including)
  - drop-out
  - high repetition rates.
- Equity and gender

- Management
- Capacity building
- Community participation
- Secondary education.

### **Who should generate the knowledge required?**

It is clear from the above illustrative list that the education sector needs to learn more about what is already really happening inside classrooms and schools, and what could potentially be achieved if different, improved approaches, policies, models, etc. would be introduced. National governments are ultimately responsible for the delivery of education and for achieving the EFA goals, and therefore the responsibility for developing the research agenda (or at least commissioning it and overseeing it) also lies with government (i.e. with the Ministries of Education). However, this does not mean that the Ministry alone should necessarily undertake all of the required research. Neither should it seek to frame the research questions in isolation. This is a varied and multifaceted task that will benefit from the inclusion of experience and expertise from many sources – not all typically to be found in just one institution. Thus, a team approach is called for, led by the Ministry of Education, but in such a way that each of the key players (and potential players) is able to contribute their own specialist knowledge and skills.

## **The Problem**

### **Why is higher education not more active in supporting EFA?**

If higher education is to act as a driver of progress in relation to the EFA goals, and not least of all in the area of conducting research and building research capacity, it is important to understand why this has not happened before now to a greater extent. Several reasons, or sources of the problem, can be identified, including: issues of communication, the reward structures within universities, the varied and multifaceted nature of the research required, and funding mechanisms. These are inter-linked rather than isolated and distinct from each other.

### **Lack of communication**

A prerequisite for a more meaningful and more effective contribution to supporting the EFA goals is that good lines of communication are developed between the universities and the Ministries of Education. Ministries are staffed with civil servants whose work, rules and hierarchical structures do not necessarily encourage them to think and work in the same way as their more free-thinking counterparts in the academic world, and this too often leads to a communication gap. Also, universities are usually staffed with intellectuals

with higher academic qualifications than are typically found in the Ministries of Education and this can add a real or perceived intellectual gap. That there is a gap – and a related lack of communication – is often illustrated in the way teachers are educated and trained by the universities. This is a situation where the Ministry of Education is clearly the main client – i.e. the body that will later employ all the trainee teachers. In spite of this clear client – supplier of services relationship, too often the Ministries are not invited by the universities to comment on curricula, or to discuss and provide feedback on other matters that affect the preparing of these future teachers.

If communication and dialogue between university and Ministry are so poorly developed for such a clear cut assignment as the training of teachers – should we find it surprising that the situation is even less encouraging in relation to the less tangible subject of EFA?

### **The reward structures within universities**

In many cases, an additional reason why universities do not engage more enthusiastically in discussing with Ministries of Education issues such as EFA, stems from the way they view their mission and from the career path structure for academic staff and the way these same academic staff are rewarded for performance.

The vision and mission of most universities around the world – although all worded differently – tend ultimately to be built upon three common pillars – teaching; research; and outreach (or service to society). Almost invariably, wording that stresses the importance of helping to tackle issues of local, regional or national importance is also included. An interesting observation here is that with such a vision and mission, helping to achieve the EFA goals would appear to fit very well as a high priority for most universities, particularly in developing countries where much stress is placed on supporting national development. Further explanation is therefore needed to explain why we do not see much greater involvement of the universities.

Reasons here include the way career paths of academic staff are structured and how academics are rewarded for performance. Even in those universities that profess to place teaching, research and service to society on equal footing with each other, practice in reality is often found to be quite different. The phrase ‘publish or perish’ has been so overused it has now become a cliché – but that is only because it captures the reality so well!



If the real rewards are for research and publications (rather than for teaching and outreach), this again would seem to point to a very considerable potential for university academics to become much more involved in supporting EFA. However, a problem arises here. Due to the lack of clear, coherent and well-directed research policies, the majority of universities tend to struggle to assess the quality and the importance of any research that does not fit the international norm of being published in internationally refereed journals. Whilst some EFA research will comfortably meet such a requirement, not all of it will immediately or naturally do so.

Faced with his or her work being under-valued by the reward system, the university academic will understandably tend to drift away from writing-up grey literature (even if it is of value to society) to a more rewarding line of research – i.e. one that lends itself more readily to formal publication, irrespective of whether it is useful to society or not.

### **The varied and multi-faceted nature of the research needed to support EFA**

An additional factor is that the kind of knowledge and expertise needed to answer many of the EFA-type research questions is not always to be found in one individual or in one single group of academics or practitioners. A bringing together of multifaceted knowledge, insight, experience and expertise is called for. This will certainly involve university academics, but often in some form of integrated team that also includes the knowledge and expertise found in Ministries of Education, in planning departments, EMIS units, curriculum development centres, teacher training colleges, regional education departments, in schools, teachers, and elsewhere. This increases the complexity of the process.

### **The commissioning and funding of research**

EFA research also provides its own complexity in terms of its commissioning and funding. It is ultimately government that funds much of higher education. This can easily cause confusion and misunderstanding when that same government decides it wants the university to carry out work on its behalf. Inevitably, a question will arise regarding who pays.

Educational research need not be unduly expensive, but it does need to be funded if meaningful progress is to be made. Research in support of EFA also needs to be commissioned by someone or some body. Although in more developed countries this might be an independent body set up for such a purpose, generally speaking this should most sensibly be by the body that holds the formal responsibility to ensure that the EFA goals are met – i.e. the Ministry of Education.

The ToR and the expected deliverables need to be clearly defined and the work properly assigned to those who will carry it out. Whilst ministries might not always be well placed to frame such ToR on their own – increased dialogue and cooperation with the universities, as advocated in this paper, should (in principle) lead to a good final result.

Irrespective of who the Ministry asks to assist it in this task, it should still retain ownership of the ToR and of the overall exercise – even when it outsources much of the execution of the work to others.

### **The difficulty in accessing implementation experiences and research results in relation to EFA**

Another important issue is the difficulty experienced by policy makers and practitioners in trying to find all the relevant information available worldwide (or even closer by) on EFA experiences, including promising practices and results of research. What information exists is often scattered across a very large number of different websites and storage sources, if indeed it is available at all. This makes accessing such key information a difficult and cumbersome task – at the end of which one may still not feel confident that all the material available has been located.

### **The Way Forward**

In looking for solutions, we touch briefly on longer-term structural change that will help to bring about the closer relationship called for above, but our main aim is to find straightforward approaches that can be implemented to-day, in institutions as they are currently organised and resourced, with all of their present strengths and weaknesses. That is to say, to focus on what we can do now as opposed to what medium or long-term future developments might help to facilitate.

### **Recommitment to supporting national developmental goals**

The first part of the solution relates to the attitude and approach taken by the universities and the Ministries of Education. The real springboard for success will come when universities and Ministries of Education recognise that they are natural partners in the drive to achieve EFA and that closer cooperation can provide significant gains for both sides. For most universities this should not require them to depart from the core values they have already selected for themselves, but simply to make a positive and meaningful reconnection with those particular values that call upon them to make an important contribution towards tackling societal issues.

**Bringing about improved communication between the key players**

It was argued earlier that improving communication is also a prerequisite for improved cooperation and better end results. The simplest of informal structures can sometimes serve this purpose as the University of Botswana has shown (Box 3).

**Box 3: The Advisory Committee on Education at the University of Botswana**

During the 1980s the University of Botswana became increasingly aware that, in spite of being located little more than 1 km from the Ministry of Education in Gaborone, and also in spite of the many areas of common interest (including not least of all the training of teachers for secondary education), there was no existing simple mechanism for both sides to exchange information and views on matters of common interest. Enlightened leaders at the university then decided to set up an informal Advisory Committee on Education to meet on an occasional basis with the participation of senior members of the Ministry of Education and senior members of the university – and to be chaired by the Dean of the Faculty of Education. This Advisory Committee continues to meet to this day. The committee meets normally as little as just once per year but this can be adjusted if and when necessary. Issues tabled at such meetings are not restricted to EFA goals – but may include any and all matters with respect to which both parties have an interest.

The Advisory Committee on Education as established at the University of Botswana illustrates several important points. The first is that initiating dialogue with a Ministry of Education is not as difficult as might often be anticipated. The second is that issues such as the autonomy of the university, and other such distractions, need not complicate the process since the committee has no formal powers of decision – only the power of suggesting and recommending courses of action on matters of common interest. The third is that the bringing of both sides together is entirely within the control of the university to initiate such a process.

The simple Botswana model can easily be expanded in larger countries with several, or many, universities: the link might then become with the Regional Education Office rather than the Ministry headquarters, but the principle remains the same.

**Revised reward structures for academics**

One problem is that much work on supporting EFA may tend to be categorised for reward purposes as service to society or consultancy work, rather than as research. Neither of the first two categories attracts the same level of merit

and reward within universities that accrues from so-called ‘proper’ academic research. This is ultimately wrong and counterproductive in terms of maximising the impact on society of the higher education institutions. We would argue that, if a university academic applies all of his or her experience, expertise, time, energy and drive in support of solving problems of national importance – then this should not be considered as a second-best effort. Indeed, it should be quite the opposite.

Ways need to be found to encourage greater participation of academics in this type of work, and the obvious way is to ensure that such efforts are fully and appropriately incorporated into the reward structures (i.e. in relation to acknowledgement, annual increments, promotion and prestige). There seems no reason, in principle, why striving for academic excellence in an esoteric branch of science or the arts cannot exist comfortably side-by-side with addressing issues of national importance in a sound, learned and effective way.

Whilst this section focuses on the reward structures that are applied to academics, it is as much about the need for universities to frame their research policies more clearly. The scarce resources available for research in many institutions will need to be used for coherent, well-directed research programmes and not dissipated on a range of isolated individual efforts. Selected priority fields, including the tackling of problems of national importance, should be included at the centre of such plans.

### **Coping with the varied and multi-faceted nature of EFA research**

As noted earlier, universities should not be viewed as the sole source of the knowledge, expertise and experience required to support EFA. The approach needed would follow that advocated by Gibbons et al., (1994) – i.e. it should be multidisciplinary, with teams of specialists being assembled with a wide range of professional backgrounds, diverse academic disciplines, and from a range of different institutions and sources. As in the Gibbons Mode 2 approach, these are assembled in a network, sometimes located together, sometimes scattered far afield, for the duration of the assignment, after which the network would dissolve or be reconfigured with different membership to tackle the next problem for which funding is available

One of the most attractive features of Gibbon’s approach is its flexibility in being able to assemble multidisciplinary teams of just the right profile for each problem to be tackled. This is certainly an interesting model to consider, even if it may not provide an immediate solution within the context of to-day’s structures and modes of operation. We also need strategies that can work in the current

settings with the present levels of available human and material resources.

The universities are potentially in a position to make major contributions to EFA, not only through specifically commissioned research, but also through post-graduate programmes. For example, research assignments assigned to Master's and PhD candidates can be better aligned with those issues and questions that are of value to society. University students are an inexpensive source of bright and able research capacity – ideal for work that is labour intensive (e.g. classroom studies and the like). Their academic supervisors would then screen all such research reports to ensure that only those of quality and reliability would become more widely disseminated.

Similarly, if a better dialogue is established with the Ministry of Education and its related institutions such as curriculum development units and teacher training colleges, these can become fertile sources of interesting, useful and challenging research questions for university academics.

An additional aspect to bringing in specialist skills is that of universities transferring relevant skills to their counterparts in the Ministries. Some universities already offer so-called professional programmes (often at Master's level) targeting staff of Ministries and their agencies such as curriculum development and examinations units.

This transfer of knowledge and skills should not necessarily be a one-way process: university academics may need to gain experience in how sector-wide programmes are designed, managed, implemented, monitored and evaluated before their own specialist knowledge and skills can be utilised to the full. Ethiopia, for example, now includes university academics in its annual Joint Review Mission teams looking at the progress made in their ESDP programme.

### **The commissioning and funding of research**

At an early stage, dialogue between Ministry and university should establish the different sources of funding that are potentially available for research to support EFA – from both government and external agencies – and also determine what each party is expected to bring to the table.

Funding to support the research studies of senior students and of individual academic staff should, wherever possible, come from the university's own research funds, or from funds secured from an external source by the university or by the individual academics.

In the commissioning of research specifically to support EFA (or the implementation of ESDP plans), the Ministries of Education should retain control of this process, including making sure that appropriate budgetary provision is made in order to support the work to be carried out. Although perhaps not the only source of expertise, the local universities would seem to be the most obvious and natural source of expertise for the Ministry to tap for implementing this work. From the university's perspective, the availability of extra funding for (targeted) research in support of EFA, or the implementation of the ESDP plan, can provide an important incentive for the academic community, allowing them to increase their research activity. At the same time, also contributing in an invaluable way to national development.

### **Access to EFA research**

A concern described earlier, is the scattered distribution of much of the world's research literature on EFA and other related targets such as MDGs. This has led to a call for a single dedicated website or portal to be set up, where interested practitioners can access such information. The multitude of useful and interesting documents and other materials already located in major well-established databases in an organised way suggests that some form of portal is likely to provide the better solution.

In this regard, it is pleasing to note that the International Association of Universities has recently (2009) launched a prototype portal for this very purpose (see <http://www.heefa.net>).

### **Conclusion**

This paper calls for a much closer partnership to be established between universities and their Ministry of Education with a view to increasing the contribution the universities can make in helping to achieve the EFA goals. The contribution from the universities can be in different forms – prominent amongst these being in the area of EFA-related research. With such an approach, it is entirely possible that primary, secondary and tertiary education can all benefit.

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