
The Role of Higher Education in Development

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In my lecture today I will focus on two questions. Just how important is higher education when it comes to human development? How should Vietnamese policy-makers look upon higher education when setting government initiatives and priorities for public policy and expenditure?

By higher education I'm referring to all forms of education, not only beyond primary and secondary, but also beyond vocational education. In other words it's the university and research sector generally that I am referring to, and my question is - how can that sector play a role in development? Is it the "engine of development in the new world economy" as Castells has claimed, or is it less important than say literacy and numeracy programs at the pre-primary and primary levels?

Before looking at this issue I will outline my understanding of how change occurs in order to set the scene for my analysis of the role of higher education.

WHAT DRIVES PROGRESS?

I start with human beings and their desires and capacities. They seek to live well and improve their standard of living, and to this end have capacities that mark them out in the world of nature. They can think and reflect, and most importantly innovate. Technology is a feature of their existence, forever changing as human beings face up to the challenges of their time.

We can call this mix of desires and capabilities the forces of production.

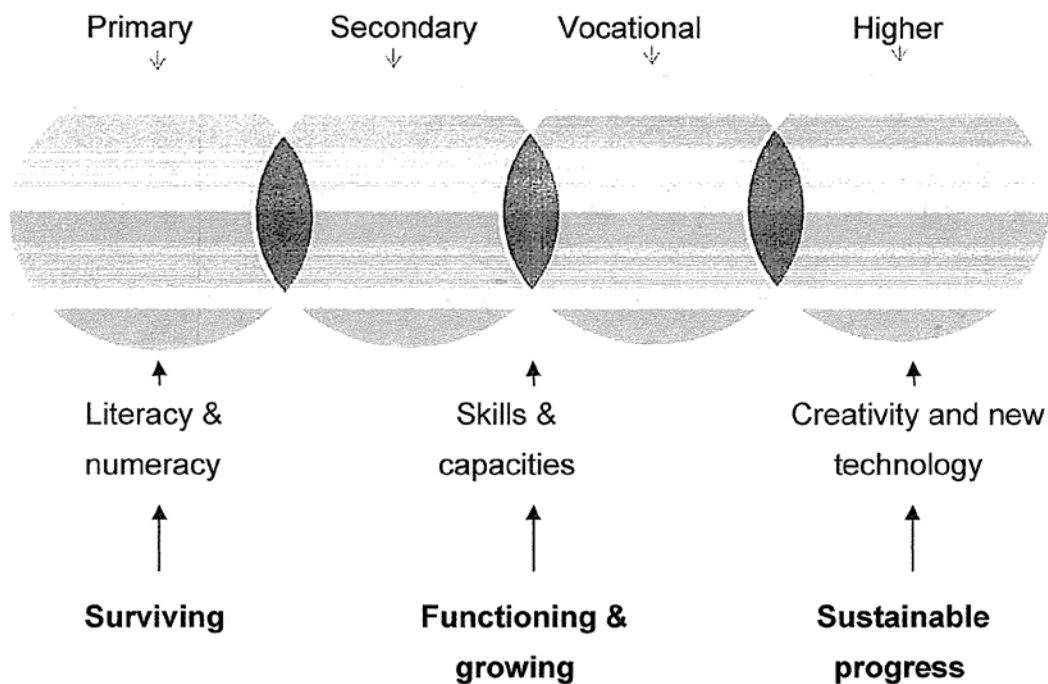
There are, of course, hierarchies of needs and capacities, and that is why words like "progress" and "development" are in our vocabulary.

We need to survive and that means food and shelter but we also need to belong and that means families, communities and ultimately nations. On top of that we need to enrich our lives with the arts, culture and science.

When it comes to our capacities the same story can be told. We have developed the weapons of language, measurement and calculation, at first primitively and now at a high level of sophistication. Also, and as a matter of need, we have the social capacities to live together in groups small and large. Production and distribution systems have been developed and social relationships refined, attached to which are ideas about what works and what doesn't, and what is right and what is wrong.

At the peak, however, are our critical capacities, to think and reflect on the past and present and also to reflect on the future. This critical capacity drives invention and feeds innovation in all areas of life. We can theorise, collect and evaluate evidence and try out new ideas.

In some ways this pattern of development applies to individuals as much as it does to communities. Consequently we have developed age (and circumstance) related systems of education which we can illustrate as follows:-



Yes, we all want to survive and to function well and progress, but most importantly we want this progress to be sustainable. For that to be the case creativity and innovation are crucial. To this important point I will return later in the lecture. What I need to establish now is how change occurs and how this is related to the development agenda of countries like Vietnam.

In today's world we see a range of political forces emerging from the social relations of life and production that come with human existence. People form communities and communities develop into nations. Patriotism in the interests of national self-determination is a powerful force, as can be regionalism and localism. Within society group and interest-based forces based on race and ethnicity, gender and sexuality, location and occupation and class and culture come together as social and often as political movements.

What results is tension not only between the forces of production and these relations of life and production, but also within society between the various groups and interests, it being the task of politics to manage these tensions by striking an appropriate balance for the times. However, any resolution that defies new knowledge technology and its potential to improve the conditions of life is bound to be unstable.

However, what we call progress can be held up to be a range of forces, but in the developing world three stand out for special attention - colonialism, despotism and populism. The first holds back local initiative, the second feeds corruption and the third defies economics. Progress, on the other hand, comes with national self-determination, mechanisms of accountability and public interest based decision-making.

The politics of progress

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Colonialism → National self-determination

Despotism → Accountability

Populism → Public interest

The public interest is a most important concept, along with the related concept from political science - public value. It is - or at least it ought to be - the national or public interest that we seek:

- The good of **all** and not just some
- The **future** as well as the present
- The **environment** as well as the economy
- The **spiritual** as well as the material

The alternatives to the public interest are all narrow and limiting and may be the result of colonial domination, ideological rigidity or governments caving into vested interests.

Where, then, does higher education fit into this story?

HIGHER EDUCATION AND PROGRESS

Higher education has the capacity to act as an autonomous force for change. It is, indeed, one of the forces of production. This follows from two aspects of its work and culture:

- Critical thinking about institutions and outcomes
- Scientific inquiry both basic and empirical

It can be summarised as that capacity to step back, make inquiries and think again. For most of us caught up in daily survival and defined work this is hardly an easy option. However, in universities for example, it is possible to utilise the methodologies and techniques of science to explore the workings of nature and society. The knowledge created is invaluable in meeting the challenges of life both today and in anticipation of the future.

This is the theory but we need to ask: What does the evidence tell us? Does it confirm the importance of higher education? Does it pay to take some of the hard earned money we have and invest it in higher learning?

Looking at the rates of return from investing in higher education in Asian countries we see that the results are positive, both for the individuals concerned and for the communities in which they live.

	Primary	Secondary	Higher
Private	20.0	15.8	18.2
Social	16.2	11.1	11.0

SOURCE: Psacharopoulos and Patrinos (2002) reproduced in Tilak (2003)

Reflecting on these statistics Jandhyala Tilak makes the following point:

"Though the rate of return to higher education is less than to primary education, it should nevertheless be noted that higher education does yield an attractive rate of return to the society (11%) and to the individual as well (18%)."

What about other measures? Two commonly used are the Gross Enrolment Ratio (GER) and Higher Education Attainment (HEA). The former looks at enrolment in the various levels from primary to higher education. For example it seeks to determine how many are enrolled in higher education as a percentage of the age group pertinent to that level, say 18 to 24 year olds.

Tilak's paper on higher education provides figures on Vietnam's position in respect of both measures. In respect of the GER it can be seen that the rate varies enormously between nations according to their level of development.

Gross enrolment ratio (%)					
≤5	6-10	11-20	21-30	31-50	>50
Afghanistan	China	Armenia	Hong Kong	Japan	Korea
Bangladesh	India	Azerbaijan	Macao	Kazakhstan	Australia
Brunei		Bahrain	Philippines	Singapore	New Zealand
Cambodia		Indonesia	Thailand	Uzbekistan	
Lao		Iran	Turkmenistan		
Maldives		Kuwait			
Myanmar		Kyrgyzstan			
Nepal		Malaysia			
Pakistan		Mongolia			
Sri Lanka		Tajikistan			
Vietnam		UAE			
PNG		Fiji			
Samoa					

Source: Based on UNESCO (1999) reproduced in Tilak (2003)

Higher education attainment in Asia-Pacific (% of adult (25+ age-group) population having post-secondary education (latest available data in 2001)

New Zealand	39.1	Turkey	10.8	Pakistan	2.5
Mongolia	23.4	Brunei Darussalalm	9.4	Indonesia	2.3
Philippines	22.0	Singapore	7.6	Mayanmar	2.0
Korea	21.1	India	7.3	Maldives	1.7
Japan	20.7	Malaysia	6.9	Afghanistan	1.6
Taiwan	17.8	Macao	5.9	Bangladesh	1.3
Hong Kong, China	14.5	Solomon Islands	5.6	Sri Lanka	1.1
Kazakhstan	12.4	Thailand	5.1	China	1.0
Tajikistan	11.7	Fiji	4.5	Cambodia	1.0
Israel	11.2	Vietnam	2.6	Nepal	0.6

Source: UNESCO (1999) reproduced in Tilak (2003)

Vietnam's score is low on both charts but it begs the question - is higher education the **cause** or **consequence** of development, or indeed a mixture of both? If it's a cause a link needs to be found and that is from the development and use of technology.

HIGHER EDUCATION AND TECHNOLOGY

Work by the United Nations Development Program (UNDP) has identified four dimensions that are related to technology; firstly, the capacity of a nation to invent; secondly, the capacity to diffuse new technology; thirdly, the capacity to diffuse older, but still important technologies, like telephones and electricity; and fourthly, the overall level of skills and capacities in the community to manage such matters. These factors measured become part of a Technology Attainment Index (TAI).

It should be noted that what we call invention here isn't necessarily high-level science but the adaptation of new technologies to local conditions. For this to happen, space needs to be created for research and development and a group of scientists with the relevant capacities available to occupy that space effectively. One of the roles of a university is to empower technology in this way. As Hill and Dhanda put it:

"...technology advances build human capabilities through the swift dissemination of progress in medicine, communications, agriculture, energy and manufacturing. Additionally be taken to extend opportunity? What is the role of private initiatives in higher education? They are subjects for another lecture."

THE CASE FOR HIGHER EDUCATION

Note too that in addressing higher education we shouldn't just be focussing on rates of return for individuals and communities but also on its impact on social development and environmental health. In providing science and new technology it not only helps businesses innovate and compete it also helps communities tackle disease, decay and disadvantage. This feeds trust which

creates room for government to fund what may be seen as unproductive to the poorer sections of society battling on a daily basis.

To develop nations don't just need technology but also community-wide support and the work science does to improve life is an important means to that end. However, when it comes to prioritising higher education alongside primary, secondary and vocational education for which the returns can be significant, governments face a challenge. It's that economic problem again - unlimited desires and limited resources.

However, in a globalised economy there is little choice but to make room for higher education alongside initiatives to promote literacy and numeracy and to develop work-ready attitudes, capacities and skills. Sustaining development has to mean industrial best practice and innovation. Standing still is not an option when it comes to the modern economy and the value-chain that underpins it. As Desai, Fukuda-Parr and Johansson put it:

"Poor countries need to foster their own creativity to use both local and global knowledge and science to find technological solutions to their development problems."

For such creativity to be encouraged institutions that foster it are crucial. Modern universities that mobilise the best talents in society to form a scientific and technological elite can assist by bringing science to all levels of industry, thus improving productivity, and to all levels of society and its interactions with the environment, thus improving human development.

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