

Distance and e-learning: An Answer for Unemployment?

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Distance and e-learning have become buzz words in the Higher Education sphere. While most of the post-school institutes jump on the wagon of providing it, we can not lose sight of the macro economics phenomena like jobless growth and skilled unemployed that must be accounted for by these institutes. Thought is it difficult to determine the unemployment rate (due to the discourage worker effect), the figure is estimated at about 26% for South Africa. If Higher education institutes main objective is supplying graduates to the labour market (and thereby gaining enormous state subsidies), they are ignoring the demand for labour. Distance and e-learning can be valuable tools in addressing unemployment, but emphasis must be placed on the demand of labour, given our social and political environment with constraints.

INTRODUCTION

South-Africa has a very complex labour market, with strong unionization and relative low labour productivity. We also experience brain-drain (of highly skilled workers) and illegal immigrants (mainly unskilled) from adjoined countries like Zimbabwe. This might contribute to high levels of unemployment in the country (even during years of economic upswing).

To shift the focus; Does Higher Education in South-Africa contributes to jobless growth? Is Unemployment the sole responsibility of government's fiscal policy? Who is accountable for the skill mismatch in the labour market?

THE DEMAND FOR LABOUR (L_d)

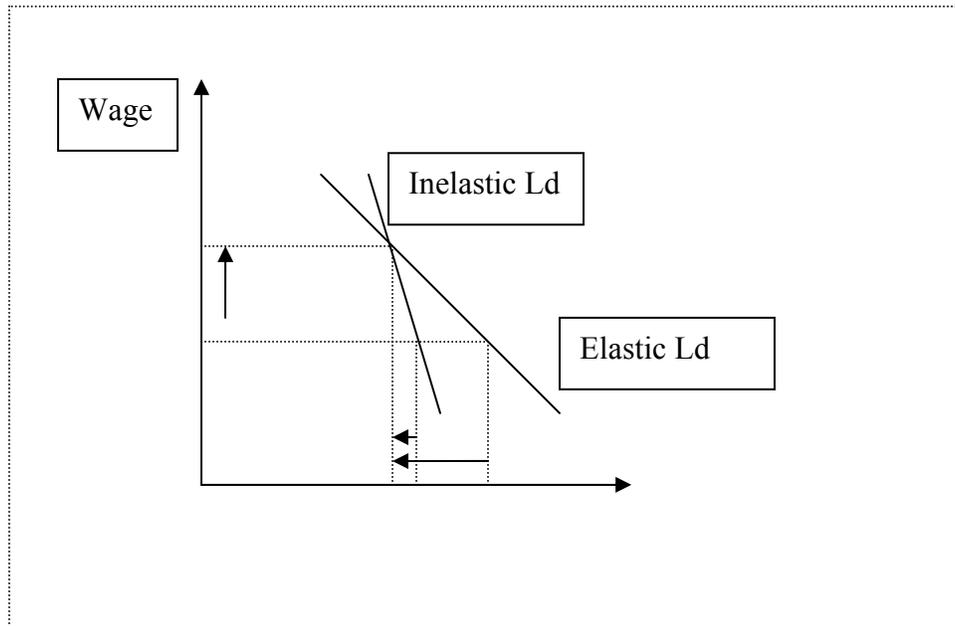
Theoretical Approach

The demand for labour is a *derived demand* – in other words it is derived from the demand of the product. Thus the product market will, in a direct way, influence the labour market, and also the demand for labour. The latter will also have an influence on the wages/ remuneration paid to workers.

It can be illustrated by means of South Africa's main export, gold. If world demand for gold increases, more mine workers will be employed. While an appreciation of a currency is in general good news for a country, the other side of the coin is a lower world demand for the more

expensive export products. It may have devastating effects for the particular labour market, where retrenchments are inevitable.

**FIGURE 1
THE DEMAND FOR LABOUR**



The labour demand curve is negative sloped, since employers will demand *fewer* workers at a *higher wage* rates and more workers at lower wages.

When the wage rate for workers in a particular sector increase (as indicated on the graph), it will lead to a decrease in job opportunities. The *degree* of retrenchment depends on the elasticity of the labour demand. The Hicks-Marshall law are applicable, where the elasticity of demand will be high/wage elastic (See Figure1) under the following condition:

- When the price elasticity of demand for the product being produced is high;
- When other factors of production can be easily substituted for the category of labour;
- When the supply of other factors of production is highly elastic; and
- When the cost of employing the category of labour is a large share of the total labour cost.

GATT and the Demand for Labour

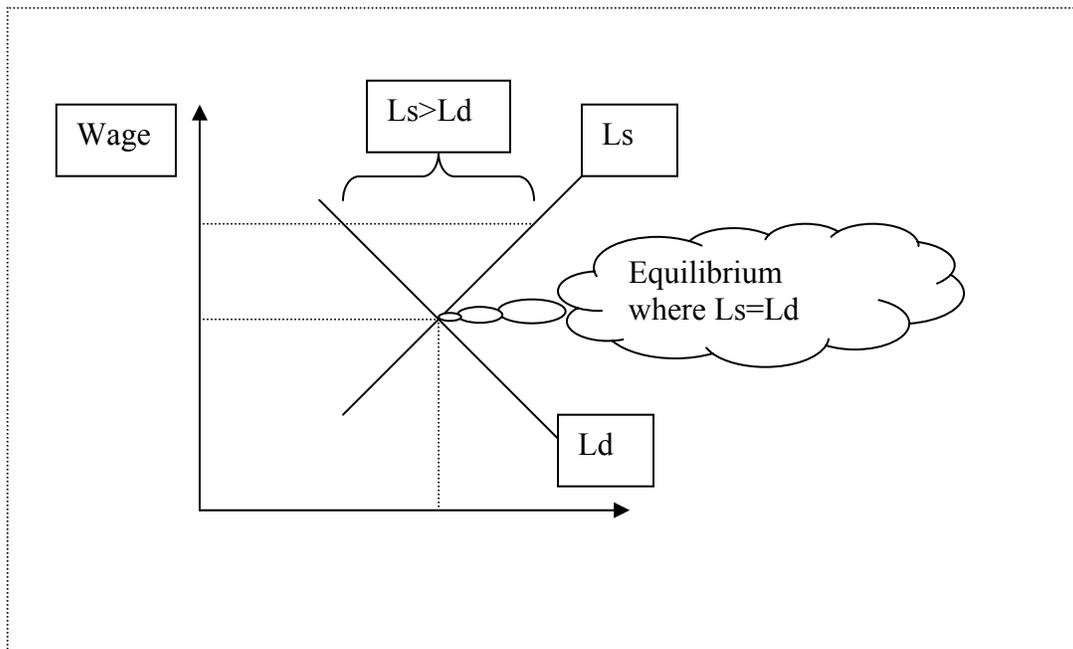
The General Agreement on Tariffs and Trade (GATT) main objective is to expand world trade. There for the field for the flow of goods and services between countries is becoming more level. The implication of this is that South-Africa product market became more *open and free* market principles applied.

Contrasting to the mentioned fact is the role that trade unions play in our labour market. The trade union COSATU is very dominant in South Africa and ruling wages demands in the labour market. If higher wage demands are not accompanied with higher productivity, it normally leads to a decrease in job opportunities (figure 1), especially in the case of an elastic demand curve.

Jobless Growth and Unemployment

During the last past year South Africa experience jobless growth. The implication of this is that unemployment (and specifically structural unemployment) still exists during upswings. Structural unemployment arises from the nature, location and pattern of employment opportunities. A major portion of structural employment is due to intrinsic mismatches between workers skills requirements of available jobs. The type of products that are selected for production, the kind of inputs used and especially the way in which they are combined in production determine what *kind* of, and how much, labour can be employed.

FIGURE 2
LABOUR SUPPLY AND DEMAND



Unemployment can be seen by the excess supply ($L_s > L_d$) of labour (See Figure2). Although South Africa experience high levels of unemployment, we still experience shortages of labour in certain sectors, especially where high level of skills are required. Medical doctors from Cuba and elsewhere are “imported” to solve the problem. The question is whether South-Africa can not supply the right kind of workers via various learning methods.

TRENDS IN DISTANCE AND E-LEARNING

In recent years many Tertiary Institutes have been developing interactive courses designed specifically for the Internet. The large numbers of digital multimedia technologies that are available create opportunities to design learning materials which support learning.

There are several advantages of using Internet education rather than contact education. These include:

- Internet education compels lecturers to question old assumptions about teaching and learning.
- Institutions that implement Internet education often save money, resources and time with no loss of effectiveness.

On the other hand, the web may fail to enhance distance education if study materials are poorly designed or outdated. Other problems include keeping up with Internet developments (which demand time and effort) and unproductive hours spent searching the web. Some lecturers may be unfamiliar with the necessary computer hardware and software and may thus struggle to get started. This situation can be tackled by using a team approach. Relevant learning theories, such as *constructivism* and *discovery learning*, need to be considered as method to add value in the education process of the right kind of labour.

Reasons for e-learning

What would be the reasons why institutions and individuals would be interested in the development of open/distance-learning over the past two decades? The suggestion here is that employers have been increasingly interested in the flexible use of their labour force. Open/distance-learning is another example of the way that employers expect their employees to acquire skills on a flexible basis. Furthermore, these skills will be *value added* to their specific job description. Employers would also be more likely to finance further studies of employees if it is relevant to the workplace.

According to Monk (2001), the reasons that are usually given to explain this trend have concentrated on "pull" factors (such as the development of technology); but one could also consider the existence of "push" factors such as the fact that firms now face increased competition from global competitors. It is against this background that employers wish to gain some added value from the *right kind* of employees and flexible-learning methods are seen as a cost-effective strategy to help them to gain such an advantage.

Individual students/employees (and their trade unions) also responded favourably to the development of distance and e-learning to enable them to equip themselves with the acquired skills for the job, and possible promotions.

Transforming Tertiary Institutions for Mass Higher Education Through Distance and e-learning Approaches

The recent global occurrences are in one way or another affecting many individuals, institutions and even governmental structures, particularly in the developing countries of the world. Those who are hard hit include the Universities on the continent of Africa, where their hitherto status quo as "ivory towers" is being challenged by private competitors while this situation has been aggravated by the fast dwindling financial support from their varying governments.

In addition, the process of democratization of education has inevitably led to the explosive demands by the citizens of the different African countries for open admission into the tertiary institutions as full time students. However the universities have no absorptive capacity to meet the demands due to some perennial factors.

Against this background we can analyse the current spate of "transformation process" which is going on in most of the Southern African Universities. This can be done using the telescopic view to assess the rationale, with a view to synthesizing the positive dividends which may accrue from the adoption of distance and e-learning approaches in order to achieve greater accessibility and the massification of educational products.

This is especially pertinent during this era of technology driven educational innovation, so as to make universities' programmes not only accessible but also relevant to the needs and aspirations of the teeming African population.

However it is vital that the needs of the students must be balanced against the needs of the labour market.

Challenges for Distance and e-learning

As Higher Education institutions are gearing themselves for integrating Information Communications and Technology (ICT) in their instruction, a number of challenges come to light. The challenges are particularly prominent when the institution operates in a predominantly developing country, like South Africa.

Academics question the rationale of making use of sophisticated technology when clients stand to be "disadvantaged" by the technology. Issues of access or the so-called information technology divide precipitate in profuse debates among academics and management of higher education institutions.

A further complication in the debate arises when the delivery of instruction is through the "distance mode". Large distance education institutions are engrossed in self-reflection to determine the parameters on which to base ICT instruction principles.

One of the problems experienced by potential learners is accessibility to education facilities like e-learning, especially in rural areas and for people with time constraints.

A case study done by Mashile and Pretorius is presented of endeavours to forge ahead with distance and e-learning given the constraints of the digital divide. The results of this case study indicate that digital divide considerations can undermine the provision of enhanced pedagogies in distance education programmes and thus contribute to non-development of individuals from low socio-economic backgrounds.

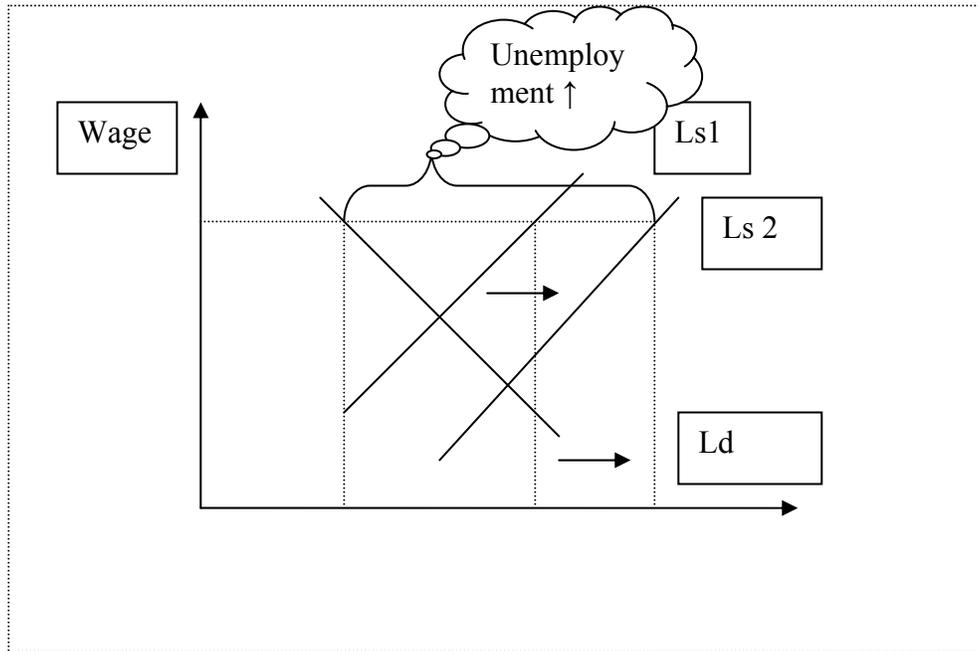
RESTRUCTURING OF EDUCATION LEVELS

Structural unemployment arises because of excess supply of the *wrong kind* of worker. Higher Education institutes must be accountable for the way of they address the skill mismatch. Research done by the Central University of Technology in 2003 on their graduates reveals that one out of every four did not get a job in the formal sector the year after completing studies.

For many years tertiary institution in South Africa got subsidies for their intake. If training is done in sectors where there are an abundance of workers but no a sufficient demand for, it worsen the unemployment problem (See Figure 3), and add to the pool of *skilled unemployment*.

Fortunately the Department of Education realize the wastage in investment, also human investment, occurring and force Higher Education Institutes to become accountable for the quality and kind of education provided to their students. Focus is now placed on the throughput (instead of intake) of qualified graduates to meet labour demands.

**FIGURE 3
INCREASE IN LABOUR SUPPLY**



ABET and OBET

Adult Basic Education and Training (ABET) programmes are dwindling in numbers (Vivian 2002:15). The success of ABET programmes or their failure to bridge the divide between education and training will determine how ABET is valued by industry.

Emerging trends in the assessment of learners supported by the Outcomes-based Education and Training (OBET) approach in response to the challenge to equip learners for professional vocational employment must be explored. The results of the studied done at the CUT (Friedrich-Nel et al) indicated that the use of performance assessment methods should receive more attention. Abandoning the traditional paradigm and adopting the principles and ideas of assessment with a new approach with success will require time, energy, effort and patience from educators, faculty and learners.

E-learning programs must be restructured to target the adults by means of the outcome approach to equip them with the *right skills* to be successful in the labour market. In this way they can become life long learners.

NVQ and the Dual System

In 1991 the National Vocational Qualification (NVQ), consisting of four levels was introduced in South Africa. It was started in 1983, in the UK by the Business and Technician Education Council (BTEC), to develop a national system of vocational training whereby training is done in a trade/occupation.

Wolhuther (2003:145) examine the potential of the envisaged dual system of vocational education and training in South Africa from a comparative perspective, namely, the German prototype and the many attempts to transplant this to other countries. The dual system in

Germany is outlined and assessed, followed by an evaluation of attempts to export it to other countries. According to this study the population dynamics, economy, the mobile employment market and low prestige accorded to vocational education do not bode well for a dual system in South Africa. On the other hand, building the qualifications attained in the dual system into the National Qualifications Framework, and empowering would-be learners from designated groups by means of the Equal Employment Act, could create a dual system that could be exemplary for other developing countries, like South Africa.

MANAGERIAL IMPLICATION

*“If the rate of change on the outside
exceeds
the rate of change on the inside,
the end is near.”*

*—Jack Welch
Former Chairman and CEO
General Electric Corporation*

Although distance-learning and e-learning are not a panacea for all educational problems, it holds great promise for driving change in education and tackling the unemployment problem in South Africa. The transformation of SA Higher Education involves far more than restructuring the institutional landscape in terms of its "size and shape", or changing the demographics of students and staff at individual institutions. Within the South African context (as elsewhere), curricular change according to OBET is strongly influenced by political and economic reform, causing resentment among academics that favour gradual change informed by "internal" or discipline-based considerations.

Distance-learning can relieve the situation, where both private and public providers of higher education (residential and distance) can co-exist in South Africa. Private Higher Distance-learning (PHDL) contributes in lowering present levels of unemployment by providing *specific skills*, as many prospective students stay in rural areas and townships.

Therefore, it is proposed that e-learning and distance education should be incorporated in education programmes should the need arise, in part to address the digital divide and in part to enhance life long learning in addressing the specific demand of labour, according to the demand of products for a country.

By bringing education opportunities to masses and creating an environment of shared responsibility between government institutions and private initiatives, a greater part of the population can be service. It this way distance and e-learning might help to solve structural unemployment.

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