

## CONFIGURATION OF OPEN AND DISTANCE LEARNING IN NEW ENVIRONMENTS

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### ABSTRACT

*Configuration of Open and Distance Learning (ODL) in New Environments* is a position paper aimed at sensitizing stakeholders of the ODL system of delivery as a qualitative alternative of providing education, at all levels, and mainly at higher education level. The paper begins with clarification of key terms, namely, ‘configuration’ and ‘new environments’. Practitioners and stakeholders of open and distance learning need to conceptualise that higher education institutions in new environments would be different from those well-established ones. This foregrounding knowledge helps them develop distance education aspects of management, curriculum development, support services, and information communication technologies, from an informed position. The brief history of ODL and related concepts are explicated in the process. Importantly, emerging theories of ODL are discussed, bearing in mind that this mode of delivering the benefits of education is not as well established as conventional education. The significance of the paper is that it promotes better understanding of the often misunderstood mission of ODL as an alternative of conventional education systems.

### INTRODUCTION

*Configuration of Open and Distance Learning (ODL) in New Environments* is a position paper aimed at sensitizing stakeholders of the ODL system of delivery as a qualitative alternative of providing education, at all levels, and mainly at higher education level. We are motivated by the September 2015 United Nations General Assembly’s landmark 2030 Agenda for Sustainable Development, and the primary motivator is the stand-alone goal on education (SDG4) that calls the international community to:

*“Ensure inclusive and equitable quality education and lifelong learning for all”.*

This is deliberated upon bearing in mind cooperation and collaboration as ODL is configured in higher education in our new environments. In advancing this theme, the critical matters of quality will be accentuated.

The following preliminaries of ODL will be shared in the first instance, namely: brief history, theoretical foundation, issues of technology, to name some. This is especially significant in those environments where ODL is still in its infancy, hence the term *new environments*. The titular term: *Configuration* has, thus been preferred for a convincing position as explained presently.

### ‘Configuration’ and ‘New Environments’

For purposes of the present paper, configuration refers to the arrangement of parts or elements of ODL in a particular form or combination within a given environment as a conscious effort to assure sustainability through cooperation and collaboration in Southern A-

frican higher education scenario. The Paper is more consciously focused on new environments.

Higher education institutions in new environments would be different from those well established ones such as The University of Phoenix, which was founded in Arizona in 1976, and had by the first decade of the 21st century become the largest private school in the world, with more than 400,000 enrolled students. The Indira Gandhi National Open University, headquartered in New Delhi, with an enrollment in excess of 1.5 million students, and the China Central Radio and TV University, headquartered in Beijing, has more than 500,000 students. (<http://www.britannica.com/topic/distance-learning>).

Since its launch in 1969, 1.89 million people worldwide have achieved their tertiary qualifications and learning goals by studying with the Open University (UK) (cf. <http://www.open.ac.uk/about/main/strategy/facts-and-figures>). Enrolment numbers, as well as date of establishment and statistics of employees all point to one fact, namely, that the said institutions are well-established. Therefore, the environments in which they operate can no longer be termed new.

Without exception, all countries within the sub-region, referred to as Southern Africa, have at different times of the late 20<sup>th</sup> century embraced ODL to capitalize on its perceived benefits. These countries then are the ones we refer to as 'New Environments'. They all share similar characteristics because they have developed, and continue to develop ODL institutions that are very new in their incarnation. Some of the reasons for establishing new ODL institutions, as expressed by Modesto and Tau (2009, p25) include addressing social and economic issues, which the conventional systems could not address all by themselves. In other words, there is recognition that conventional institutions may not be sustainable.

The UN Brundtland Commission defines sustainable development as development that meets the needs of the present without compromising the ability of future generations to meet their own needs (Brundtland Commission, 1987). However, as the Ontario's Distance Education and Training Network (2015, p. 9) proposes, higher education can reach beyond the Brundtland definition, which set the challenge of 'not compromising the ability of future generations to meet their own needs' to effectively improve the ability of future generations to meet their needs through delivering them a better world. We consider this to be a challenge for ODL as it is configured in new environments.

### **Brief History of ODL**

Distance Education provides "access to learning when the source of information and the learners are separated by time and distance, or both (Bozkurt, *et al.*, 1993). Distance education courses that require a physical on-site presence for any reason (excluding taking examinations) may be referred to as hybrid or blended (Tabor, 2007; Vaughan, 2010) courses of study. Massive open online courses (MOOCs), aimed at large-scale interactive participation and open access via the web or other network technologies, are recent developments in distance education. A number of other terms (distributed learning, e-learning, online learning, etc.) are used roughly synonymously with distance education. The first distance education course, in the modern sense, was provided by Sir Isaac Pitman in the 1840s, who taught a system of shorthand by mailing texts transcribed into shorthand on postcards and receiving transcriptions from his students in return for correction.

## University correspondence courses

The University of London was the first university to offer distance learning degrees, establishing its External Programme in 1858. The background to this innovation lay in the fact that the institution (later known as University College London) was non-denominational.

It was referred to as "People's University" by Charles Dickens because it provided access to higher education to students from less affluent backgrounds. The External Programme was chartered by Queen Victoria in 1858, making the University of London the first university to offer distance learning degrees to students.

Australia with its vast distances was especially active. The University of Queensland established its Department of Correspondence Studies in 1911 (White, 1982). In South Africa, the University of South Africa, formerly an examining and certification body, started to present distance education tuition in 1946.

## Open Universities

The Open University in the United Kingdom was founded by the then serving Labour Party government under the prime minister, Harold Wilson in 1969. It revolutionized the scope of the correspondence programme and helped to create a respectable learning alternative to the traditional form of education. The University has been at the forefront of developing new technologies to improve the distance learning service as well as undertaking research in other disciplines.

Athabasca University, Canada's Open University, was created in 1970 and followed a similar, though independently developed, pattern (Byrne, 1989). The Open University inspired the creation of Spain's National University of Distance Education (1972), and Germany's Fern Universität in Hagen (1974). There are now many similar institutions around the world, often with the name "Open University" (in English or in the local language). All "open universities" use distance education technologies as delivery methodologies though some require attendance at local study centres or at regional "summer schools". Some open universities have grown to become 'mega-universities' (Daniel, 1998), a term coined to denote institutions with more than 100,000 students.

## Brief Theoretical Background of ODL

Educationists and educators alike have been concerned with the qualitative nature of ODL, compared to what the world is used to, namely, that of conventional education. The attempt to explore this issue is closely linked with the philosophy of ODL. According to Holmberg (2005), scholarly theories imply a systematic ordering of ideas about the phenomena of this field of enquiry. In that respect a study of philosophical foundations helps us achieve three important goals, namely:

- an understanding of the field;
- the capacity to explain issues within the field; and
- an ability to predict outcomes of intentions and activities.

Different emerging theories explain DE in different ways. Keegan (1986) proposes an initial classification for some of the DE theories as follows:

### ***Theory of independence and autonomy***

Wedermeyer (1977), former professor of education at the University of Wisconsin, Madison, developed the theory of *independent study*. He popularized the expressions: *independent study*, *open learning*, and *distance education*. Central to the three notions is the concept of learner autonomy, that is, the learners study independently in their own environment that is free from the restrictions of classrooms.

Wedermeyer also introduced the notion of *continuing education* as one of the purposes of independent study. His argument is that factors like geographical remoteness, poverty, age, or any psychological conditions prohibitive of institutionalized education should not in any way prevent an aspiring learner from achieving his/her educational goals.

### ***Theory of industrialization of teaching***

The theory was proposed by Otto Peters (1973), the first vice chancellor of Fern University (in the former West Germany). Peters explains his theory by outlining some industrial characteristics of distance education. These include:

- *Division of labour*. He observes that the production of teaching materials for DE is an industrial process that requires a range of experts to accomplish.
- *Mass production of teaching materials*. This is meant for the greater numbers that characterize distance learning.
- *Systematization of work procedures*. There are identifiable parallels between the input and outcomes of industrialization and those of distance education, such as: planning; formalisation of procedures; standardization of products; systematization of the overall process; and centralised decisions before decentralisation.

### ***Theory of interaction and communication***

Michael Moore (1981), who introduced this theory, identifies two defining characteristics of autonomy, namely, *dialogue* and *individualization*. Dialogue is broadly interpreted as an expression of academic interaction aimed at promoting meaningful learning. It may take place in face-to-face situations, telephone, correspondence, or through computer-assisted instruction. Individualisation, on the other hand refers to the manner in which study material is structured. A programme is individualized when the curricular components, namely, objectives, methods, materials, and evaluation are determined with the learner profile in mind.

### **Distance Learning and Technology**

Early students of distance education consisted largely of students located in rural or remote areas that did not have geographical access to educational institutions. Another major population of distance learners in the United States was the members of the military, scattered in different parts of the world, but requiring access to education. This led to the rise of information technology to mediate transactional distance.

Early distance education courses employed *First* and *Second Generation* communication technologies.

*First generation (1850s to 1960s)* was predominantly one technology and consisted of print, radio, and television. As new media emerged such as radio and television, these new

technologies were integrated into distance education delivery methods.

*Second-generation (1960-1985)* distance learning courses utilized multiple technologies without computers. The media used to deliver distance education within the second generation included audiocassettes, television, videocassettes, fax, and print.

*Third generation (1985-1995)* courses used multiple technologies including computers and computer networking.

*Fourth generation technologies*, the current generation, combines previous media but also incorporates high-bandwidth computer technologies including:

- desktop videoconferencing
- two-way interactive real-time audio and video
- web-based media, etc. Each new generation of distance learning technologies increases opportunities for student-to-student and faculty-to-student contact and collaboration (Sherron and Boettcher, 1997).

### **Distance Education Today**

The "digital revolution" is having a major impact on distance education today. Traditional universities and new dot-com companies are jumping on the distance education bandwagon, competing to develop distance education programmes that take advantage of new and improved methods of distance education delivery. The National Center for Education Statistics (NCES) reported the following statistics on Distance Education for the 1997-98 academic year (NCES, 1999):

- The number of distance education degree programmes in the US increased by 72% from the 1994-1995 survey
- About 1/3 of the nation's 2 and 4 year institutions of higher education offered distance education courses

Arthur Levine defined three basic types of colleges and universities that are emerging today (Levine, 2000):

**Brick Universities** - traditional residential institutions

**Click Universities** - new, usually commercial institutions, also known as "virtual universities"

**Brick and Click Universities** - a combination of traditional and virtual universities. Virtual University for Small States of the Commonwealth (VUSSC) is an example of a virtual/click university.

International Data Corp. predicted that the U.S. e-learning market would grow to more than \$14.7 billion by 2004. Much of the revenue comes from corporations paying to train their employees as companies save time and expense by eliminating travel.

Distance education is a "hot" topic in many educational publications and journals today. According to Hurst (2001) (<http://er.educause.edu/~media/files/article-downloads/eqm0138.pdf>), distance education is shifting from a peripheral activity on college campuses, to the center of many higher education institutions. Based on its long history and current trends, distance education should continue to be an important and viable educational option for many students.

### **Research Trends in Distance Education**

Research is an essential element for any academic discipline, and this applies to Open and Distance Learning. Conventional systems of education are perceived to be superior to distance education. This is mainly because scholars have, over the years, established through research, a range of theories and principles about such systems. However, DE is yet to fully attain this legitimacy. Notwithstanding

the view that it is an academic area that is fast gaining momentum, a gap still exists in the literature as well as in practice regarding its status as a discipline, also because it is under-researched. Research is an aspect of quality assurance of educational practice.

Research in DE ought to be systematic and whatever the approach used, it should also culminate in the development of a cohesive theory. In the words of Keegan (1990:5), “a theoretical basis would replace the ad-hoc way of responding to crisis situations which normally characterise this field of education”. Mishra (1998) specifies that systematic research in DE started in the 1950s, and the first theoretical work was published in 1959 in East Germany “with the title *Write, teach and learn*” (Keegan, 1990:51). The establishment of the Open University (UK) in 1969 was a major milestone especially because of its concern for research. Today, well-known journals are in place, including *The American Journal of Distance Education* (USA), *Distance Education* (Australia), *The Journal of Distance Education* (Canada), and *Open Learning* (United Kingdom). *International Journal of Open and Distance Learning* (Southern Africa). This state of affairs demonstrates how research has either generated theories about distance education, or has utilized such theories to feedback into distance education praxis (cf. Jeffries, 2009).

Sherry (cited in Berge and Mrozowski 2004:2-4) has come up with some areas of research priority in ODL, and these include: Design issues, Redefining roles of key participants in ODL, Strategies to increase interactivity and active learning, Learner support, Operational issues, Policy and management issues, Equity and accessibility, Cost/benefit trade-offs and Technology selection and adoption.

### **Quality Assurance in open and distance learning**

To recapitulate, the foregoing discussion made some observations about distance education in established environments, versus provision of the same in what we termed new environments. Characteristically, the more established open universities have a longer history of operations, have high enrolments, are technologically advanced, as well as being well-staffed. ODL institutions in new environments are new, with a short history, battle with limited resources – both physical and human -, and are technologically disadvantaged. Notwithstanding that, new institutions continue to emerge in developing countries. They need to configure their praxis in order to deliver quality products and services. As observed earlier, configuration refers to arrangement of parts or elements of ODL in a particular form or combination within a given environment. Given that the environments are new and significantly different from those of established universities, there is need to configure with insight from how established institutions do it, while at the same time taking into account the objective environment, relative to quality.

Literature about quality is now abundant, but literature on quality regarding ODL is not yet as ample. Put simply, *quality* refers to a product or service that is fit for purpose. A quality system consistently meets customer requirements with enhanced satisfaction through effective application of sound systems and activities. *Quality assurance*, on the other hand, refers to the conscious steps taken by stakeholders in the distance education system to ensure adherence to quality (cf. Mhlanga, 2011). To the extent that the foregoing discussion also dwelt on ‘certain ways of doing things’ for the growth of DE as a discipline, it shows how established providers have been, and continue to be conscious of quality matters. For example, it has been noted that theories have been developed, and new ones continue to be developed; different technology types continue to be developed; and research, in the field, is gathering pace. It is argued that all these are quality issues to be configured in new

environments.

In a book-long treatise by Koul and Kanwar (2006), insightful chapters have been contributed by as many as 18 scholars. Of particular import to the theme of configuration in new environments, the chapter by Tau and Thutoetsile is significant. Their purport is that when an individual institution configures or re-configures, it ought to take into account, "...definition of terms like quality assurance, corrective action, preventive action, audit trail, non-conformities and quality control..." (Tau and Thutoetsile as cited in Koul and Kanwar, 2006, p.24)

### Why Quality Assurance of Distance Education?

Providing access to education via the distance mode has often been stigmatized, when compared to provision via the conventional mode. This is especially the case at higher education level, where qualifications obtained through distance have been questioned, in some quarters. Hope, Prasad, and Barker (2006) have observed that even in developed countries, where DE has a prolonged history, distance education has been viewed "...very much as an inferior option..." This is strongly the perception many developing countries where new distance education institutions are mired in a whole host of challenges. This perception is based on the belief that the essence of teaching is the irreplaceable quality of face-to-face interaction between the teacher and the learner. Thus, the stigma makes it imperative to configure and re-purpose quality as an imperative. The ODL providers should, therefore, set out to dispel the stigma by building into the systems rigorous quality assurance measures in all aspects of operation. If by sustainability we include to consciously take calculated measures to prepare a better future world for future generations, we need to go beyond rhetoric. We need to leverage specific quality assurance characteristics. The following areas are accentuated for attention.

- i. Strengthening and expanding the use of online, open and flexible education*  
This entails the increase of quality, rate and speed of adoption of blended and online learning by key stakeholders in universities – lecturers and professors. The understanding of opportunities that technology-enhanced learning provides in supporting learners is often not fully appreciated. Essentially, it promotes more students learning more often, anywhere and any time. While it avails more opportunities of learning, it also encourages peer networks.
- ii. Ensuring collaboration and co-operation*  
Cognisant of the so-called knowledge explosion and knowledge management, the rapidity in useful knowledge has become exponential. Based on that understanding, configuration of ODL in new environments should ensure that only pertinent knowledge is assimilated from like-minded institutions. Thus, sustainable development requires sustainable levels of collaboration and co-operation among communities, regions, and nations. *Inter alia*, this involves peer-to-peer expert learning and teaching networks and building effective communities of interest and practice. This eventuates from collaborative programme and course development aimed at meeting set goals.
- iii. Policy*  
In the quest to attain excellence in management of ODL systems, the issue of policy and strategic planning is critical. Practitioners are under obligation to learn some notions about this. The ideal situation is to have a national policy that informs individual institutional policies. The long-term goals of the nation and the

institution will be stimulated by the Policy. The question is: What would be the benefit of a policy regarding configuration? Having a policy in place has the potential of: providing guidelines for higher education capacity building through ODL; rendering guidance in the development of programmes that respond to diverse emerging needs of different types of learners; enabling cost effective utilisation and sharing of educational resources; encouraging continuous professional development; and catering for the needs of the industry and society.

iii. *Programmes*

The interests of ODL stakeholders converge on the quality of programmes offered, and this happens to be one of the most critical configuration factors in New ODL environments. There should be demand driven courses and programmes at all levels of higher education. Such programmes should provide opportunities for learners to gain relevant and recognized competencies and credits.

iv. *Quality Assurance Policies*

Apart from the ODL policy at both national and institutional level, as proposed above, any given institution should have a quality assurance policy, says Mhlanga (2011, p. 184). He has argued that Quality enhancement in an institution is premised on sound quality assurance policy, at institutional, at faculty, at departmental, as well as at national (systemic) level. There seems to be more talk about quality than its practice in our institutions. The policies would be in areas of:

- *Examination processes*

There is need to assure credibility of examination processes in higher education. This is critical in ODL settings where teaching and learning are decentralized, and distance is an issue.

- *Quality of teaching and quality of staff*

In the attempt to configure ODL in new environments, it seems one of the major challenges is having in place a committed and qualified cadre of teachers and experts with the relevant ODL qualification. It is commonly known that full-time staff often have been trained in the conventional education system, and that is the best they know, hence the best they can offer. Many of them have severe shortcomings, including limited appreciation of principles of ODL.

v. *Research and Publication*

The configuration initiative should take into account the pursuit of research in the nascent field of ODL (at least nascent in new environments). It is through research that ODL can be legitimized, and it is through research that practitioners demonstrate their merit.

vi. *Sustainability and Open Education Resources (OER) in ODL*

Discussion of ODL and higher education would remain incomplete without a brief discussion of open education resources (OER). These resources enhance higher education in a number of ways because they are readily accessible. OER are materials used to support education that may be freely accessed, reused, modified, and shared. The demand for higher education and secondary education is now too high, and it is becoming increasingly difficult to supply adequate study materials.

- OER are available at little or no cost that can be used for teaching, learning, or research. They account for accessibility, equity, and inclusion.
- OER typically refers to electronic resources, including those in multimedia formats, and such materials are generally released under a Creative Commons or similar license that supports open or nearly open use of the content. To that extent they enhance co-operation and collaboration without travelling to specific institutions.
- The term OER generally refers only to digital resources and, as such, tends to focus

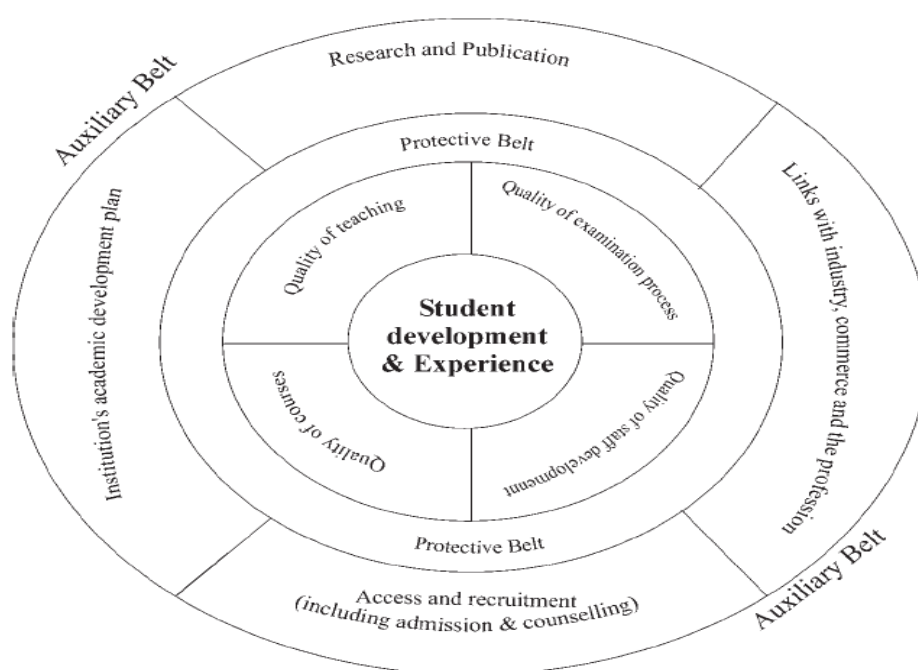


on usage in online or hybrid learning environments, though electronic content can certainly be used in face- to-face environments as well.

The implications for using OER as a sustainability quality indicator are multifarious. Future ODL provision is bound to be more sustainable largely because access to education will be increased. Secondly, study materials will be available at little or no cost. Thirdly, due to technology mediation, students will not have to travel long distances to universities and libraries since they can access study materials at the click of a button.

### Institutional Conceptualisation of Quality

Is there a way of perceiving quality, a way that can be shared by institutions in a more objective manner? Figure 1 below summarises what collaborating institutions could share towards more effective configuration in new environments.



**Figure 1 Barnett's Quality Framework**

Source: Barnett (1992) (cited in Mishra, 2006)

According to Barnett, the core activities that impact directly on learners in any didactic situation are: the quality of the programmes and courses learners go through, the quality of teaching support provided, the quality of teachers that mediate the learning process, and the quality of assessment systems.

No institution can achieve quality service if there is laxity in any one of these core ingredients of educational provision. Barnett further argues that around these four areas, there is a belt of support factors – some kind of enhancers. These enhancing factors include: an institution's academic development plan, research and development, linkages with strategic external partners like industry and professional bodies, and access and recruitment policies and practices.

We are talking configuration, collaboration and co-operation. The foregoing aspects speak proficiently on some kind of framework that could unify intentions, thus assure quality and the sharing of commonalities while pursuing the diverse.

### Statistical Indicators

The growing need for distance education is born out of felt need. In Oceania, almost two thirds of children of secondary school age are out of school. Abrioux, (2009:4) notes that in Sub-Saharan Africa, only one child in four participated in secondary schooling in 2006, leaving some 78 million of the school-age children out of school. In the SADC countries alone, this figure was reported to have been 8.7 million by 2003 (SADC 2006). Limited access at secondary school level is coupled with worryingly high levels of inefficiency of the systems. In SSA, of those who enter lower secondary, less than one third of them survive to upper secondary. Research shows that 35 of SSA countries have secondary Gross Enrolment Ratios (GERs) that are below 40%, and 15 below 20%. On average, the sub-Saharan African region has a secondary GER of 25%, compared to the Arab States with 60%, South and Western Asia with 52%, the Pacific with 65%, and Latin America and the Caribbean with 83% (Lewin, 2008). Clearly the glaring gap between SSA and other developing regions is cause for great concern as it has obvious implications for economic growth.

The statistics show that Southern Africa is behind other countries in terms of access, equity and inclusion in education, in general, but far behind in higher education. To promote co-operation and collaboration, and to ensure sustainability, the way forward is to take action that is neither ambivalent nor hesitant, guided by principle.

### RECOMMENDATIONS

The Paper advocates for more conscious and positive action and these recommendations are motivated:

- i. In line with lifelong learning, it is motivated that more flexible learning pathways need to be provided that enable people to move between different education levels, attracting also non-traditional learners, and to extend and broaden learning opportunities for young people.
- ii. To be successful on this path, quality, relevance, access, excellence, innovation, governance, and student-centredness ought to be adhered to more consciously, more proactively, and more systemically.
- iii. It takes conscious effort to move out of established mindsets about educational matters. It is high time practitioners develop a passion for novelty, innovativeness and entrepreneurship in managerialism. Specifically, there is need to embrace the spectacular progress in internet connectivity, mobile technologies and other digital media that may not have been familiar to many practitioners.
- iv. As the proposed regional work on quality matters is today being concretised, it is recommended that a common framework be forged out of our deliberations. A task team could come up with a draft for consideration before adoption.
- v. The Paper motivates inter-institutional quality assurance initiatives, where universities and colleges peer review one another.
- vi. Southern African countries are endowed with expertise across the board. It is recommended that a database of experts in various fields be compiled and shared. As and when need arises, there is prudence to draw experts sub-regionally before going to the USA or Europe for experts who may be in your neighbouring country,

or your backyard for that matter.

## CONCLUDING REFLECTIONS

The position paper is meant to stimulate reflection by looking objectively at the higher education environment we all share. In particular, it is urged that Barnett's model be used to configure or re-configure those ideas that we associate with quality assurance of the ODL products and services.

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