

JIPE
Journal of Issues and Practice in Education
Volume 4 No. 1, June 2012 ISSN 1821 5548



The Open University of Tanzania
Faculty of Education
P. O. Box 23409
Dar es Salaam
Tanzania

Email: jipe@out.ac.tz
Website: www.out.ac.tz

Editorial board

Dr. John A. Soka	The Editor; Ed. Admin, Plan and Policy Studies, Faculty of Education, The Open University of Tanzania
Prof. Ezra Maritim	Education Psychology, The Open University of Tanzania
Prof. Cornelia Muganda	Education Foundation, The Open University of Tanzania
Dr. Felix Mulengeki	Curriculum and Instructions, The Open University of Tanzania
Prof. Philemon A. K. Mushi	University of Dar es Salaam
Dr. Elinami Swai	Adult and Distance Education, The Open University of Tanzania
Prof. Emmanuel Babyegeya	Ed. Admin, Plan and Policy Studies, The Open University of Tanzania
Dr. Peter P. Lipembe	Linguistics, The Open University of Tanzania
Dr. Joviter K. Katabaro	DUCE

The Journal of Issues and Practice in Education (JIPE) is a property of the Open University of Tanzania and is operated by the Faculty of Education. The journal publishes research articles that add new knowledge in the field of education.

All correspondence should be addressed to:

The Chief Editor –JIPE
The Open University of Tanzania
P.O. Box 23409
Dar es Salaam, Tanzania

or

Email: jjipe@out.ac.tz

©The Open University of Tanzania, 2012
All rights reserved

Note: Opinions expressed in this journal are those of the authors and not necessarily those of the publisher - The Open University of Tanzania

Editorial

The Open University of Tanzania is celebrating its 20th anniversary this year. Being the first public Open University in Eastern Africa it has unveiled the best educational preference to many people in the region. The best learning process transcends the efficiency and ethics of a workforce. Through research and hard work, the university has been stirring social transformation evidently in the elevation of dependable approach in solving social problems consistently with the needs of the 21st century. Although the OUT doesn't brag for its learning output, its mission and vision attract many to share the reputation of belonging to such learning institution. The importance of this occasion inspires all university stakeholders to re-evaluate the contribution of the open and distance learning to the nation. The growth in delivering and expanding access to many students in Eastern Africa has been marked with increased knowledgeable workforce in the society.

Adult learning contributes in attainment of achievers of social reform and development. For 20 years, East African nations have absorbed graduates capable of transforming society dreams to reality. Learners' response in e-learning has proved that acquisition of knowledge and skills can be done in a non-tradition classroom setting. Deviating from conventional mode of delivery, learning becomes the source of interest and excitement to both students and scholars. The uniqueness of the Open University of Tanzania is realized in its attainable goals, and taking risks while embracing internal and external challenges. The opportunity to extend access and knowledge coincides with emphasis on andragogical learning methodologies. Mobilization of educational resources and guidance in the acquisition of new knowledge empower learners' confidence and sense of belonging to the institution. Inclusion of learners' background and experience has moderated the pace of learning whereby students are in control of what and when to take courses. An online learning method has encouraged students' inclination and motivation to engage in the 21st century technology. The OUT has adhered to students' quest for new knowledge through face to face sessions, virtual and physical libraries.

Open and Distance Learning (ODL) has liberated many individuals from stagnation to active participant through e-learning. Learners appreciate their recognition and inclusion of their experience in the learning process. ODL acts as the remedy of many shortfalls of traditional system of education. ODL is also mentioned by Mushi in her article to create free critical and relatively independent thinkers capable of interrogating, interpreting and innovating. East African governments have welcomed the OUT move to create challengers of actions, goals, social structures, traditions and thinking. Higher quality of learning and achievable goals override society status quo. Although liberation is refined by social transformation, the OUT is still challenging its staff and students to be more conversant with emerging technologies.

Human capital has been a pillar of OUT for realization of its goals. Outsourcing innovators and those proven to excel the norm, has made the institution firm to the

present. Mbwette and Ngirwa emphasized the importance of human resource managers to increase diversity of employees. Inclusion of individual's contributions enables the institution to achieve multiple goals. Differences offer higher chance of growth but is also mentioned by Mbwette and Ngirwa to elevate chances of creating specific challenges. The institution is current in its delivering superior knowledge through qualified individuals and its initiative in sponsoring its workforce in acquisition of new knowledge and skills. The stability of the institution to its core values is affirmed in its unitary vision of all stakeholders.

Dr. John Soka
The Editor

Integrating Psychological Resources in the Implementation of Online Instructional Design and Pedagogical Processes: The Case of Open University of Tanzania

Regina Monyemangene and Doreen Mushi
The Open University of Tanzania

Abstract: *Information and Communication Technology is an important aspect in a distance learning environment. In response to this awakening, the Open University of Tanzania (OUT) has aligned itself with principles of effective online pedagogy by ensuring institutional support and commitment as well as implementation of sound instructional design methodologies. Despite these interventions there is still a need to examine instructional design processes in order to address attitudinal challenges, inadequate educational resources and insufficient ICT infrastructure. The contributions of this paper could be incorporated as a solution for instructional design framework which addresses the needs of a distance education environment.*

Introduction

Information and Communication Technology is an important asset in a distance learning environment (Bakari, Tarimo, Yngstrom & Magnusson, 2005). In response to this awakening, the Open University of Tanzania (OUT) has sought to keep abreast with emerging educational technologies in order to enhance the teaching and learning experience. In 2007, the University adopted e-learning media for the purpose of enhancing teaching and learning activities. The transition started with an establishment and customisation of the learning management system (LMS) called A-tutor. Due to some complexities, the system was replaced by Moodle that was considered easy to adapt and integrate with other University information systems. In the long run, the Open University of Tanzania aligned itself with principles of effective online pedagogy by ensuring institutional support, commitment and well as implementation of sound instructional design methodologies. However, despite these interventions, observations have been made that highlight impediments to the successful route of implementing online pedagogy and instructional design at OUT. These hurdles stem from issues of lack of awareness, low motivation levels, limited skills and negative attitudes that surface during the operational environment. Most instructors are still not yet knowledgeable and exposed to the advantages of getting involved with the electronic approach to instruction. This is reflected among the students as well as they also do not appreciate existing educational technologies or the learning management system in terms of the associated resources and opportunities made available to them.

It seems that there is still a need for a revised approach to the implementation of online pedagogy that accommodates attitudinal challenges, motivational issues and inadequate skills. This paper proposes that in order to ensure effective and efficient implementation of online instructional and pedagogical principles, a new element needs to be considered or added to the currently utilized instructional design and pedagogical framework. The proposed element is termed as 'Psychological Support', which is inclusive of aspects such as behavioural or attitudinal change, motivation, skills in ICT

etc. This paper aims at highlighting and sharing experiences of the instructional design process transpiring within a distance and Higher Education Institution (HEI) in a developing country. Furthermore, it recommends an additional element to the existing instructional design framework used to implement online learning in HEIs.

Conceptual Framework/Literature Review

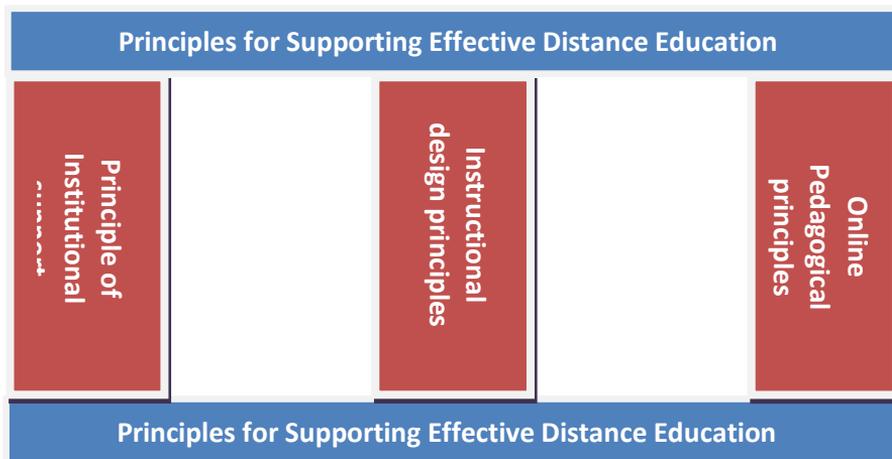
This paper focuses on three main areas of academic discourse which include: distance education, instructional design and online pedagogy. The first area of concentration is *distance education* (DE). Yacci (2000) simply defines DE as a teaching and learning process, which is characterised by a separation between learners and facilitators in terms of distance as well as or time. Distance education has evolved through five specific generations (Taylor, 2001), each characterised by a distinct phase that was applied to enhance teaching and learning experiences. The first generation of distance education (DE) made use of the "correspondence" model which was based on print technology; the second generation adopted the "multi-media" model which was based on print, audio and video technologies. What followed in the third generation was the "tele-learning" model which utilized telecommunication technologies to create opportunities for synchronous communication. Subsequently, the fourth generation embraced the "flexible learning" model which capitalized on online delivery through the use of Internet. The emerging stage that DE has or will shortly evolve to, is the "intelligent flexible learning" phase which according to contemporary researchers (Taylor, 2001), makes use of automated response systems that do not require human intervention. Each of these models has left its print in DE environment.

The principle of instructional design is another key focus area in the paper and it refers to reliable and consistent systematic design procedures that are used to develop education and training programs (Gustafson & Branch, 2002). The commonly accepted model which embraces the principles of instructional design is ADDIE. This model comprises of reiterative processes of **A**nalysing, **D**esigning, **D**eveloping, **I**mplementing and **E**valuation as the core elements necessary to attain effective teaching and learning experiences. In light of the growing relationship between distance education and Information Communication Technology, some researchers (Zimnas, Kleftouris & Valkanos, 2009) have adopted the instructional design principles encapsulated within the ADDIE model and have incorporated a web-based learning element to form what is referred to as a simple *Instructional Design Tool for E-learning* (IDEL). In essence, IDEL is a model that was developed in order to facilitate the development and implementation of online courses in accordance with the ADDIE model principles.

The final component of academic discourse explored in this paper is the aspect online pedagogy. This term refers to strong theoretical foundations that ensure educational excellence in online education (Herie, 2008). According to researchers like Scheers, Terry, Doolittle and Hicks (2004) online pedagogy –especially in a distance learning environment- can be secured through the implementation of three principles, namely: institutional support, instructional design and online pedagogy principles. The researchers assert that effective online pedagogy can be attained by ensuring

institutional support in terms of commitment, motivation and availability of infrastructure as well as support services. The instructional design principles are recommended for effective online pedagogy because they provide guidelines on instructional goals, objectives, context and media selection as well as assessment and evaluation processes. The online pedagogical support principles on the other hand ensure that the basic educational process of interaction, knowledge constructions, inquiry and cultivation of student independence are carried through in an online environment. A graphical representation of Scheer et al. (2004) online pedagogy framework could therefore be portrayed as in Figure 1:

Figure 1
Principles for supporting effective distance online education



Source: Scheer et al. (2004)

Online pedagogy framework

A close analysis of the online instructional design and pedagogical principles, in operation at OUT, reveals that the institution is closely aligned with Scheer et al.’s (2004) online pedagogy framework which is anchored on three main pillars, namely: institutional support, instructional design and online pedagogical principles.

Institutional support

The University has been successful in ensuring institutional support. There is an established institute of educational technology which oversees the development and progress of Information Technology (IT). An e-learning strategy document has been developed for the purpose of providing concrete guidelines for the implementation of E-learning at the University. The top management has also shown commitment and support by organizing and facilitating workshops, seminars and training for academic staff and students. In 2011, at least three workshops were conducted and at least forty members of the academic staff acquired knowledge and skills around issues of online instructional design and pedagogy. As a result, there is increased awareness, knowledge

and skill on the use of E-learning as a supplementary instructional tool. Top management also strives to support the unit by providing the needed infrastructure for supporting e-learning activities. The institution has established 30 regional centres in the country and at least 14 of these nodes have computer labs that enable online activities. Currently, plans are underway to develop four computer laboratories at some of the remaining centres that have no computer labs.

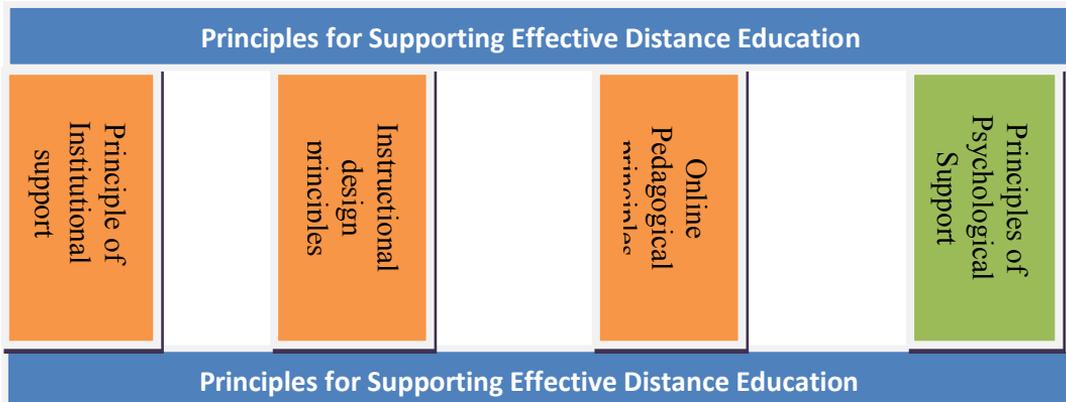
Challenges in implementing online instructional and pedagogical processes

Some of the main issues that the institution is trying to address are low awareness levels and negative attitudes that academic staff and students have towards online instructional design processes. These negative attitudes are reflected through low interest levels and lack of motivation towards instructional design initiatives that are organised by the institution. Additionally, system generated reports reflect that there is a limited number of courses on the systems, many of which are either inactive or incomplete. Another challenge that the institution is facing is a lack of available study material to support online instructional design and development.

Revised framework

In spite of the apparent implementation of the recommended framework (Scheer et al., 2004) at OUT, it is evident that effective and efficient implementation of online instructional and pedagogical principles require more than acquiring institutional support and engaging online instructional as well as pedagogical principles in the teaching and learning process. It is proposed in this paper that an additional element should be considered or added to the current framework in order to facilitate successful online instructional and pedagogical processes. Parallel to the principles of institutional, instructional and pedagogical support, there is a need to address issues of a psychological nature which include issues of interest, motivation, awareness and skills. This arm of support is termed as a “psychological support” principle. It is strongly suggested through this paper that ‘psychological support’ should be explicitly embedded within the instructional design frameworks in order to ensure effective implementation of the online instructional design and pedagogical processes as reflected in Figure 2.

Figure 2
Revised framework for supporting Effective Distance Education



Researchers such as Davis, Bagozzi and Warshaw (1989) who theorise about technology acceptance, have also confirmed that psychological issues such as attitude are core influential factors in the adoption of technologies. Similar sentiments are echoed by Rhema and Miliszewska (2010) through the assertion that a positive attitude towards ICTs is necessary in order to achieve effective implementation of ICTs in the realm of teaching and learning.

The revised framework and approach for supporting effective distance education has already been adopted at OUT with positive results. E-learning awareness seminars have been scheduled for all faculty members and one-on-one consultation sessions are being conducted. These are among some of the preliminary strategies that have been embraced to ensure that the institution achieves positive mindsets amongst its academic staff and students.

Conclusion

Higher learning institutions offering open and distance learning have been embracing ICTs, as a tool towards delivery of quality education. The link between technology and pedagogical context has been established for the purpose of ensuring effectiveness in delivering learning outcomes. The current framework has been anchored on instructional support, design and pedagogy principles. Psychological support as an element of the revised framework is aimed at raising awareness levels of academic staff and students on online instructional design processes. The positive mindsets will therefore contribute to attaining maximum engagement in online learning activities.

References

- Bakari, J. K., Tarimo, C.N., Yngstrom, L., & Magnusson, C. (2005). *State of ICT security management in the Institutions of higher education in developing countries: Tanzania case study*. The 5th IEEE (ICALT 2005), Kaohsiung, Taiwan.
- Davis, F. D., Bagozzi, R. P. & Warshaw, P.W. (1989). User acceptance of computer technology: a comparison of two theoretical models. *Management Science*, 35(8), 982–1003.
- Gustafson, K. L. & Branch, R. M. (2002). *What is instructional design?* In R.A. Reiser and J.V. Dempsey (Eds.), *Trends and Issues in Instructional Design and Technology*. Upper Saddle River, NJ: Merrill Prentice-Hall.
- Herie, M. (2008). Theoretical perspectives in online pedagogy. *Journal of Technology in Human Services*, 23 (1-2), 29-52.
- Rhema, A. & Miliszewska, I. (2010). Towards e-learning in higher education in Libya. *Issues in Informing Science and Information Technology*. Retrieved on February 12, 2011 from <http://iisit.org/Vol8/IISITv8p061-076Rhema216.pdf>
- Scheer, S. B., Terry, K. P., Doolittle, P. E. & Hicks, D. (2004). Online pedagogy: Principles for supporting effective distance education. *Journal on Excellence in College Teaching*, 15(1 &2), 7-30.

- Taylor, J. (2001). *Fifth generation distance education. Keynote address presented at the 20th ICDE World Conference*, April, 2001, Düsseldorf, Germany.
- Yacci, M. (2000). *Interactivity demystified: A structural definition for distance education and intelligent*. Retrieved on August 19, 2011 from <http://www.it.rit.edu/~may/interactiv8.pdf>. Accessed.
- Zimnas, A., Kleftouris, D., & Valkanos, N. (2009) IDEL - A simple instructional design tool for E-Learning. *World Academy of Science, Engineering and Technology*, 37, 366-372.