# **Teacher Perceptions of Open Distance Learning in Samoa**

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#### Abstract

This paper examines in service teachers perceptions of the effectiveness of the Open Distance Learning (ODL) as an alternative mode for training and upgrading primary school teachers located in remote areas of Samoa. A survey questionnaire containing closed and open ended questions was distributed to 22 primary school teachers who were enrolled in a pilot ODL Science course as part of their bachelor program. Findings suggest that ODL in its blended mode seems to be an effective method of delivery to address the training needs of teachers residing in remote areas. Although there is an expectation for high instructional interaction in distance learning due to ICT explosion; in the context of the current study the blended mode is more feasible due to internet dilemma. Thus it can be suggested that for distance learning to operate in a more sophisticated manner there is a need for governments to improve their support in this respect.

#### Introduction

The changes in societal and educational needs in addition to ICT explosion in the last decade require a paradigm shift concerning educational service provision. This is due to the fact that many individuals who aspire to continue their pursuit of educational goals face many challenges in accessing education due to social, economical and geographical factors such as family commitment, financial costs as well as distance. In Samoa many individuals especially adults aspire to pursue further studies however are inhibited by geographical challenges since many of them reside in remote village locations far away from the National University of Samoa (NUS) which is located in the main town of Apia. Added to this predicament is also the fact that public transport is often not reliable. Given these and other disadvantages; the Faculty of Education of the National University of Samoa in early 2000 responded by introducing a distance learning mode of delivery to address the problem of out of reach teachers. This is an initial move on the part of the Faculty of Education NUS towards employing this new mode of service delivery.

## **NUS and Open Distance Learning**

Since the establishment of NUS in 1984 the most common mode of instruction employed has been very much conventional, with the lecturers and tutors meeting students face to face. Distance education was first introduced to NUS in early 2000 when the Faculty of Science delivered one of their mathematics courses via distance to reach students who resided in American Samoa<sup>1</sup> the Eastern Islands of Samoa which are United

<sup>&</sup>lt;sup>1</sup> The Samoa Islands were divided in 1899; Western Samoa to be administered by Germany and Eastern Samoa by the United States of America. Western Samoa has been independent since 1962 and Eastern Samoa remains a territory of the United States.

States Territory. In 2013 some vocational courses were also offered through the ODL mode for students who lived in remote areas. In 2016 the Faculty of Education (FOE) in response to the Ministry of Education's policy concerning teacher quality (Afamasaga, 2006) employed distance education to upgrade teachers who live further away from the university.

In Samoa many teachers have been teaching for years with only a basic certificate in teaching. Given the imperative for quality education as emphasized in national educational policies, the need to upgrade teachers cannot be overemphasized. In early 2000 teachers were encouraged to upgrade their skills from a diploma to the bachelor degree. The upgrading could occur only locally at the National University of Samoa (NUS) and the University of the South Pacific (USP). Most teachers opted for NUS however this created a challenge given that many teachers resided miles away. Hence, the NUS Faculty of Education in its attempt to address this concern utilised distance learning as a means to reach its remote students. But what is distance learning?

## The Distance Learning Phenomenon

Distance learning simply refers to learning that occurs at a distance. The beginning of distance learning as a delivery mode traces its origins to the mid-19th century Europe and the United States (Nasseh, 1997). During this era the only effective technology that was available to make educational opportunities accessible to individuals who were not able to have access to conventional schools was the postal system. This involves sending materials by post. The nature of this type of delivery mode involves a 'prepackaged text, audio, and or video courses taken by an isolated learner with limited interaction with an instructor or other students. People whose needs were addressed via such system were individuals with physical disabilities, women who could not enroll due to their gender (as education was open only to men), and those from remote regions where schools did not exist. <a href="https://www.cdlponline.org/index.cfm?fuseaction=whatis&pg=3">www.cdlponline.org/index.cfm?fuseaction=whatis&pg=3</a>

In the last decade, the definition of distance education and distance learning has been used inconsistently however it is worth noting that when one talks about distance education the type of instruction that transpires will occur at a distance. This is reflected in Wahlstrom, Williams & Shea, (2003) definition where they see distance learning as a type of instruction in which the students and instructor are separated by physical distance. In a similar vein Moore, Dickson-Deane and Calven (2011) refer to it as the process of making learning accessible to those who are 'geographically distant.' Technological advances are influential in the changing modes and sophistication in which distance learning occurs as reflected in its evolving definition. Moore (1990) notes that 'as computers became involved in the delivery of education, a proposed definition identified the delivery of instructional materials, using both print and electronic media'. Simson et al (2009) cited in Osei-Owusu & Awunyo-Victor (2012) defined distance education as "an institutionally approved method of teaching a course using one of more institutionally approved and supported analog or digital communications technologies, which provide synchronize or asynchronise means to deliver and receive text and audio visual course materials and assignments and promote interaction between instructor and student, who are separated by location and/or time of attendance" (p. 222). Furthermore distance learning moved to another plateau as indicated by the various names such as e-learning, online learning (Moore, Dickson-Deane and Calyen (2011), and MOOC. These forms and terminologies imply the advanced manner in which the distance learning phenomenon continues to operate. Thus there is an expectation that interaction within the distance learning mode should be more effective given continual advances in technology. It can be argued however that this is only an assumption since in countries where technology and internet is a problem; distance learning in its more sophisticated mode is often not viable. Accordingly it can be argued that distance learning offered in its blended mode seems more ideal in these contexts like Samoa.

The manner in which distance education currently operates within the NUS context is through the blended format the same model used to deliver the science course to the participants of the current study. This involves printed course materials that are delivered to teachers in addition to face to face interaction with the tutor, for a period of one week (see Table 1).

Table 1: Model of ODL as used by FOE

Course duration	Block course/Face to face lectures	Printed material	Tutorial
1 Semester (14 weeks)	- 1 week interactive lectures - 1 week individual consultations	Self study (12 weeks)	On campus with students coming in and on location with tutors going out.

The benefits of distance learning lie in its viability to provide instructional programs for students who are separated by time and/or physical location from an instructor. Belanger and Jordan, (2004) added that regardless of lifestyle or location, distance learners have the opportunity to pursue life long learning at the end of tertiary education. Furthermore, distance learning embraces equity by serving learners who are deemed marginalized; their access is enabled by ODL. These benefits are noted notwithstanding the question that continues to haunt researchers over the years concerning the notion of effectiveness (Schmidt and Faulkner, 1989) and efficiency (Ojo, Ogidan & Olakulehin, 2005) of ODL mode in addressing the needs of those individuals who are separated from instruction by distance.

## **Efficiency and Effectiveness**

The efficiency of an education system implies that most output is produced through utilization of few resources including instructor's time, and abilities in addition to pedagogical practices (Hanyshek, 1986., Levin, 1976, 1983., Pogrow, 1983 and Rossmiller & Geske, 1976). Effectiveness on the other hand is concerned with how these few resources are used effectively so it will have a positive impact on achievement (Husen & Postlethawaite, 1994). The importance of utilising minimal and specific resources to achieve objectives cannot be overstated. The proponents of ODL in arguing for the effectiveness and efficiency of ODL highlight the flexibility and hybridity of this mode in that the students can participate in a conventional and distance learning class concurrently. Implied in here is the notion of distance learning supplementing face to face classroom instruction. Lawrence (2007) in relation to effectiveness of distance education notes that this mode of delivery provides a cost effective method of delivering higher education in that institutions will only require fewer instructors to educate a high number of students. Efficiency of distance education is reflected by its potential to support many individuals per dollar spent. Distance mode therefore addresses the challenge of cost, access and equity.

## Purpose and significance of the Study

Since NUS's involvement in the ODL no study has been undertaken to examine participants' views concerning the efficiency and effectiveness of this mode of delivery, to address the needs of individuals who live in remote areas. The current study therefore examines in service teachers' perceptions of ODL as an alternative mode for training and upgrading primary school teachers who reside in remote parts of Samoa. Findings of this study will be significant in various ways. First to inform our practices as teacher educators at the Faculty of Education (FOE) at NUS, concerning alternative approaches to address the training needs of teachers who are out of reach. Secondly, to assist in informing policies at our Ministry of Education. The latter is constantly seeking cost efficient and cost effective ways to improve the quality of Samoan teachers which include those from remote areas. Finally, this information may also contribute to the literature debate regarding the effectiveness and efficiency of ODL as an alternative to conventional education especially in developing countries where access is hindered by social and economic factors. The participants in this study are not representative of all open distance learners in Samoa. The intention of the study is not to generate findings (Merriman, 1988) but rather to provide a unique insight and interpretation of a phenomenon in one particular case.

#### Method

#### **Participants**

The sample was drawn from 22 primary school teachers who were enrolled in a Science course as part of their bachelor of education program at the Faculty of Education (FOE) within NUS. This was part of their upgrade.

There were twenty females and two males, ages ranging from 40 to 50 years of age. The twenty two teachers were purposively selected given their involvement in this FOE ODL course.

#### The instrument

A survey questionnaire was developed by the researchers to gather information for the study. The survey was divided into three sections and included both closed and open ended questions. The first section focused on the delivery mode with 10 closed and 1 open ended question. The second section focused on the pedagogical content knowledge with 9 closed and 1 open ended question. The third sections focused on the contact and block courses and consisted of 4 open ended questions.

#### Data collection

The data was personally administered and collected by the assistant researcher who is a staff member at FOE and also the tutor for this Science course.

#### Data analysis

The data was analyzed using a qualitative analysis approach which involves constant comparison to extract patterns and emerging themes as noted by Miles & Huberman (1994).

# **Findings**

The study aims to find out participants views on the value of ODL as a delivery method. Given that the study focused on ODL in its blended mode it is therefore necessary to consider all aspects of ODL to get a deeper and an overall understanding of this phenomenon from the participants' perspective. This section presents findings that relate to three aspects of the ODL- the deliver, the pedagogical as well as the face to face aspect. With regard to the delivery feature, the results indicated very positive feelings towards the blended mode of delivery in that the majority see it as a very helpful way to learn. The question which asks participants about their feelings about the distance mode of delivery indicates that twenty one participants (95.4%) are excited about using this mode to learn. All participants (100%) feel that this mode of delivery improves their science knowledge. In terms of task completion approximately 8 (36%) seem to have completed their assignments all the time while another 36 % were only able to complete most of the time. Again it is a very positive view towards ODL. Concerning completion of assignments tasks within time frame eight (36.8%) managed to complete assignment tasks all the time while seven (31.8%) were able to complete most of the time. Again responses to this question indicate that participants were able to complete their assessment tasks within the given time frame while learning through distance. In terms of help available, responses indicated that high support was offered and made available for participants since none of the participants indicated that there was no support. Ten (45.4%) participants stated that all the time there was help available while eight (36.3%) indicated that help was available most time. The question concerning manner of contact with tutor indicated that next to phone usage (63.6%), email (81.8%) seem to be the most popular means participants communicate with tutor. Only one participant indicated use of sms as a way to contact the tutor. According to fourteen (63.3%) participants these means of communication serve their need. Participants when rating the delivery element of ODL where 1 is less and 5 best, gave a high rating where seventeen 77.2% gave it a rating of 5 while 3 (13.6%) sits at a rating of 0-2.

The open ended question at the end of this section fully supports what participants noted in the survey questionnaire. After analysis three categories were identified that are related to aspects of the ODL that seem to have contributed to the success of this course. These are; face to face interaction, instructor qualities as well as resource materials.

With respect to the pedagogical content knowledge of the course as was delivered via distance mode this aspect of the blended distance learning model also indicates an overall positive response from participants. For example participants found activities, laboratory tasks, assignments and notes in the study material very helpful Under this item, sixteen participants (72.2%) commended the value of these while five participants (22.7%) found these helpful which still a very positive view. There was also a very optimistic view about level of language used in the course material since nineteen (86.3%) participants stated it helped them understand scientific concepts. It must also be noted that the lecturer responsible for the development of the course content material deliberately chose and related as much of this science course to local surroundings enabling the teachers to understand more readily and apply more relevantly the science concepts to their local context. Such

a sense of familiarity also assisted in great measure with the general feeling of connectedness, awareness and gradual progress (Faguele Suaali'i, pers comm, May, 2016). The item on different learning activities notes 90.8% of the participants being highly involved in learning tasks and activities. In terms of content relevance, nineteen (86.6%) indicated that the course content is very relevant to the primary science curriculum. More than half of the participants (72.7%) indicated that they have learned a lot of science from the activities, lab tasks assignment and notes. The majority of participants nineteen (86.6%) felt that the course content was very helpful for their teaching of science in primary schools. More than half of the participants (63.6%) felt that they have learned a lot of new teaching strategies from the course. When asked to rate this aspect of the ODL twenty (90.9%) participants rated excellent while one (4.5%) rated it as good which overall still gives a good indication that this component was well organized.

Similar to the delivery mode section, the open ended question used at the end of this section fully supports the questionnaire closed questions. One of the common themes that emerged seems to relate to teaching approaches used. For example the mixture of face to face interaction in addition to course material was deemed important by participants. Further the importance of working with course material that is comprehensive with fun and relevant activities seems to have contributed to the success of the distance learning as it occurred in this context. Gaining more skills and knowledge became less arduous and more enjoyable.

Four open ended questions were asked of participants regarding the face to face aspect of the ODL delivery mode. Although this set of questions require extended responses however in the first three questions participants responded with a yes and no, which did not elicit much information. The fourth question however elicited some lengthy responses which were analyzed thematically. Themes that emerged anchored on teacher delivery methods in addition to well prepared activities. The value of a well prepared methodical instructor with a bag of resources is deemed to be very important motivating factors that contribute to success of ODL. Overall findings from this aspect indicate that the participants were well informed of the contact and block course ahead of time. Participants viewed the block course component as very helpful.

# **Discussion**

The aim of this study was to seek perceptions of teachers about effectiveness and efficiency of distance learning in reaching the out of reach in Samoa. Findings of the study revealed that distance learning using the blended form is possible in supporting individuals who are out of reach. Effectiveness of ODL cannot happen in a vacuum since there are factors that contribute to its success. According to participants face to face interaction is essential. For example presence of the instructor and the block course is important as reflected by this comment:

"this delivery mode is very helpful to me as I am a science teacher. It's good to visit and share with other teachers"

Another comment that indicates the value of face to face interaction in this blended mode:

"It (face to face delivery) is very clear and fun. I like it very much"

One can gather from these comments that it is the presence of the tutor himself that contributed to the success of this initiative. It can be argued that the ODL instructor needs to be effective for it seems to have contributed to the success and positive attitudes of these participants. Distance learning in its blended mode allows time for the instructor to meet from time to time with students in a face to face interaction after they have put in a lot of time to study and understand the content. Thus it appears that, this aspect of the delivery mode is found by participants as very effective. The face to face mode is necessary as it supports students in clarifying and confirming their understanding especially in relation to scientific and technical terms. Individuals require this type of face to face interaction as a support mechanism even if for a brief period of time. As noted in this course, there was one week block course where the instructor met with students thus this may be one of the factors that has contributed to the success of this course seeing there was a 100% pass rate for students who were enrolled in this science course who are also participants of the current study.

Student support is very crucial and can be argued as one of the important characteristics of ODL According to one participant this form of delivery works well for her since she is able to remain in her own village and family where she will be supported:

"... suitable for my situation as I stay in Savaii in my own family ... I achieve because of many support"

One can very well relate to this sentiment concerning the value of support. In the Samoan context, the notion of support in the form of 'tapua'i' is a very important concept as noted by Tufue-Dolgoy (2010) and Kruse Vaai (2011). In her study Tufue Dolgoy found that teachers who were involved in a change implementation perceived being supported as vital for success. The participants in the current study seem to be of the same view thus it is vital for administrators and instructors of ODL to consider this when they develop ODL courses. As also discussed by Kruse Vaai (83,84) the notion of 'tapua'iga' is a Samoan expression of solidarity through presence and other forms of moral support.

In the current study, participants seem more supportive of the blended mode where they have face to face interaction with the instructor. This is as opposed to the technology part of the course where they rely on an internet that is unreliable:

"it [delivery mode] was much appreciated but ...because internet had a bad reception sometime that is the problem"

One of the questions asked of the participants relates to manner of support needed for efficient and effective running of the ODL course. The majority of participants indicated that they needed reliable tutor support but poor internet connection was a major barrier in achieving this. Hence the importance of having good internet for effective ODL deliverance is essential. NUS online courses are in the pipeline to provide efficient services for out of reach students; however technology can be an inhibitor. For distance learning to be effective in its more sophisticated form, it is imperative to have good internet connection. The government of Samoa is in the process of building a Broadband Highway to address this challenge and to support other areas of government and administration.

# Conclusion

The result of the study indicates that distance education in its blended mode is an effective and efficient way to reach remote students in Samoa. Although ODL continues to change and develop over the years e-learning in Samoa is not as effective at this point in time although it is a good consideration for the future. Challenges are mainly due to internet related factors which can be very discouraging for e-learners. Thus it reinforces the finding that an effective and efficient way to carry out distance learning in Samoa is through blended mode. Given that there is an increase in number of individuals who cannot access the more traditional and conventional type of education, having sophisticated internet service supported by government could improve these. It is only when these are improved that NUS will be able to improve its ODL service to out of reach individuals.

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