How can open and distance e-learning be more relevant in agricultural extension system in the Philippines?

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Abstract

Efforts to utilise open and distance e-learning (ODE) in agricultural extension have taken off in recent years. Many researchers see its potentials in coming up with an alternative extension system. This paper critically evaluates the modes of execution of ODE in the context of agricultural extension system in the Philippines. Specifically, the paper tackles technology and social issues attached to ODE. Recommendations are likewise forwarded as an attempt to set the direction of ODE in agricultural extension system in the Philippines. This paper argues it is only in putting farmers at the heart of the process can ODE establish its relevance in realising an alternative or a supplementary platform in agricultural extension system in the Philippines.

Subtheme: Problems, Barriers, Reforms and Solutions

Keywords: agricultural extension, e-learning, e-readiness

Introduction

Open and distance education (ODE) applications are not very common in development projects outside the education domain. Whilst there are several attempts to employ it, the literature is still dominated by education-related concepts.

PhilRice has been pilot-testing ODE mechanisms in agriculture. As it is, there remain many issues that should be resolved lest it will be unsuccessful and irrelevant. In fact, some policymakers are already questioning the relevance of ODE in agriculture owing to the commonly encountered problems such as low enrolment and absenteeism.

This paper will discuss ODE in the agriculture sector in the Philippines through the initiatives of the Philippine Rice Research Institute (PhilRice). A number of pilot-testing have occurred, and hence, enough data have been gathered to come up with some plausible recommendations.

It will be argued in this paper that whilst at the moment benefits from ODE are yet to be felt; continued studies should be conducted to refine its execution. As it is, the problem is not much on how the project is being implemented, but more on infrastructure although massive developments have happened in recent years.

ODE at PhilRice

Videoconferencing

In 2008, PhilRice pilot-tested the *Online Campaign on Rice Production*. It was executed in four cybercommunities in Mindanao namely; Midsayap, North Cotabato; Dujali, Davao del Norte; Banay-banay, Davao Oriental; and Sto. Niño in Agusan del Sur (Manalo et al 2009). Videoconferencing was the major platform used where experts from Nueva Ecija communicated with the group of farmers in the cybercommunities.

Prior to the conduct of the videoconferencing, focus group discussions (FGD) were conducted in the project sites. A representative from the Development Communication Division of PhilRice travelled to the project sites for the said purpose. The FGDs focused on the rice farmers' concerns on rice farming. FGD results served as the basis for tapping experts for the videoconferencing and for the initial topics for discussion.

For the first session, the topic came from the result of the FGD. In the succeeding sessions, however, the facilitator asked the farmers the topic they wanted to discuss. Hence, the original plan to use videoconferencing as some sort of a class to tackle their major rice production problem became an online consultation on various topics on rice production. The farmers played significant role in designing the videoconferencing curriculum so to speak.

During each session, a site coordinator was in place to deal with the information and communications technology concerns such as setting up the computer, microphone and others. Hence, across sites, the only major problem encountered was the unstable signal, which resulted in several other negative repercussions. In Midsayap, for instance, during the

first session, the participants ended up shouting when they learned they could not be heard on the other line. The farmers hardly found the videoconferencing useful for them. Additionally, the event resulted in the cancellation of the succeeding sessions as no farmer wanted to turn up after the incident.

E-learning

Unlike the videoconferencing, e-learning is more structured and is module-based. In e-learning, the course coordinator sends invites using the PhilRice Text Centre and other means. Enrolees are given a password to access the e-learning site. Before they could start any module, they are asked to answer some pretest questions. Some of the modules are on nutrient and pest management and on starting up a rice-based farming system. An enrolee is given 40 days to finish a module, but s/he can very well finish a module in one day if s/he likes. Upon completion, a participant is given a Certificate of Completion.

Concerns related to the conduct of e-learning are: interface problems, server issues, low number of enrolees, and the quality of knowledge. Before, the interface of *PalayAralan*, the e-learning website, was a bit difficult to navigate, hence, the need to improve the interface to make it more attractive and user-friendly. Regarding the server issues, there was a time when the PhilRice system had unstable internet connectivity, which resulted in the difficulty in accessing files from *PalayAralan*. Meanwhile, inadequate promotion of the e-learning resulted in the low number of enrolees. There were likewise questions on the quality of knowledge gained by the participants. The fact that they could finish the course in one day raised concerns on the quality of learning especially that some technologies need to be tried out, and some concepts are too technical. Added to this was the only measure to gauge knowledge was the pre and post tests.

Reflections on the processes

Videoconferencing

There are plenty of push and pull factors that are worth reflecting on the videoconferencing activity. The push factors include: observance of the participatory approach and presence of site coordinators. The participatory approach was observed during the course of implementation. This was manifested in the conduct of FGDs prior to the start of the campaign, the flexibility in changing the topics to adjust to the pressing needs of the community, and the whole conduct of the videoconferencing. The participatory approach made all the difference in this project as it gave a sense of empowerment to the farmers. A good evidence was their enthusiasm in asking questions (Manalo et al 2009). This could be explained for the most part by the fact that they were the ones who identified the topics, which were the pressing concerns they had at that time. Ramirez and Quarry (2009) noted involving members of the community in the development process is one of the keys to success of any development initiative.

The presence of site coordinators likewise proved useful, as it relieved the participants, most of them in their 50s or older, from having to worry about ICT issues. The presence of site

coordinators helped in addressing ICT anxiety or the feeling of discomfort towards ICTs (Brosnan 2008). If not managed, ICT anxiety could negatively affect the learning of the participants. Additionally, the site coordinator created a favourable environment for learning as all the participants needed to do was to sit and speak. They did not have to worry about the stressful ICT-related tasks. Brosnan (2008) noted an environment that is not conducive for learning unknowingly reinforces computer (ICT) anxiety.

Perhaps the major pull factor in the videoconferencing was the unstable signal in some sites. It resulted in at least three other major problems: the expert in Nueva Ecija complained of the poor facility, farmers in Midsayap ended up shouting thinking that they could be heard better that way, and eventually, because of the incident, the farmers did not bother turning up for the succeeding sessions.

What happened in Midsayap raised at least two important points. First, it well resonates that infrastructure is the first phase towards an ICT society. If this phase is ignored, then there is no point in fantasizing for an ICT society. Second, it reinforces points related to having location-specific ICT interventions. This is a case when ICT should not be pursued owing to the mismatch with the social context.

E-learning

As it is, the only problems seen are the low number of enrolees and how it can best be promoted to potential students. There might be a need to optimise other options such as face to face sending of invites, sending printed letters of invitation instead of e-mails as most Filipinos would still prefer the printed ones as they are perceived to be more official and formal, and try to promote the "why" component of this platform. The e-learning team at PhilRice has probably exhausted many promotional strategies, particularly focusing on the what. Hence, there might be a need for project implementers to think things through and start promoting its why. At the end of the day, it boils down to what the intended participants can get out of it. Some questions that might be good to ask are:

- How is e-learning different from other modes of information delivery?
- Is there any urgent need that only it can address?
- Is there a need for audience segmentation at this stage?

Arguably, e-learning will best serve the interest of individuals who do not have internet connectivity issues, and wanted to make it big in farming. Having said that, there are at least two possible audiences where the e-learning team could direct its efforts on: the rich farmers who want to learn more, and to students.

The face of the farmers in the Philippines is changing. To say that rice farming is a poor man's enterprise will be inappropriate. In 2007, PhilRice documented rice farming is something that people from varied professions share in common. Hence, these people are in the best position to significantly contribute to national production. Most of them may not be directly involved in farming, but serve as major decision-makers in their rice farm. Hence,

there is wisdom in educating them so they are able to make informed decisions, and ODE is a good platform to make that possible.

Second are the students. In 2010, Manalo et al noted there is a need for infomediaries so farmers who do not know how to access computers can still stand to benefit from the Internet. Infomediaries are those who access computers for those who cannot access them. The students can very well serve as infomediaries for at least three reasons. First, the internet connectivity issue will be solved as the young individuals have plenty of computer access points either in school or in computer shops. Second, computer illiteracy will not be as big as an issue. Third, this opens avenues on how the youth can be involved in farming despite their rather busy schedule in school. The key is to keep them informed with the latest rice farming technology so they are equipped with knowledge that will put them in the right position to help their parents in decision-making.

Recommendations and conclusions

At present, meagre impact can be noted that would attest to the relevance of ODE in the context of Philippine agriculture. This is not to say, however, that this platform is irrelevant. In the first place, the chain of issues attached to ODE in agriculture emanate from the inadequacy of ICT infrastructure, and not from the concept itself. However, one should also not discount the fact that the access issue seems to get better in recent years. Increasingly it is way easier to access internet now than a decade ago. Internet access is available from restaurants to public utility buses. The key point is that ODE in agriculture is relevant, but as to when we can optimise it is the question. The following points might hasten the process (with the assumption that needed ICT infrastructure will be made available the soonest possible time):

- Try focusing on different segments of the population and see where ODE can best fit.
- Adjust curriculum as needed. At present, there are standard presentations that are being delivered to students. With audience segmentation comes the need to tailor fit information delivery to specific audiences.
- Explore traditional modes of sending invites, and combine them with the modern ones.
- Create a demand by focusing on the why of the platform. Involve the “students” as much as possible in the process. This has proved useful in the context of videoconferencing.
- It is high time for multi-stakeholder collaboration. It would do the project good if it would tap other agencies to help in different aspects. For instance, for the infomediary initiative, there might be some wisdom to partner with the Department of Education to mobilise student participation or the possible inclusion of ODE in agriculture as one of the modules in the school curriculum.

References

Brosnan, M. J. (1998). *Technophobia: the psychological impact of information technology*. London: Routledge.

Manalo IV, JA, Layaoen, MG and Parac, EA (2009). 'Reflections on online communication campaign on rice production: Prospects and inputs for expansion', paper presented to the Philippine Extension Network Symposium, Manila, 13-15 October.

Manalo, J.A. IV, Biag, H.H.M., Frediles, C.A., Abdullah, S.A., Ylar, G.I. & Grande, E.H.O. (2010, December). *Assessment of e-readiness of the five top rice-producing provinces of the Philippines.* Paper presented during the ICTD 2010 Conference, London, United Kingdom.

Ramirez, R. & Quarry, W. (2009). *Communication for another development: listening before telling*. New York: Zed Books.