

# Designing and Evaluating Collaborative Projects in Learning Communities: Innovative Practices and Strategies

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## Abstract

The present research critically reviews few existing e-learning practices in selected online programs. The reviews of the research done on e-learning programs in Asia emphasize on how to design an effective tool with a model that will help support sustainable education for collaborative learning projects.

Past research conducted by the research team on e-platforms, revealed findings that there is a wide scope for collaborative projects integrated through e-learning that can contribute to enhance practical skills and gaining knowledge. However, the sharing of knowledge is limited and skewed towards academic excellence. Low priority is given to social responsibility and nurturing of ethics based citizenship. The main reason is because e-learning in many programs has emulated traditional modes of teaching except that they are online.

There is much space for improvement on online learning and this is possible if current methods of e-learning platforms accommodate peer tutoring, pedagogical knowledge and collaborative teaching strategies leading to blended learning and practical skills. There is further evidence that academicians are ready to collaborate to share knowledge in platforms such as MOOC and Creative Commons.

This research review therefore concludes by suggesting a possible model that will help support blended learning for upcoming learning communities. The model supports assessments which are both individual and collectively based.

In order that learning communities are able to contribute to the betterment of societies, involvement of social services such as collaboration with health, education and non-profit organizations is necessary. The success of communities lies in sharing of knowledge and collaboration of various learning communities for sustainable e-learning to occur.

**Key words:** learning communities, collaborative learning, corporate social responsibility, sustainable e-learning design,

## 1. INTRODUCTION

A forum prepared for the search for SEAMEO young scientists (SYSS) was organized by the research team in Penang, Malaysia, to be broadcasted through web conferencing tools. Interviews with students during an initiative to connect internationally on e-platform resulted in some delay between the teacher and student communications. The delay initiated communications but was broadcasted through face book, webinar and skype. The lesson learnt was that blended learning using constructivist approaches integrated with digital tools will be the future trend (Ng, 2012). A recent research conducted on challenges and opportunities of e-platforms

to promote values based education stressed that the future trends will use more digital tools and learning mechanisms through complex networking systems (Ng, K.T, Parahakaran, S., Lei Mee, 2015). This is depicted in Fig.1.

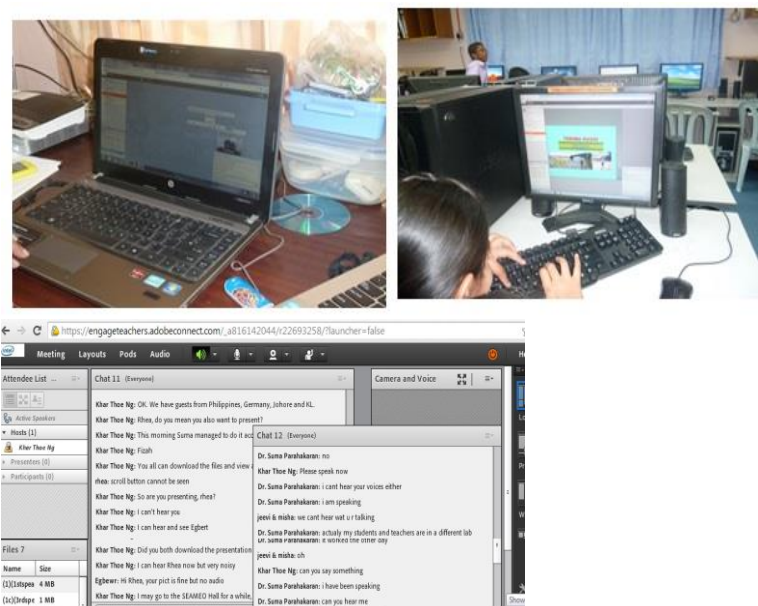


Figure.1. Webinar, Skype and Forums

Source: Printscreen of chat messages with National and International guests, webinar trial run session (Chat 11) (27/2/2014) and SSYS forum (Chat 12) (7/3/2014). Ng, K.T, Parahakaran, S., Lei Mee, (2014).

### A. Mode of Learning

The mode of communication for a project based approach can be adjusted as and when parties, for example, teacher- student, project coordinator and the dependent groups require. Learning for the future requires flexibility in communications between the supervisor and students, peer to peer learning and flexibility within industrial work and collaborations between software companies. In traditional classrooms, there are reports that show that lectures (eighty nine in the sample) were more positive towards learning methods and explanation (ninety five) for learning environments. The other learning methods (reading journals, books, and problem solving) were less popular (Malie & Akir, 2012). Blended learning seems to be the most effective learning mode where e-learning is concerned. Universities in China, Korea, Japan and Singapore use blended learning approaches for e-

learning (Kwongonn & Choikit, 2011). However, the researchers reported that there are various limitations to blended learning such as; lack of pedagogical content, instructional methods and delivery methods. The researchers also reflected in their reviews that in Singapore, the interest was more on show casing technology enhanced products rather than integrating knowledge based content in e-learning.

Moreover there are different academic platforms today such as MOOC and Creative Commons where a large body of information is disseminated by the Public and are accessible. Currently, the learning contents are designed to accommodate the cognitive domain and do not include the values, attitudes and perceptions of the people. This paper emphasizes the importance of integrating contents which include contexts which are ethics and values based and how the content can be taught using collaborative approaches so that students can learn how to be socially responsible. This is the point where innovative strategies can be implemented. These platforms that serve large communities of different fields can be strategized to collaborate with the corporate bodies.

For example, if students were to examine how to complete a project on disaster risk situations, the knowledge and skill can be obtained via e- learning tools and blended learning in a workplace. An actual office which works with disaster risk reduction may not volunteer to accommodate for such learning to take place. This gap divides social life situations and the actual academic and workplace.

#### B. Peer tutoring

Peer tutoring on an informal basis helps increase skills related to communications, leadership and social skills required for solving problems in academic education. A study conducted in the College of Engineering and Technology, New Era University, on *the effect of Reciprocal peer tutoring and non- reciprocal peer tutoring on the performance of students in college physics* resulted in findings that show that reciprocal peer tutoring help students learn better. The study consisted of sixty eight engineering students enrolled for physics. The students switched roles as tutee and tutor within the ongoing sessions while in the non-reciprocal group, one way peer tutoring was organized. Online peer tutoring was conducted by peer mentors and class monitors in both groups. In both programs it was found that eighty nine percent felt that there was positive impact on their learning as they received help and the RPT group felt that peer to mentor relationship needs to be enhanced and 35% thought that the writing component was difficult. The non RPT group responded to a lesser extent (Dioso-Henson, 2012).

The positive aspects in today's information system are a result of web tools which have made it easier for institutions to incorporate them in their learning systems. Learning does not involve only reading a lot of information. For example, if a student were to learn on air borne diseases, the body of knowledge is enormous in the web. To learn the skills of eradicating health issues, it will require practical visits to the local areas and learn how to

effectively manage the eradication. Educational Policies in a country can include such policies for the future development of the nation and at the same time help support huge corporates through internship programs. This helps corporate social responsibility hold a high place in work places and increase the level of networking with the community. These strategies encourage effective marketing processes and enhance advertising strategies without huge financial costs.

#### C. Missing Link: being, learning and doing

The increasing gap in wealth distribution and poverty issues has caused new ways to solve issues within the corporate systems. Benabout & Tirole (2009) asserted that there are three possible ways that corporate social responsibility could work. They include the need to incorporate a long term perspective, philanthropic contributions from stakeholders, and individuals asserting their share for altruistic needs for prosocial behaviours. Three important factors impact prosocial behaviors by investors, consumers and workers. They are intrinsic altruism, material incentives (laws and taxes) and social or self-esteem. The use of social media web tools and links with social issues through CSR can enhance learning and doing.

In Asian countries, there are examples of case studies of causes of social illness, inequality and underdeveloped communities. They are due to high rates of unemployment, corruption, and poor governance (Dewa & Lin, 2000; Njenga, 2002; WHO, 2002). As part of corporate social responsibility the response of companies to the social concerns in society can be improvised through collaborative projects with student interns. E learning helps bridge the gap through open educational resources (OER). Currently the number of NGO's have increased in Asian regions because of poor governance and the regions they serve are on a charity basis. A new way of looking at solving issues will be through linkages between corporates, industries and tertiary education.

Case studies conducted in India on social injustice revealed that poor governance had an impact on social and community development. Issues related to poor governance included; lack of textbooks for 25 million youth in Bangladesh, political interference of legislators in Bangladesh, urban services such as water and electricity in Ahmedabad, India, equity issues in Cambodia and gap between rural and urban poverty issues in Nepal (Santhiram, Suma, Vighnarajah, 2013).

The loss was great in terms of the lives of many people and including time and money. To prevent such happenings, it is important that corporate companies network with Health, Education, Urban services and Environmental services to work on their CSR programs.

Firstly, tertiary education could include community service as part of their programs so that students are ethically oriented. The sustainability of communities depend on how willing citizens are to empower their societies and in order that education prepares them for developing the nation, free information or knowledge management has become possible with Online Learning Resources (OER). These OER needs to be fine-tuned and

integrated with values and ethics component of issues currently happening in both local and international contexts. The integration will help community development and enhance social responsibility in citizens.

2. ASSESSMENT OF THE ETHICS AND VALUES INTEGRATED OER PROGRAMS

Evaluation using guidelines from Bloom’s taxonomy where appropriate, can help contribute a holistic approach to the OER component of e learning. An example is the challenges faced by MOOC when the Stanford’s Artificial Intelligence course was run. Some of the issues faced were high dropout rates, lack of a sustainable model and problems related to plagiarism (Siemens, 2013). The integration of the human emotion, values and attitudes are important elements for creating relevance in learners. The significance of integrating videos for this purpose is highlighted in the case study by Selson and Alison-Bowers (2009). Other e- learning programs currently conducted in Asia e University, (AeU), Wawasan Open University and Open University Malaysia are examples of Higher education Institutions where open learning has been successfully run in Malaysia. However, the programs have not linked for community development or training for social responsibility tasks. Incorporation of the affective domain will provide a holistic approach. Fig.2. illustrates the links as discussed.

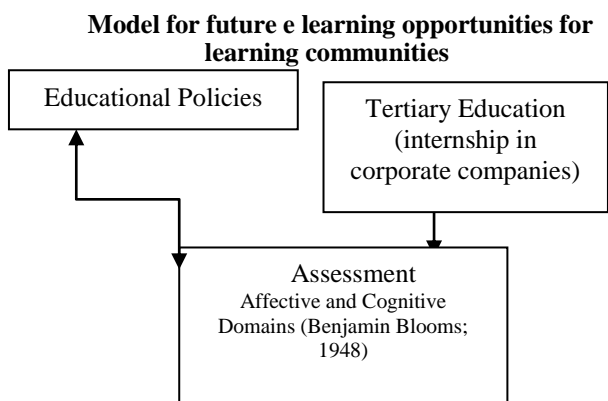


Figure.2. Policy, CSR and Learning Communities

A. Large systems and analyses of complex situations

The 2009 Corporate Social Responsibility Report stated that the Cisco Networking Academy, for example, depends on networking as core technology instead of separate networks. Ernest Friend, Director of Academic Systems, Florida Community College at Jacksonville vouched that networking academy students have an impact on how they learn. In India, e -learning is accessible to millions of students.

Currently tertiary institutions focus on student learning and does not support networking with the community. This issue can be eradicated if industries open to more internship. Students from tertiary educational Institutions face a problem because their learning is merely theoretical and are not related to knowledge of real issues in their local situations.

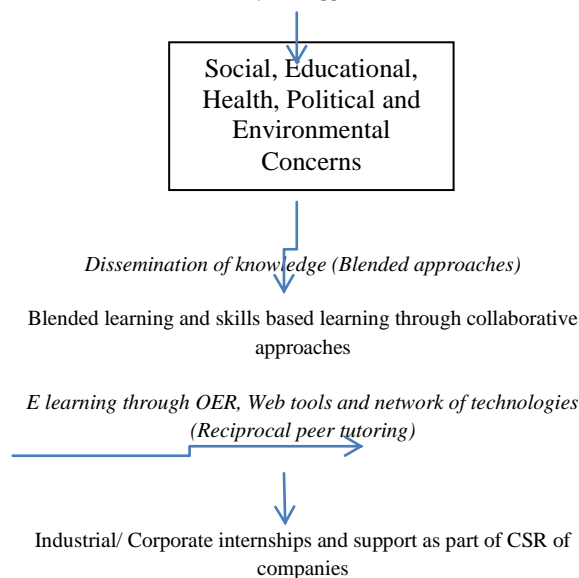
Additionally, corporate companies’ with CSR programs face a situation where they seek situations with social issues which need assistance and volunteerism for solving

critical issues. This is evident from reports by Porter and Kramer who stated that “the prevailing approaches in CSR are so disconnected from business as to obscure many of the greatest opportunities from companies to benefit society” (Porter & Kramer,p.2,2006).

Collaborating between academic and corporate bodies will profit in two ways. Firstly the combination of knowledge and skill based activities will enhance student learning. According to Benabout & Tirole (2009) the demands for individual and corporate social responsibility by societies have gained prominence.

B. Design for E learning communities and linkage to Industries

Educational Policy (integration of e learning in tertiary education as a wide system approach)



Flow chart illustrating the future trends

C. Evaluation in Education

Evaluation in education has incorporated a blended approach. These include formative and summative approaches. Peer evaluation, use of analytics, and supervision of ongoing work by various experts can lead to engaging and developing learning communities.

Activities related to climate change can be assessed. Using popular web tools such as Learning Activity Management Systems (LAMS) are now popular in Singapore and in Universities in Malaysia. It has raised teacher status to combine activities with actual learning. It has become compelling now to work together collaboratively and students and staff are required to produce results which are group oriented.

There are threats to team processes (Faidley et al, 2000) and threats to team functioning (Allen and White, 2001). In order that one evaluates such learning it requires collaborations between supervisory levels and peer to peer learning. Dr Maniam Kaliannan (Nottingham University, Business school) and Suseela Devi Chandran (University Technology, MARA) conducted a study on outcome based education and skills required in work places.

Employers in Malaysia seek from University graduates scientific problem solving skills, communication skills, decision making skills, well developed analytical skills, Teamwork skills, well-practiced leadership skills, good interpersonal skills. Malaysian's higher educational institutions in 2012 contained 942000 students of which there were 50000 students from abroad. Students at tertiary levels can improve on the above skills if they are provided chances to enter into their fields of interests as interns in companies.

#### D. Learning communities, Corporates and Long term corporate social responsibility

If companies were proactively involved having a genuine concern to solve issues, then they will mitigate any negative concerns they create in their own societies and secondly support their stakeholders with a long term plan (Porter & Kramer, 2006). According to these authors, the global reporting initiatives have become a standard for CSR reporting and have initiated 141 CSR issues (social and environmental). In such cases where social issues are to be tackled, Schaffert & Geser (2008) stressed that the future of the society as far as knowledge is concerned will require competencies and skills that aim at new educational practices which will depend on open educational resources. Fig. 3 illustrates the link between learning communities and corporates.

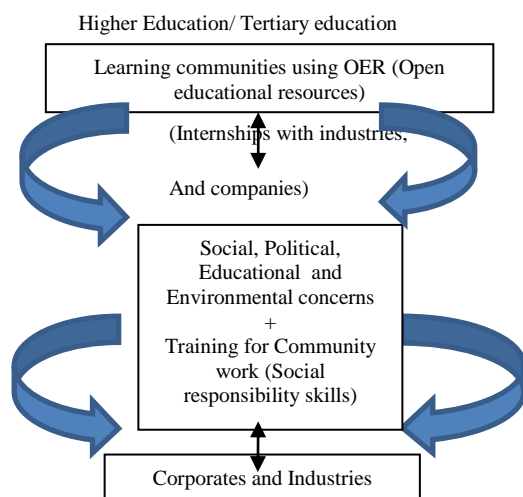


Figure 3. Learning Communities and Corporate Social Responsibility

Figure 3 illustrates the link between learning communities and

Currently OER have aimed at knowledge management but has not extended its connections to the corporates and industries. If educational and industrial policies bring these initiatives as part of their activities, both gain to benefit.

#### E. Community approach to e-learning

If educational policies are set for academics to network with workplaces and use a research based approach both parties stand to gain in the long run. The research based

approach and students' direct involvement with corporates will help them learn practical skills and knowledge required. Thus industries gain to benefit and at the same time able to support groups who are less fortunate. Currently, tertiary education is so disconnected from real life-long learning, that graduates who pass out do not possess the skills and the time to understand what issues continue to ruin or disrupt the development of their societies.

#### Summary

A critical analysis of e-learning studies shows that policy making for e-learning is not integrated with other systems or even at the tertiary level. Hence, if educational policies integrated e-learning, skill based approaches and networking with technological systems and at the same time render support to companies for their CSR programs, all parties gain to profit. These learning communities then do not become stagnant.

#### REFERENCES

- [1] Allen, D. E., and H. B. White, III. 2001. Undergraduate group facilitators to meet the challenges of multiple classroom groups. In Duch, B. J., S. E. Groh, and D. E. Allen, eds.. The Power of Problem-Based Learning, 79-94. Sterling, VA: Stylus.
- [2] Benabout, R., & Tirolez, J (2009). Individual and Corporate Social Responsibility. Princeton University .Economica (2010) 77, 1–19 doi:10.1111/j.1468-0335.2009.00843.x
- [3] Corporate Social Responsibility Report (2009). Retrieved from [http://www.cisco.com/web/about/ac227/csr2009/pdfs/CSR\\_09\\_Society.pdf](http://www.cisco.com/web/about/ac227/csr2009/pdfs/CSR_09_Society.pdf)
- [4] Dioso-Henson (2012). The effect of Reciprocal Peer Tutoring and non- reciprocal peer tutoring on the performance of students in college physics. Research in Education (87).34-49.Manchester University Press. <http://dx.doi.org/10.7227/RIE.87.1.3>
- [5] Faidley, J., J. Salisbury-Glennon, J. Glenn, and C. E. Hmelo. 2000. In Evensen, D. H. and C. E. Hmelo, eds. Problem-Based Learning: A Research Perspective on Learning Interactions, 109-135. Mahway, NJ: Erlbaum.
- [6] Kaliannan & Chandran (2012). Empowering students through outcome based education (OBE). Research in Education. 37. Manchester University Press. Research in Education. (87).50-83. <http://dx.doi.org/10.7227/RIE.87.1.3>
- [7] KwongOnn & ChoiKit (2011). Blended Learning: A Focus Study on Asia. IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 2, March 2011 ISSN (Online): 1694-0814 [www.IJCSI.org](http://www.IJCSI.org)
- [8] Malie, S. & Akir, O. (2012). Bridging gaps between learning and reaching through recognition of students' learning approaches: case study. Research in Education, 87, Manchester University Press. <http://dx.doi.org/10.7227/RIE87.1.6>
- [9] Ng, K. T. (2012). Going global in search for science and mathematics researchers (A report of the launching of on-line learning hub and workshop to promote ESD and EFA). Penang: RECSAM.
- [10] Ng, K.T, Parahakaran, S., Lei Mee, (2014). " Enhancing Sustainable Awareness Via SSYS Congress: Challenges and Opportunities of E-platforms to Promote Values-Based Education". International Journal of Educational Science and Research. IJESRAPR20159.
- [11] Porter, M & Kramer, M (2006).Strategy and Society, Harvard Business Review.
- [12] Santhiram, Suma, Vighnarajah (2013). Linking Social Justice and Innovation awareness through distance education for higher educational institutions: A reflective pedagogical and curricular framework for sustainable development. Wawasan University.
- [13] Siemens, G. (2012). Commonwealth of Learning., Open Educational Resources: Innovation, Research and Practice.

Massive Open Online Courses: Innovation in Education?  
Athabasca University.5-4.

- [14] Snelson, C & Elison-Bowers, P. (2009). "Using You Tube Videos to Engage the Affective Domain in E- Learning" Research, Reflections and Innovations in Integrating ICT in Education, Vol 3 Badajoz, Spain: Formatex, 1481-1485
- [15] Vygotsky, L. S. 1978. Mind in Society: The Development of Higher Psychological Processes. M. Cole, V. John-Steiner, S. Scribner, and E. Souberman, eds. Cambridge, MA: Harvard University Press.

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