Chapter 10
Facilitating and Evaluating the Development of Positive Interdependence in South African Distance Education:
A Social Network Analysis

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ABSTRACT

Cooperative base groups (CBGs) is a technique used in contact education to develop cooperative learning skills. However, it was assumed that the tools currently available can be used for the establishment of CBGs in distance education. For the purpose of this research, a post graduate class in distance education (N=77) was divided in 11 CBGs with 7 members each with the task to assist one another in the completion of assignments, to motivate one another to submit assignments, and to support one another on academic and personal level during the year. The results shows that CBGs provided an effective method to facilitate the establishment of reciprocal relationships and therefore the development of positive interdependence, and that social network analysis provided an effective method to evaluate the development of positive interdependence both on group and class level. Unfortunately, the technique was prematurely cancelled when the author left the university. A possible correlation between positive interdependence and academic achievement needs to be further investigated.

DOI: 10.4018/978-1-7998-5598-9.ch010

INTRODUCTION

The success rate of one of the post-graduate modules taught at the University of South Africa (Unisa), a mega institution for distance education in South Africa, was low. The purpose of this module - which was compulsory for the Tertiary Diploma in Adult Education - was to develop the knowledge, skills, and techniques necessary to apply multimedia and instructional techniques in higher education settings. Students enrolled for this module were lecturers[1] in higher education or intended to apply for positions in higher education. When the author was appointed in August 2014, almost half of the class already dropped out, and many of the students failed their assignments. At that stage, two of the four assignments were still to be submitted.

During assessment of the two outstanding assignments, it was found that many of the students did not understand the questions, yet they did not reach out for assistance. One of the students used the forum of myUnisa, the learning management system, to ask his peers for assistance, but nobody replied, not even after they were prompted via emails and SMSs. Two of the top students replied via emails that they do not participate as they perceived myUnisa as an assessment tool. Therefore, the author invited the students to use a group created for the class in Arend[2] to discuss issues experienced while completing the last assignment and preparing for the final examination. Only a few of the students used this opportunity, but they participated in the discussions.

At Unisa, there is no way to ensure that the emails and SMSs were delivered or read as myUnisa does not send read reports. Therefore, Arend was integrated in the curriculum of the 2015-class, instructing the students in the study manual to use this informal learning space to discuss assignments and ask questions. This informal learning environment, which can also be regarded as a second learning space, was regarded as important because it was assumed that as much as 30% of the 2015-class could experience difficulties due to the out-phasing of the final examination in favor of eportfolios. In 2014, 30% of the 2014 class still submitted handwritten assignments via the postal system, indicating a lack of technological skills necessary to design and develop eportfolios. The informal learning space could also be used to learn from technological-advanced students to design and develop eportfolios.

But the integration of Arend also provided an opportunity for experiential learning. From the author's own teacher experience years ago, it seemed insufficient to know about techniques that can be used to facilitate learning, without applying the techniques under the supervision of the lecturers. Therefore, the author argued that the students could have benefitted from an experiential learning opportunity by requiring of them to apply one of the techniques to facilitate learning under supervision. As the previous class did not participate in discussions, and cooperative learning techniques were integrated in the curriculum of this module, one of the learning tasks for the 2015 class required of them to apply a cooperative learning technique in a real-world setting.

Cooperative approaches to learning is based on the idea that students must work in small groups to accomplish mutual goals (Johnson & Johnson, 2013, 1994). The aim of cooperative approaches to learning is to facilitate the establishment of reciprocal, or mutual, relationships between students (Johnson, Johnson, & Smith, 2014). According to these authors, it is important that students expend effort in working together, as they tend to like one another, work harder to learn, and become more socially competent, develop a higher self-esteem, and this improve their psychological health. It has already been found that cooperative learning has a positive impact on efforts to achieve, development of positive interpersonal relationships, and psychological health (Johnson, Johnson, & Holubec, 2008). It has also been found that cooperative learning leads to greater retention, achievement of better grades, and greater use of higher