

P2: The Impact of Social Networks on Learning

- Supervisor:** Dr Majella Albion
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- Research Purpose:** This project looks at how strong social classroom networks impact on learning outcomes for first year Psychology students
- Research Description:** This project is based on a similar study conducted by Anglim, Canty, and Wearing (2008) at the University of Melbourne. While learning theorists such as Piaget and Vygotsky emphasise the importance of social interaction in children's learning, many adult learners adopt a more individualistic approach to learning, preferring to work and study alone than to participate in more active learning environments. Following the procedure of Anglim et al. this study will use concepts from social network theory to measure university students' classroom interaction, and then relate those measures of interaction to student learning outcomes.
- Participants:** All Toowoomba on campus students enrolled in PSY1010 in S1 2009 will be invited to participate in this study. The student will introduce the study in the first week of classes.
- Methodology:**
- (a) Questionnaires that will be used include the IPIP scale to measure the Big 5 personality domains; a brief measure of satisfaction with learning and social interaction; and social network questions. These scales come from Anglim et al (2008) study. Demographic data including age, gender, previous study, and ethnicity will be collected.
 - (b) As part of the data collection for the social network questions, photos of students who agree to participate in the study will be taken in the first week of the course. Learning outcomes will be assessed by using S1 results in the PSY1010 course.
 - (c) The student will be involved in setting up the questionnaire and collecting the initial data and also conducting the satisfaction survey and social network questionnaire at the end of the semester. End of semester results will be accessed by Dr Albion.
- Data Analysis:** Include in this section
- (a) The study will involve quantitative data analysis techniques including correlation and regression. These techniques will be familiar to the student. Some understanding of social network theory and data analytic techniques will need to be acquired, but this will be at a very basic level.
 - (b) The student will be expected to perform basic procedures such as data screening, checking psychometric properties of questionnaires, and matching data sets from the two separate collection events.
- Student friendliness:** As this project requires collection of data from on campus students it would be more suitable for on campus students or those who can

be available on campus at various times during S1, 2009.

I expect regular (at least fortnightly) contact with the student to monitor progress. This contact can be face to face, by phone, or by email.

Further reading:

Students should read the following paper: Anglim, J., Canty, J., & Wearing, A. (2008). *Social dynamics in a university class room: A social networks approach*. Proceedings of the 43rd Annual Conference of the Australian Psychological Society, Hobart, Australia.

Another useful text is Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge, UK: Cambridge.

Expected research outcomes: The final product of the research could be suitable for publication in a journal or as a conference presentation.

Ethics:

Ethical approval will be sought by supervisor

Resources:

Project able to be funded within \$150 departmental limit

Filename: F042D4D5.doc
Directory: C:\Documents and Settings\User\Local
Settings\Temporary Internet Files\Content.MSO
Template: C:\Documents and Settings\User\Application
Data\Microsoft\Templates\Normal.dotm
Title: Getting Inside Heads: Using Cognitive Mapping to
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