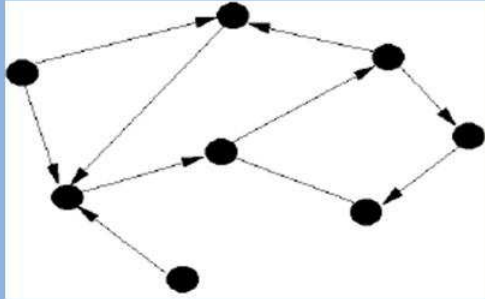


# Using network analysis in community development evaluation: Potential and Pitfalls

Australian Evaluation Society Conference 2012



Dr Gretchen Ennis  
Lecturer  
Social Work & Humanitarian Studies  
School of Health  
Charles Darwin University, Northern Territory

# Presentation Summary

1. The challenges of evaluating community development projects
2. Social network analysis (SNA)
3. A case study
  1. Key Learning's from the case study (potential and pitfalls)

# Community development

Lots of different professions involved

Lots of approaches that can be used

A cornerstone of community development work is creating and strengthening supportive networks

# Community Development Evaluation

## Some of the problems?

defining 'community' & 'community development'

Lack of published evaluations about community development projects

Often descriptive only

Data is gathered at the end (no base line data)

# Communities & Networks

Networks are often evoked in community development work, but perhaps not very strategically.

‘social fabric’ ‘networking’

We can think about communities as layers of networks

Networks are a key element of social capital literature which has had influence on community development work, but not really on community development research.

# What is Social Network Analysis?

**The methodical study of social networks**

**A social network is structure made up of actors (eg. people, groups, organisations) and the ties between them**

**A way of looking at the structure of entities (an organisation, a group)**

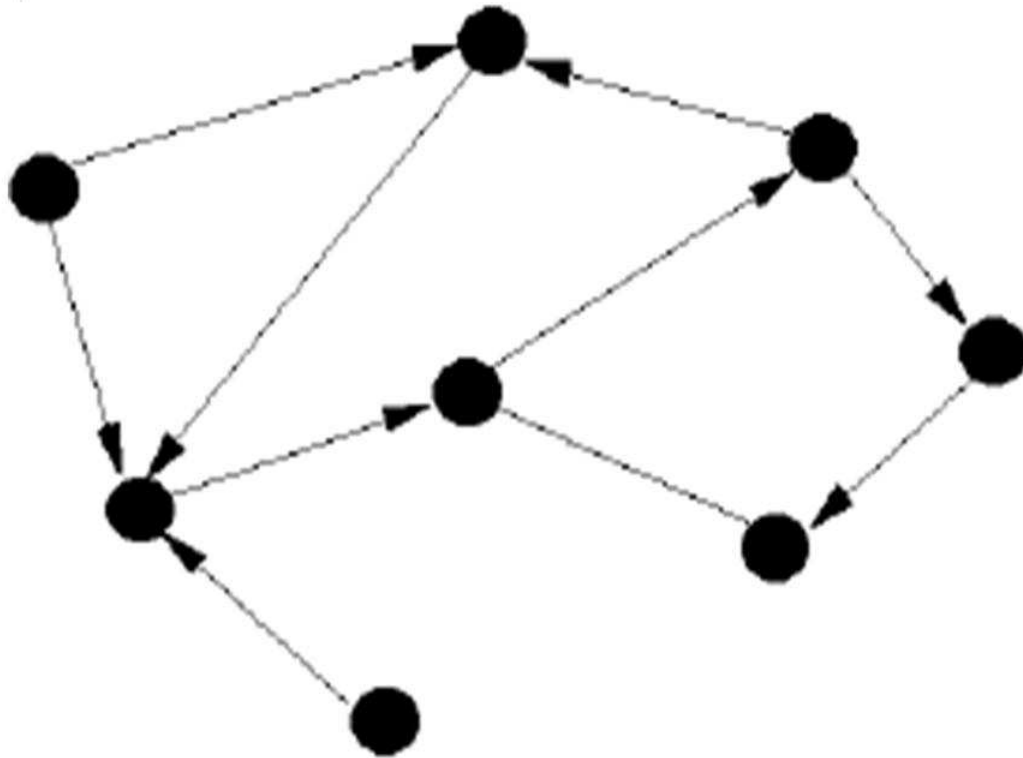
**A way of looking at how something (eg information, ideas, resources, diseases) spreads through relationships.**

**Networks are depicted using a 'social network diagram'**

**Interdisciplinary, sociological origins**

# A Social Network Diagram

A social network is social structure which consists of two elements; these are generally known as actors and ties



## Aspects of Analysis

**Size** (how big or small?)

**Content** (what does it comprise of, who are the actors?)

**Purpose** (what function does it serve?)

**Density** (cohesion)

**Cliques, clusters or subgroups**

**Network 'stars'** (who is central to the network?)

**Bridges and links** (which actors links parts of the network together?)

# Applying network analysis

## Ludmilla Neighbourhood Connections Project



### *Goals*

Increase a 'sense of community'  
Build connections between different cultural groups in  
Ludmilla



# A culturally diverse neighbourhood



Born overseas	252
Indigenous Aust.	427
Other	913
Not stated	111
TOTAL	1703



# Ludmilla Neighbourhood Connections

- Neighbourhood newsletter
- Email list
- Neighbourhood DVD
- Community celebrations
- Outdoor sports and arts events
- Helping to establish the 'Edible garden'



- *All activities aimed at creating opportunities for people to meet one another and do positive things together.*

# The network analysis

snowball sample - starting with active members of LNC group

A network of communication (who knows who, well enough to refer them)



# Participant Network 2008

49 people, 61 connections

## Cultural Groups

### Black:

Identifies as 'Aboriginal'  
(5 people, 10.2% of network)

### White:

Identifies as being 'born overseas'  
(7 people, 14.3% of network)

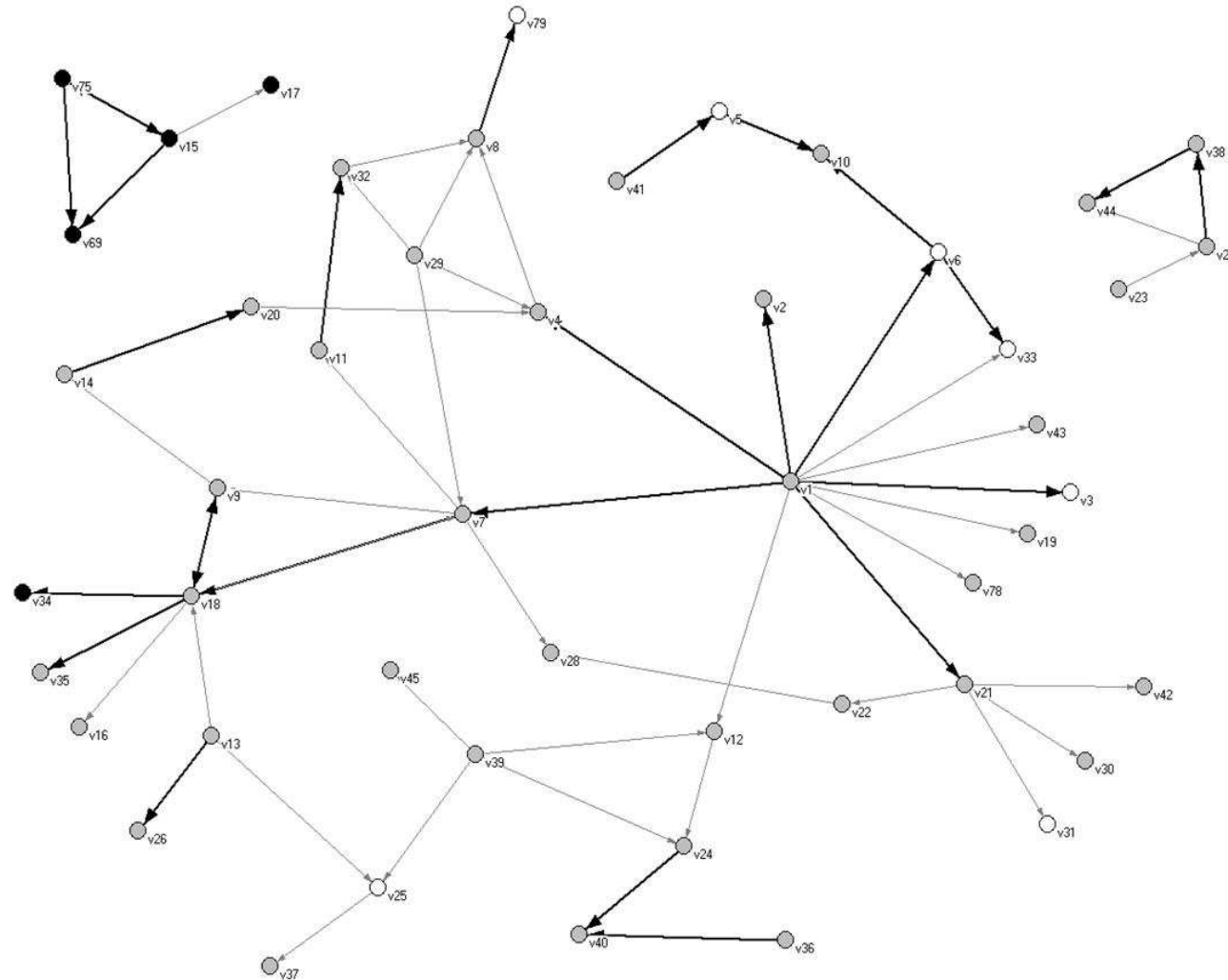
### Grey:

Identifies as 'Australian' and no other cultural group  
(37 people, 75.5% of network)

## Tie strength

Thin line = weak tie

Thick Line= strong tie



# Participant Network 2010

61 people, 106 connections

## Cultural Groups

### Black:

Identifies as  
Aboriginal (8 people,  
13.11% of network)

### White:

Identifies as part of  
cultural group 'born  
overseas'.  
(10 people, 16.29%)

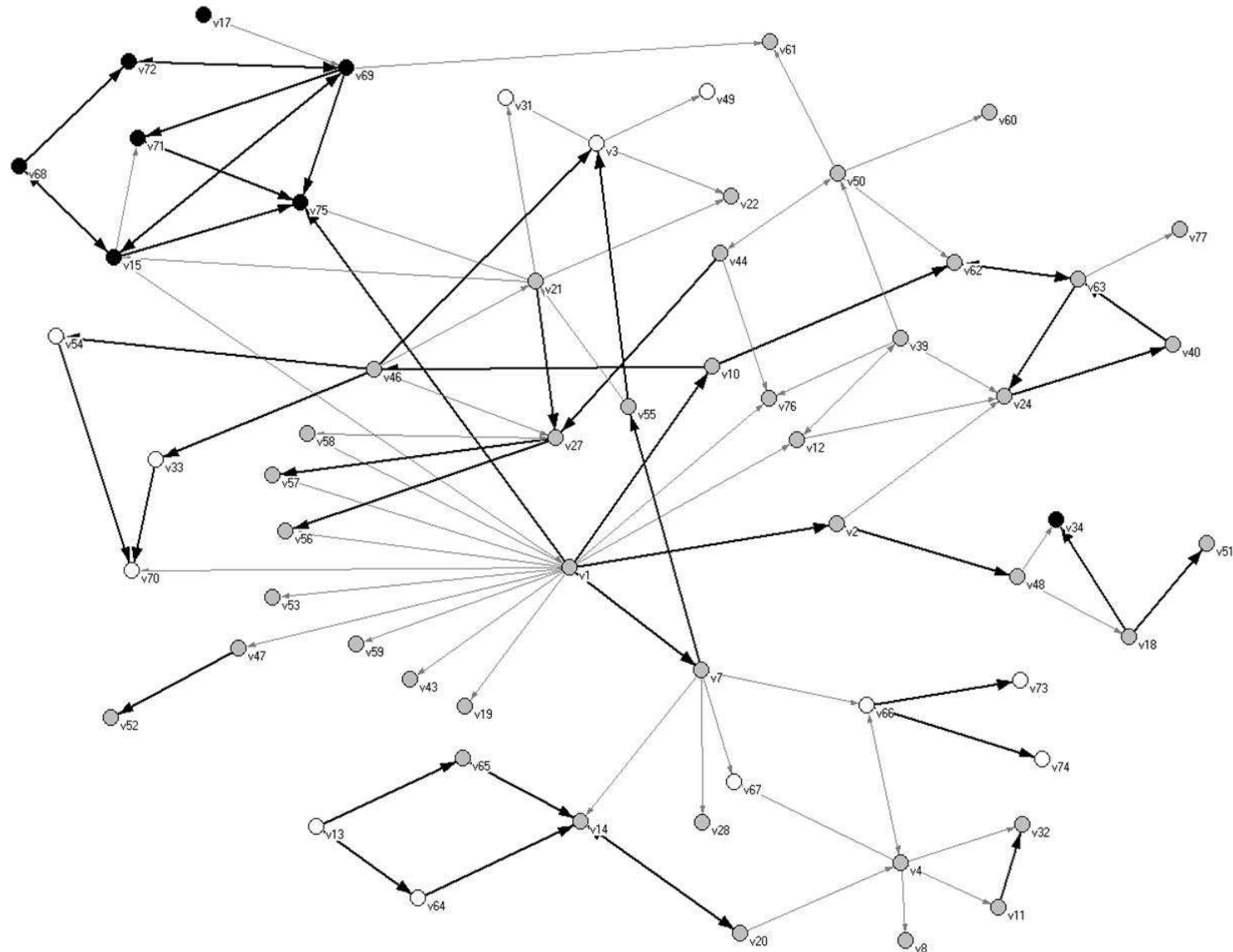
### Grey:

Identifies as  
'Australian' and no  
other cultural group  
(43 people, 70.15%)

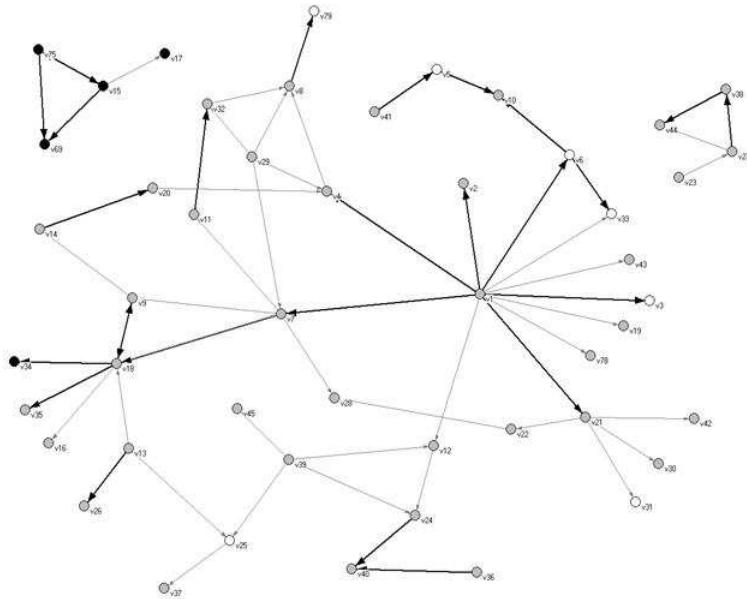
## Tie strength

Thin line = weak tie

Thick Line= strong  
tie

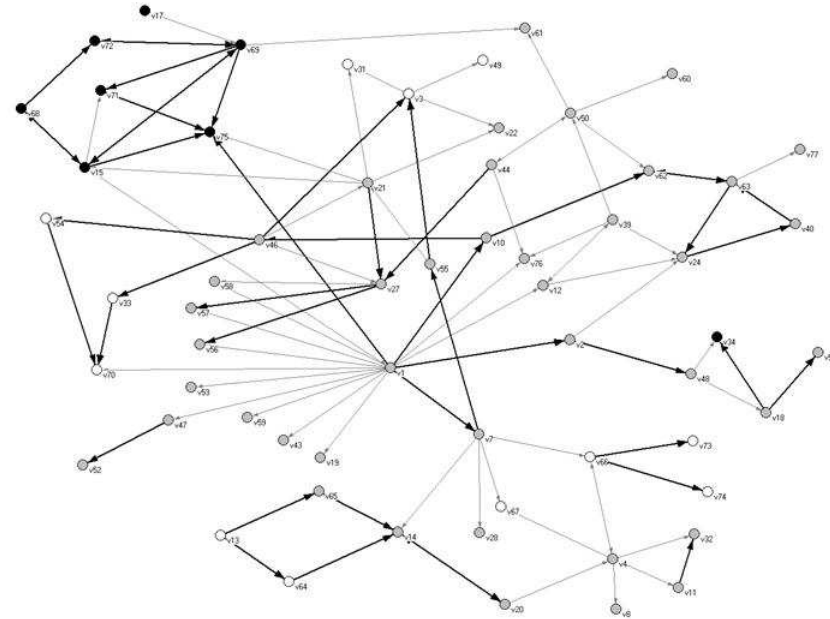


# Summarizing Participants Network changes



2008

49 participants, 61 links  
(2.36 ties average)



2010

61 participants, 106 links  
(2.98 ties average)

An increase of 12 participants and 45 links. Small increase in network cohesion.

# Organisational Networks

Organisations of various kinds are a key aspect of community

Schools, NGO's, volunteer community groups all 'do' community work.

LNC wanted to purposefully link up existing resources to focus on the Ludmilla area.

# Affiliation diagrams

a different kind of social network diagram

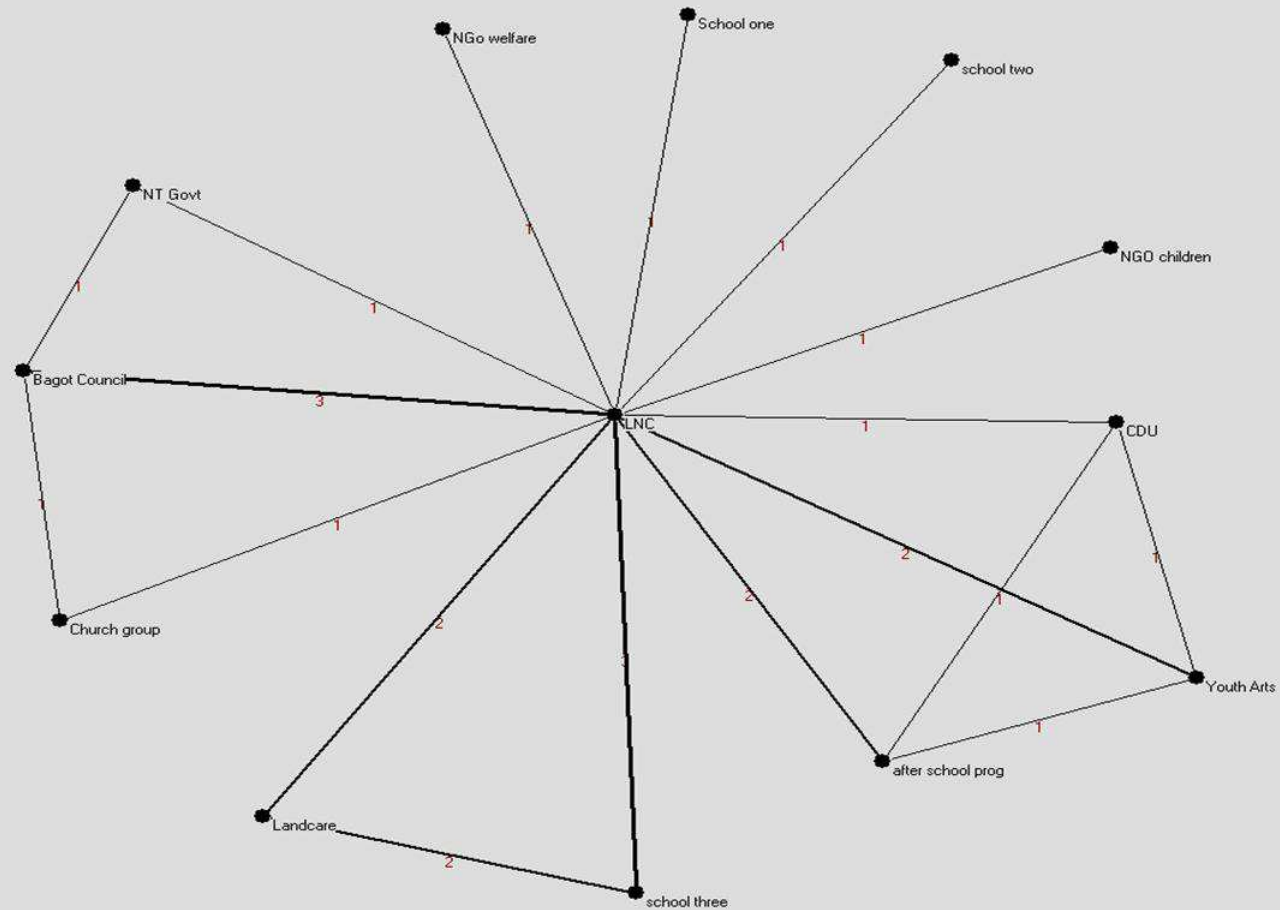
**The actors are organisations**

**The ties are people in common**

**A ties between two actors means that the two organisations are joined by a common member**



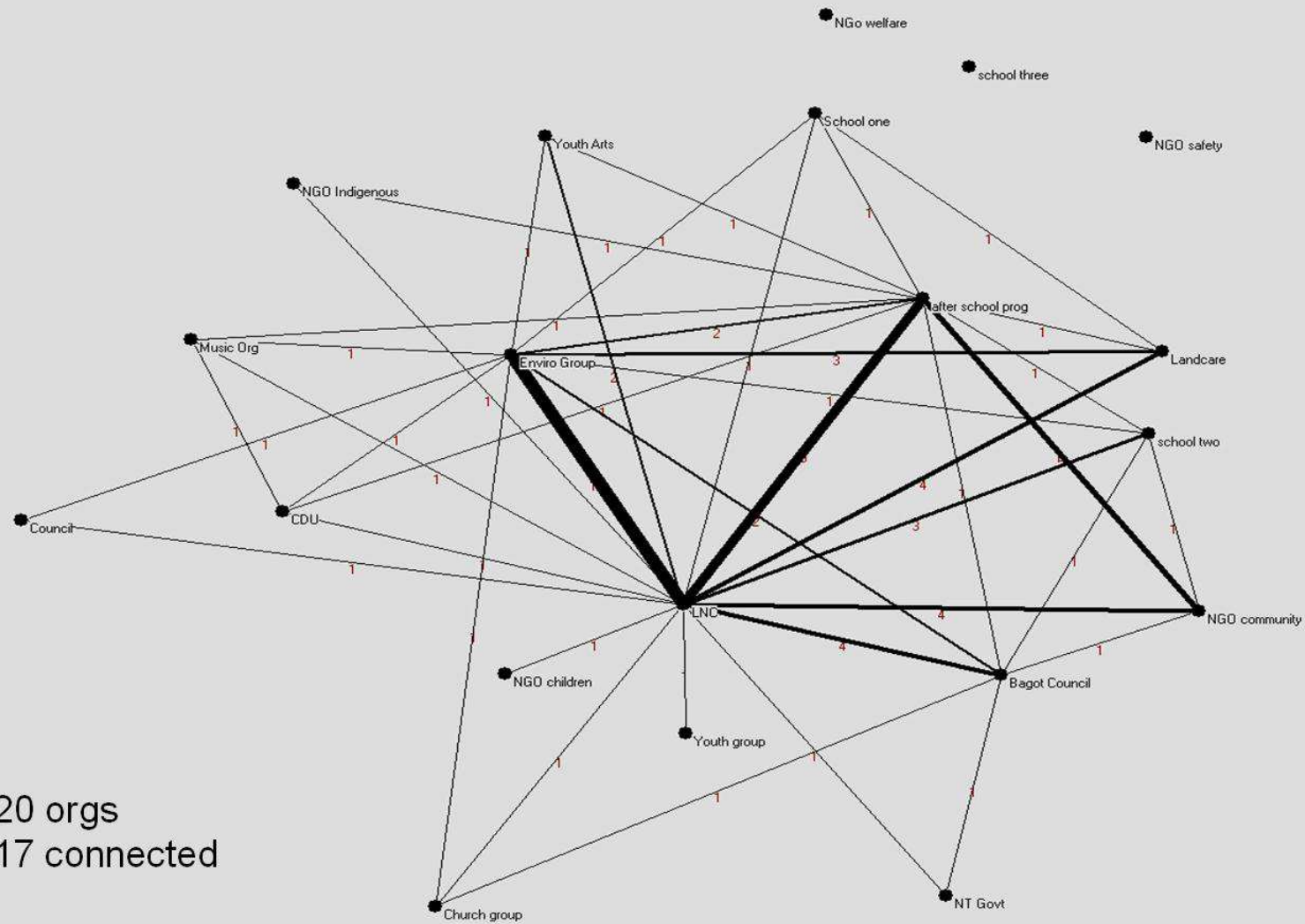
# LNC Organisations Affiliations Network 2008



13 Orgs

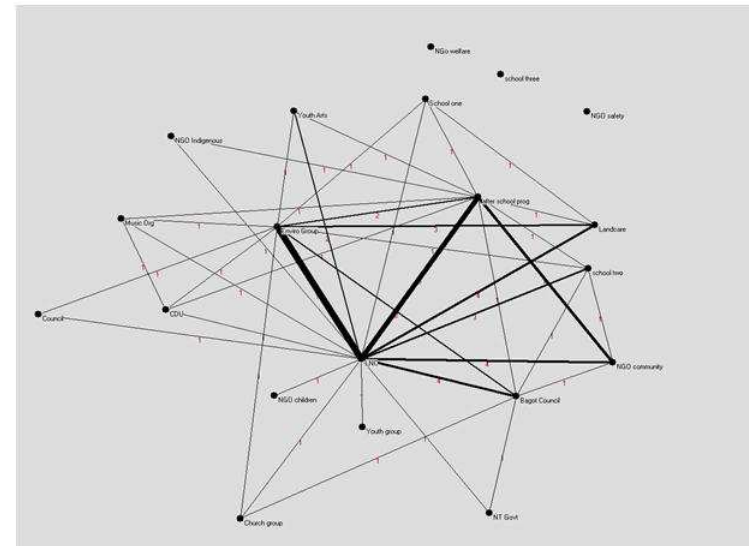
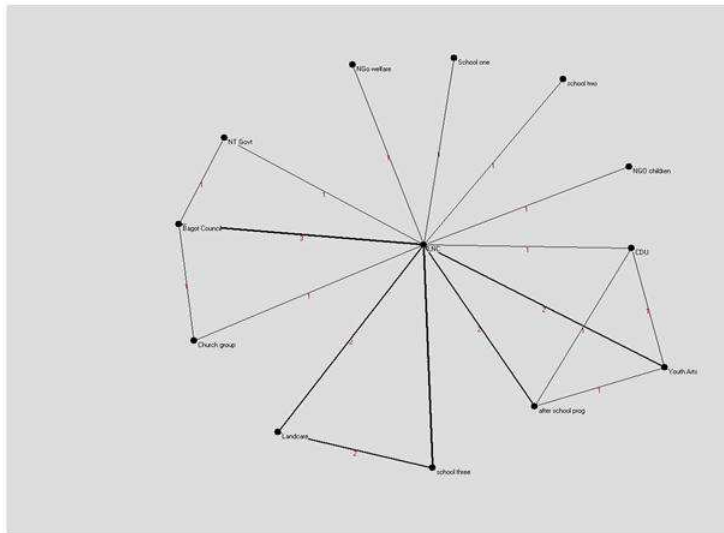
18 people

# LNC Organisations Affiliations Network 2010



20 orgs  
17 connected  
42 people

# Key changes in organisational affiliation networks



The average number of people connecting any two organisations (affiliations) grows from 2.76 to 4.20 over the 19 month period.

This indicated that more organisations are linked by common members in the network.

Three organisations previously linked to LNC are no longer linked into the network

## Network analysis was useful because

The method matched the aim of the project

*'a more connected community'*

It demonstrated the key goal of increasing connections across cultures

# The Pitfalls

- social network analysis cannot account for notions of human agency, meaning, feelings etc.
- You need to know what kind of network you are looking at
  - Full network (census sample, bounded network eg organisations, groups etc)
  - Ego network (snowball sample – for more hard to define entities, eg communities of interest, )

## The Pitfalls

- Social network analysis texts and software can be fairly daunting (UCInet, Pajek)
- However, there are newer (maybe easier) and free network drawing options available on line (eg. NodeXL, Gephi)