Two Worlds: Modern Apprentices and the Chasm Between Trade and Literacy Aspirations.

Adult Learning & Literacy Research Team

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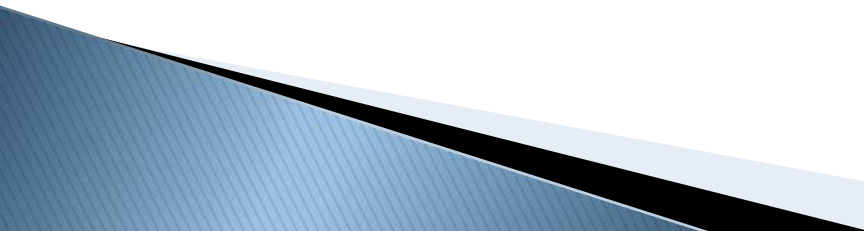
Modern Apprentices

▸ The Modern Apprenticeship Scheme
- launched in 2000
- administered by Tertiary Education Commission (TEC)
- supports young adults to begin and complete formalised industry training, by giving them a Modern Apprentice Coordinator (MAC) who visits the Modern Apprentice (MA) and employer at least once a quarter (MAC usually an Industry Training Organisation (ITO) employee)
- MACs can refer MAs to literacy support, which is then provided by Literacy Aotearoa
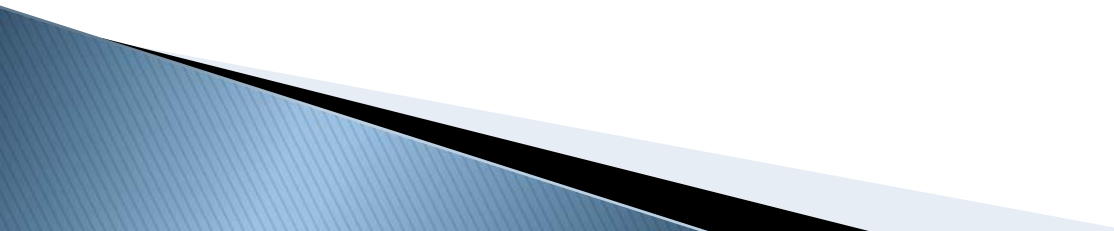
Public / political concerns about low (or slow) MA completion rates

- In April 2009 a Ministry of Education report revealed that just one third of all MAs complete their training within five years. The MA programme costs $54M p.a.
- Just 9% of Ag, Forestry & Fishing MAs qualified within that time
- Federated Farmers' VP Frank Brenmuhl: "It requires diligence ... and academic ability ... farmers are not ... doing what they need to do ... standards have been allowed to slip" (Todd, 2009, ¶10).
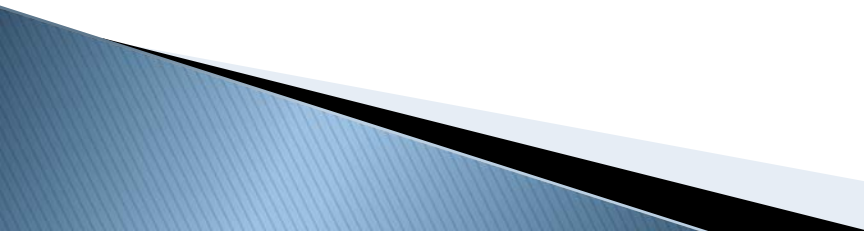
The MAs' biggest problem …

- A 2006 report on MAs (Jeffcoat & Jeffcoat) found that MAs' biggest self-reported problem in their successful completion was with their required written work
- Both understanding the materials and making time to do the reading and writing were aspects of the problem
- This also applied to MAs with good functional literacy in English – so would have been especially acute for those with lesser functional literacy.

Our research

- Funder & funding
  - Department of Labour, $70,000 (excl. Travel)
- Research objectives
  - Formative evaluation of the literacy tuition
    - Review MAs', MACs', adult literacy tutors' and employers' perceptions of literacy programme
    - Assess impact of literacy tuition on MAs' progress in apprenticeship, both in theoretical bookwork and practical on-job outcomes
    - Assess merit of the MA literacy programme and recommendations for improvement.
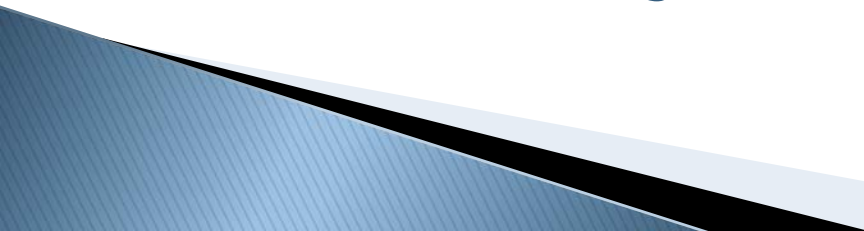
Our Team

- Adult Learning & Literacy Research Group team members & roles
  - Project leader: A/Prof Frank Sligo
  - Project manager/agency liaison: Dr Niki Murray
  - Key researcher: A/Prof Margie Comrie
  - Key researcher/data analyst: Dr Elspeth Tilley
  - Key researcher/interviewer: Dr Franco Vaccarino
  - Key researcher/data analyst: Dr Bronwyn Watson
  - http://literacy.massey.ac.nz

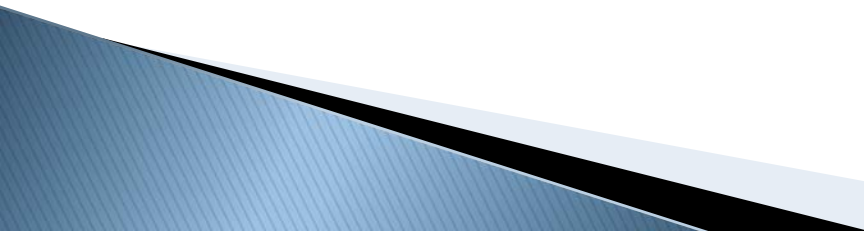 - The team worked closely with Literacy Aotearoa (LA) (National Office) and Nga Poupou (local LA branches)

Today's presentation

- Only a smaller qualitative case study section of the larger project can be covered today
- 14 case studies, each interviewing an MA, the MA's employer, the MAC, and the adult literacy tutor
- Data indicated the complexity of literacy issues, but today we focus upon:
  - A strong finding that one of the biggest challenges to success has less to do with the literacy support itself than with apprentices' position in-between two communities of practice
  - The importance of findings such as this that go beyond the research objectives – in this case made possible by the choice of grounded theory methodology for data analysis – and the challenge of communicating these to funders.

Method

- Interviews ranged from ten minutes to an hour

- Held at workplaces, Te Poupou, and homes, with a few by phone

- The typical MA is male, under 20 years of age, speaks English as a first language, identifies as NZ European, and is likely to be in the first year of his apprenticeship

- These demographics were also true of our interviewees with the addition that most were of high needs (assessed as needing 31 hours of literacy tuition or more).

Sample

- Case study recruitment method
  - Self-selected sample invited to participate by the manager of Te Poupou
  - Apprentice consent needed to approach employer, tutor, & Modern Apprenticeship Coordinator (MAC)
- Case study sample description
  - Fourteen case studies were completed (a total of 46 interviews), one each in Palmerston North, and Blenheim, two each in Dunedin, Northland, and Tauranga, and six in Hamilton.

Data Analysis

- Grounded theory – method description
  - Grounded analysis (Glaser & Strauss, 1967; Glaser, 1992), detects themes across an entire data corpus (as opposed to establishing hypotheses in advance and matching a pre-built coding 'frame')
  - Helps to discover unexpected content and ensures that data (not researcher inquiry) shape findings
  - Codes are deduced from the data during multiple close readings in which the researcher maps the overall content by taking notes of repeated or similar ideas, and identifying reoccurring key words or language patterns
  - We used HyperResearch (ResearchWare, n.d.) qualitative data analysis package to manage coding and assist with collapsing or expanding theme categories until a series of discrete codes and sub-codes was obtained
  - Each grounded theory code is checked to ensure that it is supportable in reverse; able to be illustrated by "extensive amounts of rich data" (Charmaz, 2000, p. 514), for example multiple comments from survey responses that fit the code description.
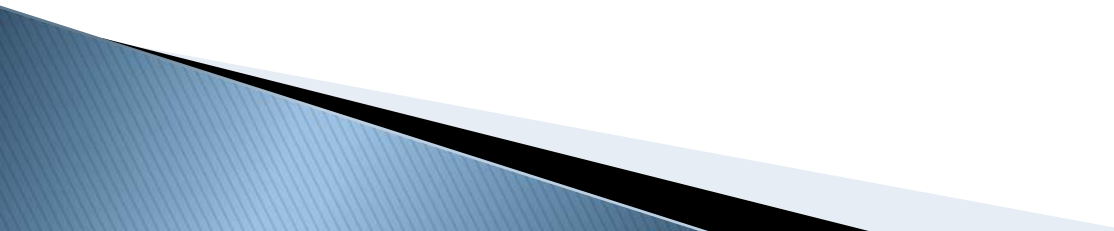
Macro findings

▸ Macro findings: challenges theme

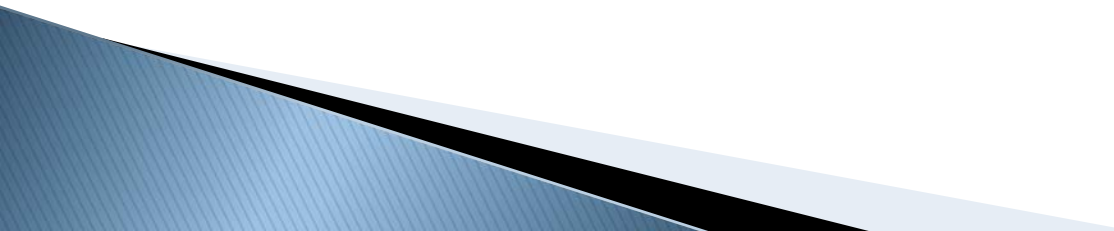| Challenges	Comments (*N*)
Functional Literacy Challenges	76
Disconnect Between 'Theory' and 'Practice'	37
Practical Wisdom / Learning Style	31
Modern Apprentices' Coping Strategies	26
Time and Fatigue	22
Motivation	18
Health	13
Reactance to Failing	12
Modern Apprentices' Organisational / Independent Study Skills	11
Family Background	6
Transport / Remoteness	5
Every Learner Different	5
Financial	4
Missed Foundational Steps	4
Other	11

Literacy Challenges

- Second and third most prevalent literacy challenges both relate to disparate communities of practice

- "Communities of practice" (CoP) (Lave & Wenger, 1991) is an influential model of learning in organisational and community contexts. In it, "legitimate peripheral participation" is an important way of seeing apprentices' entry into their trade CoP.
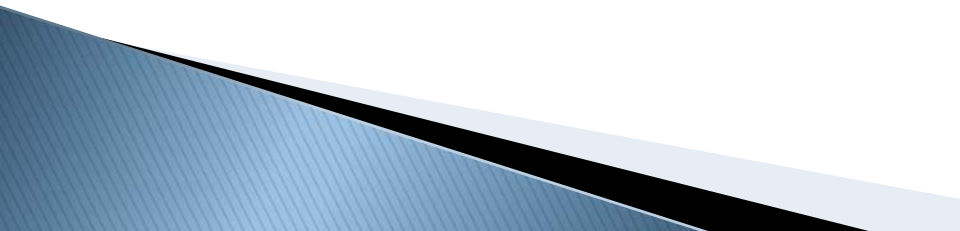
Communities of practice (CoP) research explores "situated learning"

- Learners are seen as social beings, this approach challenging (a) educational studies' assumptions about teacher–learner dyads as the principal educational form and (b) cognitive processes as the appropriate centre of research interest

- Learning occurs in many different settings without teachers necessarily being involved

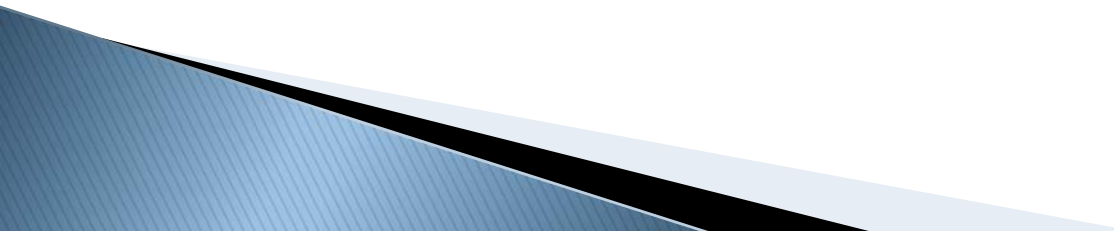- The social community rather than the individual becomes the unit of analysis.

Lave & Wenger (1991) thought that:

- It is the relational network which is key to understanding learning (not the pre- and post- states of individual minds)
- People learn via their collective collaboration in the practices of the 'lived-in' world
- Peripheral participation gradually turns into more complete or full participation in the community, via access to and membership of discourse communities.

However, questions are being raised in respect of how:

- Linguistic negotiation of meanings generates and constitutes conflict, rivalry and tension (as well as collaboration)

- Alternative discourses compete for primacy, status and resources

- Tensions between multiple or opposing CoPs "reflect hierarchies of cultural prestige and moral value that are embedded in modes of talk" (Hughes, Jewson & Unwin, 2007, p. 9)
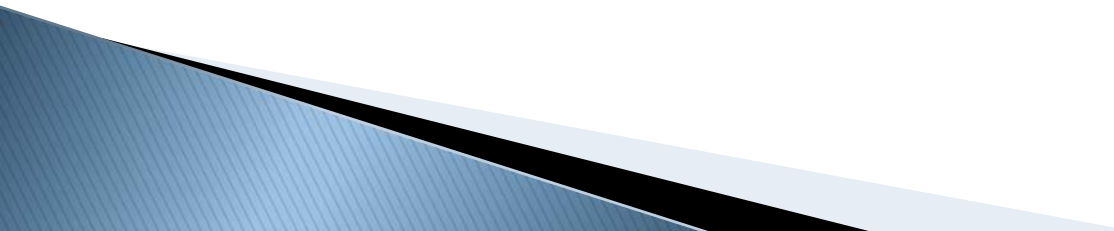
Other questions:

▸ Is there risk inherent in a wholly 'non-cognitive' model of learning?
▸ Do you have to be a member of a 'community' to learn?

And in exploring MAs' attempts to enter both trade/ technical and functional literacy worlds, we became interested in the problem of multiple or opposing CoPs.

We think that:

- MAs can readily access the trade's spoken discourse and the discourse of artifacts, but experience exclusionary effects of low functional literacy
- Thus they may have a partly-excluded identity via difficulties of accessing the shared repertoire of their trade
- Dominant discourses within MAs' trade CoP implicitly challenge and undermine the adult literacy CoP (the tacit assumptions of the literacy training provider).

Other factors:

- The MA's determination to enter their trade CoP was their sole motivator to build their functional literacy. Their engagement with the literacy CoP was purely a means to an end ("I'll never read another book!")
- Their trade CoP's downplaying of functional literacy makes the prospect of life-long learning somewhat improbable.

Findings

- Examples from our data of 'disconnect'

- *Employer*
  - Years ago we would cut our own roofs....We just did it a manual way and it worked.
  - A lot of kids go into doing a trade because they think they're not going to do any writing.
- *MA*
  - I ask the guys at work...and some of them are going "I don't remember this one, why the hang do you need to do it?"
- *MAC*
  - You know when I did my apprenticeship, well, you could get by, by doing your practical work. And our name of the game is to get them out there building you know and qualified. The qualification doesn't need to be that high-tech.
- *Tutor*
  - He's actually said "Once I've done this I don't need to do any more writing again".

So what???

- Why this issue matters so much....

- The members of a CoP learn not just to "do", but also to "be" (Sauquet, 2004).

- If the CoP constructs identity as well as learning, then MAs face the challenge of trying to be two different people in order to succeed in their apprenticeship.

- What's more, one of their communities actively undermines the person they are in the other....

  - (*No wonder so many don't finish!*)

Recommendations...

▸ Literacy Aotearoa provides excellence but cannot do the job alone. Critical additional elements are:

1. A supportive employer who understands the necessity for literacy at work and its potential to boost productivity, and who wants to allow time for the MA to undertake some theory and bookwork on the job.

2. A MAC who is a genuine mentor in both hands-on and literacy skill development, and who values all aspects of the MA's learning.

3. Excellent collaboration in the form of a partnership among employer, MAC and literacy tutor, with all sharing information and best practice, and all working collectively to support the MA.

4. **A workplace culture** that is positive about literacy and learning, and open to innovative ideas and new ways of seeing the industry and the work to be done.

Further research

- Modern Apprentices entering trades from school, along with many employers and MACs, need better understanding of how success in literacy helps to create competency in trade skills. How can a fuller understanding of this connection be fostered? There has been good recent research into the skills-productivity nexus, but more work is needed to demonstrate how literacy development translates into better productivity in the workplace;
- How best to reduce stereotypes within trades and their undermining of the desirability of literacy skills, where literacy attainment is seen as a non-masculine or non-desirable quality?

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