

**University Education:  
Enculturation, assimilation or just  
passengers on the bus?**

**Elizabeth Godfrey  
The University Auckland**

# Education

“Enculturation into the beliefs, practices, values and styles of discourse of a particular community”

# Enculturation

- Key factor in academic and social development
- Early student engagement with university culture

BUT

- One culture or
- Academic tribes ?

# Culture

- **Shared** knowledge and understandings
- Guide actions and reactions

=> cultural norms

- Culture involves **process of learning**

# Case Study

- **One discipline's calls for a "Culture Change"**
- **Lack of common understanding of culture and processes of enculturation**
- **Mismatch between espoused values and cultural norms**
- **Developed a model to define culture of engineering education**
- **Interpretive case study methodology**
  
- **Applicable to disciplinary or institutional culture**

# Learning the Culture

Students enter, motivated to succeed and fit in – observe and respond to artefacts, practices and behaviors



Older students – role models

Staff – shape practices and rewards

Peers- role models

**First Level**

*Learn the way we do things round here - what is valued and rewarded*

*Possibility of student norms changing practices eg cheating causing change in assessment practices*

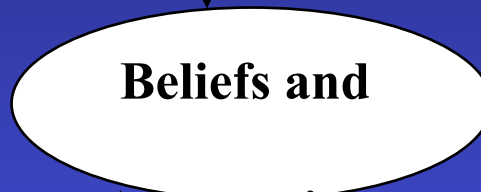
After sufficient repetition and finding what “works” develop shared cultural norms.



**Second Level**

Rarely open to change by students – stable discipline with entrenched values and norms

Unconsciously held – rarely discussed but recognizable by the group



**Third Level**

# Orientation

- Knowledge of multiple worlds
- Orientation – urge to fit in and belong
- Adaptation easier for those with experiences and personal values similar to new “world”
- “Loners”, part time students – at risk..

# First Year Engineering

- Orientation – values made explicit
- Entering a profession – community of practice
- Sense of “belonging” and identity encouraged
- Reinforced by common first year courses – even with a “class” of 500



*Thinking like an engineer, kind of being taught it I suppose. The whole course is directed at making you think differently, that is how I feel it.*

*I think that thinking as an engineer is thinking of the theoretical best solutions to problems and then the best practical way of doing it.*

*As far as a "way of doing things" goes, a facetious response would be "so they get done", or possibly "using maths" ...*

## By Final Year

- *Engineering can be very narrow, very focussed on one point, solve the problem goal oriented... I would put it down to our training, the way we are taught to think and act.*
- *I found it hard until I got into the engineering way of thinking ...the way of analysing a problem and working out how to go about solving it ...you are not really taught it ...you sort of pick it up*

# How do we Manifest what we value?

Teaching and assessment practices reinforce for students the beliefs and values shared by staff, but also lead students to unintended outcomes and cultural norms

- Include courses and content
- Role model Behaviours and Practices
- Reward - Assessment

# Courses and content

Forefront value of communication and technical skills

=> include one course per year

*You do have to think about that, they have been drumming it into you. Engineering is communicating, you have to know how to write, and how to talk with people and communicate (Angus, 1st year)*

## But ...

*I think they tended to marginalise the information about environmental stuff. Maybe they should have it integrated into all the papers if they really value it... What they are saying in their values is that this stuff is not an important part in engineering -it is an aside that we throw in because we have to, but it is not a core part of engineering.*

*(Megan, Civil 4th year student)*

# Tacit assumptions

Sometimes taken for granted, rarely articulated, shared understandings

- the role of Mathematics

- In the Engineering way of thinking truth and reality were proven and described by mathematics.
- Status and worth

# Role of Mathematics

Mathematics as an efficient, effective means  
of communication

*“The line  $\Sigma F_y = m a_c$   $200g - T_c = 200(a_c)$*

*in the model answer was as good as a sentence to me”*

*“We use maths like a language – a language to express  
ideas”*

*Mathematics is a nice vehicle for delivering these ideas. I  
don't think you could really function without mathematics  
in these sorts of systems”*

## **Espoused Values $\neq$ Norms**

- Value group projects and team work – assess individually
- Value understanding – assess rote learning and application of formulae
- Value deep learning approaches – course workload precludes? Go for grades.
- Value co-operation and team work – reality of cheating and plagiarism



# Implementing the model

Our behaviours and practices must explicitly reflect and manifest our desired values and goals.

- Need to be clear about our learning objectives - what we value, why we do what we do
- Need to make these explicit in our teaching – role model, content, teaching style...
- Reflect these espoused values in our assessment methods Have students internalised these values?

# Is enculturation necessary for success?

- Passenger – little understanding past the first level of culture
- Assimilated – strategic adoption of values and norms to fit in and succeed
- Enculturated – shared beliefs and assumptions – “what it means to be an engineer”

# Conclusion

What we do, what we say and what we write must reflect and manifest the attributes, values and goals we believe in, as explicitly as possible. If not, students will interpret for themselves what they believe is valued and their learning outcomes, values and cultural norms will reflect that interpretation.