

# Hunters & Gatherers:

## Strategies for Curriculum Mapping and Data Collection for Assurance of Learning

# Project Overview

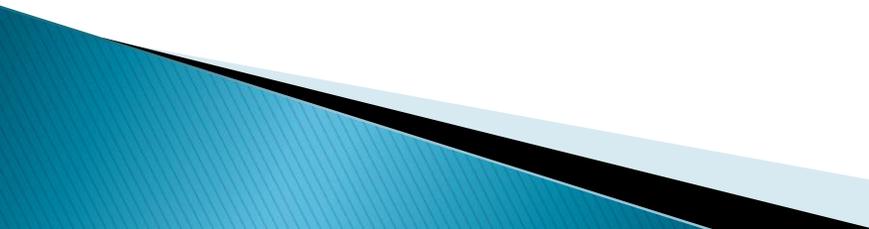
- ▶ Assurance of graduate attributes is a predominant feature in both quality enhancement and assurance in higher education.
- ▶ Recent developments, including the introduction of the Tertiary Education and Quality Standards Agency (TEQSA) will require universities to review the methods they use to assure learning outcomes.
- ▶ This project aims to support the process across Australia by:
  - sharing good practice
  - examining common challenges and possible solutions
  - developing an online resource kit, including a review of current tools used to assure graduate attributes ([assuringlearning.com](http://assuringlearning.com))

# What?

- Establishing graduate attributes and measurable learning objectives for the program
- **Mapping learning objectives** to suitable units of study in the program (where possible allowing for introduction, further development and then assurance of the objectives)
- Aligning relevant assessment tasks to assure learning objectives
- Communicating learning objectives to staff and students
- **Collecting data** to show student performance for each learning objective
- **Reporting** student performance in the learning objectives
- Reviewing reports to identify areas for program development – Closing the Loop

(AACSB White Paper, 2007)

# How?

- ▶ Sector Wide Audit
    - Pilot in business disciplines
    - Then widen to other disciplines with professional requirements (engineering, nursing, education, etc)
  - ▶ Follow up Focus groups with managers and academics
  - ▶ Critical Evaluation of Data (including a desktop audit of International practice)
  - ▶ Development of resources/tools
  - ▶ Dissemination – Review paper, strategic paper, workshops (each state), website with resources, conferences, academic papers
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# Who?

Pilot: BUSINESS – Interviewed ADTLS/equivalent at 25 Australian business schools (61%)

- ▶ Type of University

| GO8 | Technology | Regional | Other |
|-----|------------|----------|-------|
| 6   | 4          | 6        | 9     |

- ▶ Accreditation Status

| AACSB | Going for AACSB | Non AACSB |
|-------|-----------------|-----------|
| 5     | 9               | 11        |

- ▶ Locations

| ACT | NSW | VIC | QLD | SA | WA | TAS |
|-----|-----|-----|-----|----|----|-----|
| 2   | 5   | 6   | 7   | 1  | 3  | 1   |

# Questions?

- ▶ What is the current practice of mapping graduate attributes in the curriculum in the higher education sector?
  - ▶ What is the current practice of collecting graduate attribute data in the higher education sector?
  - ▶ What are the main challenges faced by the sector in mapping and collecting graduate attribute data?
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# Philosophy of AoL

“If graduate qualities are espoused characteristics that you claim your student will leave with, the only way in which you can be certain of doing that is through assessment”

“it is building blocks where the early subjects build on and develop certain skills”

“A process of continuous improvement”

“It’s a basic educational principle”

“Implementing strategies to try and improve”

“Close the loop”

“Being accountable”

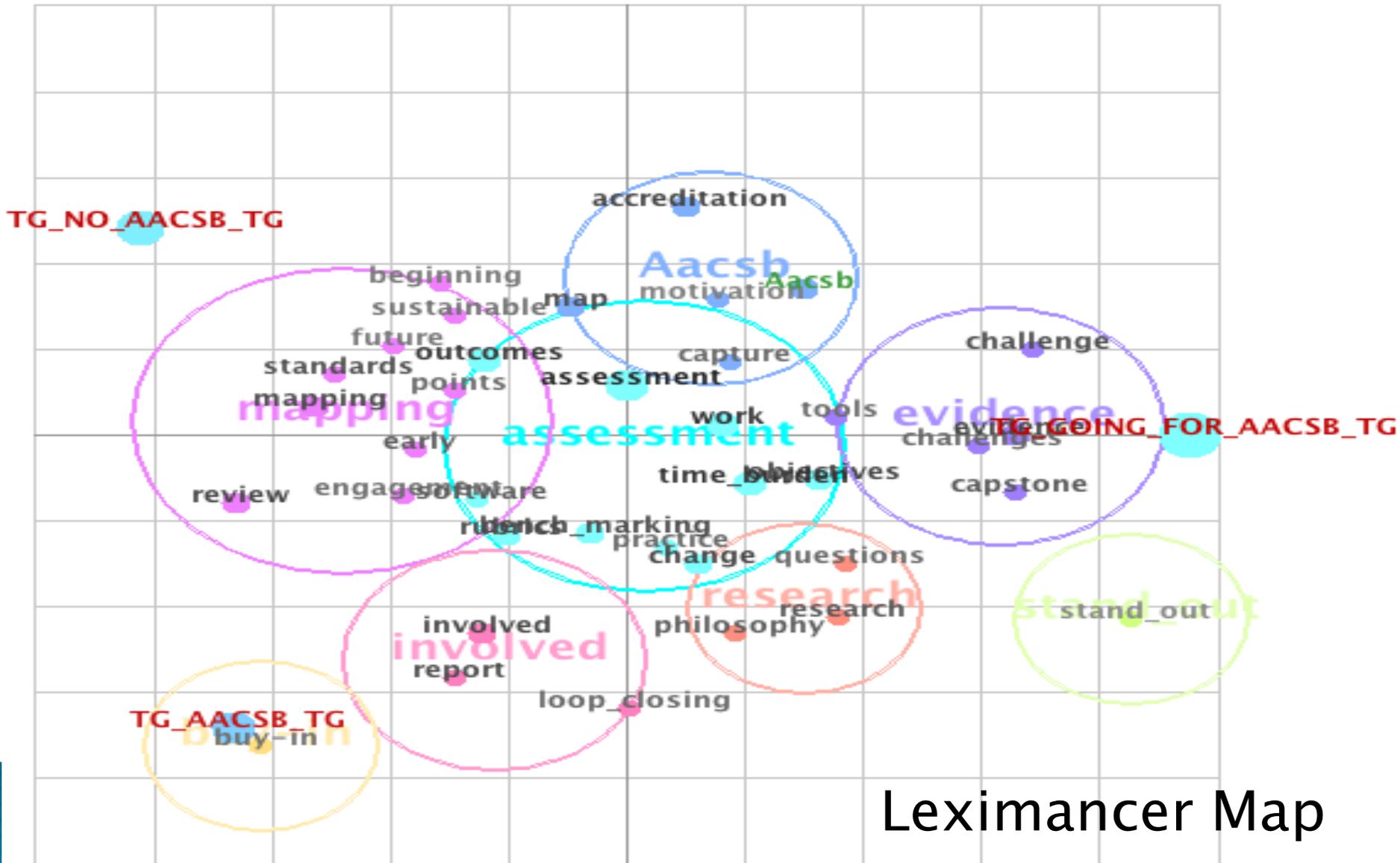
“We see the AoL process as addressing that gap (between expected and actual attainment)”

# Primary motivators for AoL

| AACSB    | PROF BODIES | EQUIS | TEQSA  | AUQA  | AQF   |
|----------|-------------|-------|--------|-------|-------|
| 16 (64%) | 5(20%)      | 2(8%) | 3(12%) | 2(8%) | 1(4%) |

| AACSB                                                                                                                                                                               | GOING FOR AACSB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | NOT GOING FOR AACSB                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| we've probably done more than anything before because of the <b>accreditation</b> but it wasn't the only driver. one of the issues was always about <b>cross campus consistency</b> | <b>TEQSA</b> and the changes from AUQA into TEQSA and <b>how they are looking for more evidence . . .</b> we're obviously needing to do this assurance of learning regardless of what we do with AACSB. . . now we've really moved it to try and <b>make it more mainstream . . .</b> we are also <b>working quite closely with other faculties</b> to look at if we develop systems and repositories and databases to hold the mapping and the reporting we want to do <b>across the university</b> | We have <b>no explicit external accreditation for which this counts.</b> But we know that if or when we go for external accreditation, it will count. |

# Findings . . .



Leximancer Map

# Curriculum Mapping

- ▶ All had a mapping process in place to identify where graduate attributes were being assured in a degree program
- ▶ Responsibility for mapping the graduate attributes into the curriculum varied:
  - 64% teaching
  - 36% faculty management (for example ADTLs, Program Directors)
- ▶ Level of mapping also varied:
  - 40% mapping to subject only
  - 60% mapping to specific assessment tasks within a subject

# Approaches to Curriculum Mapping – Who?

| AACSB                                                                                                                                                                                                  | GOING FOR AACSB                                                                                                                                                                                                                                                                                                                  | NOT GOING FOR AACSB                                                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>deliberate approach to <b>make sure we engaged all staff</b>. . . started them looking at the goals and having input into the goals, then mapping those goals in the curriculum<br/>(Inclusive)</p> | <p>I do work with the other associate deans in the other faculties who are responsible for theirs because we are <b>trying to get some consistency in how we capture the mapping</b> of the learning outcomes through into the courses and where we display that information and how we hold that information<br/>(Top Down)</p> | <p>course directors, who will have oversight of renewal of the curriculum within their courses and course plans and those sorts of things.<br/>(Top Down)</p> |
| <p>We had a <b>workshop with lecturers</b> and asked which graduate attributes are involved in your assessment tasks<br/>(Inclusive)</p>                                                               | <p>The <b>learning and teaching group</b> get a copy of all the course outlines and map which subjects are addressing which graduate attributes.<br/>(Top Down)</p>                                                                                                                                                              | <p>graduate attributes were mapped by course coordinators in our course management system.<br/>(Top Down)</p>                                                 |

# The Use of Rubrics in Assuring Learning

- ▶ 80% used rubrics in their AoL process
  - 11 of these 20 institutions used standard rubrics across programs to ensure consistency of criteria and standards
- ▶ The development of the rubrics varied across institutions:
  - 48% developed by the teaching staff
  - 16% by educational experts
  - 16% developed by faculty management

# Data Collection

- ▶ Although mapping and the use of rubrics was common practice across the sample, 60% of respondent institutions had not yet collected AoL data.
- ▶ Of the ten institutions that were collecting data different approaches were taken:
  - Capstone subjects alone
  - Collected data across the whole program to obtain measures of students' achievement throughout their degree.
  - One institution had chosen to use a stand alone testing method where students sit an exam that is independent of their individual subjects.
- ▶ Type of data being collected varied:
  - 12% collected overall marks for the specific mapped assignment
  - 28% were using the marks for the criteria that related to the graduate attribute only.

# Main Challenges

The main challenges identified were:

- ▶ Staff Workload
  - “staff looked upon AoL as extra burden” (D)
  - “time consuming, academic staff see it as imposition on their time” (B)
- ▶ Staff Engagement
  - “challenge to get beyond that this is more than ticking box, it’s about improving student learning outcomes” (B)
  - “it took me six years to get staff buy-in” (F)
  - “we have achieved staff acceptance, not buy-in” (Q)
  - “the ones that are really hung up on the content are the ones that the most difficulty accepting a different way of thinking about their course and their assessment” (O)

# Main Challenges

- ▶ Scale
  - The size of the challenge to curriculum map and data collect over a number of programs in a faculty was seen to be daunting by a number of the respondents, especially those universities with large student populations, for example, universities with intakes of over 1000 students in undergraduate programs.
- ▶ Technical
  - All the universities wanted to have a streamlined, efficient system to assure learning but achieving this provided some technical problems.

# Best Practice Examples

## ▶ Leadership

- “It’s important that the dean and other top leadership are clearly and vocally supporting AoL.” QUT

## ▶ Inclusion

- “This can be achieved by developing the AoL process together with academics and when they are comfortable with it and see its worth and workability they become champions for AoL. “UNSW

## ▶ Embedded (to reduce work burden)

- “I said to them realistically what do you really think could fit in your subject? Then I said okay, let's actually look how you assess students. Let's see how those things that you've put in that list could actually fit into an assessment without you doing anything much different. “UTS

## ▶ Resources, Support and Training

- “Staff pay attention to how much resourcing is given to AoL and how much training they get is an indicator of how serious the institution is about AoL.” QUT

# Summary

- ▶ The clear driving force for developing an AoL process is of the requirements of external accreditation bodies.
  - ▶ While a positive influence as it has prompted AoL processes to be adopted in a large number of Australian Business Schools, it also has provoked negative reactions.
  - ▶ The process is seen by many academics as a box ticking process to meet external requirements rather than as a basic education principle of assuring students have an effective learning experience.
  - ▶ There is an obvious challenge in trying to get academic staff to buy in to the benefits of the AoL process rather than seeing it as an extra burden.
  - ▶ A change management process is required to promote the necessary cultural change.
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