Across the curriculum landscape in Australia – a dog’s breakfast?

Association of Australasian International Baccalaureate Schools
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Australian Council for Educational Research
Comparability studies: What the research shows
Outline

Three pieces of research
ACER 2006 - report to DEST
ACER 2007 - report to DEEWR
ACER 2008 - report to IBAP

With reference to:
• The national agenda
• International mapping exercises
Background

“The current diversity in senior secondary curriculum structures and assessment regimes across Australia may be indicative of differing standards of achievement” (DEST, 2005)
Research 1

Australian Certificate of Education: Exploring a way forward (ACE)

National consistency and comparability? (Amongst other questions)
Research 2

Year 12 Curriculum Content and Achievement Standards (CAS)

• What is currently offered in syllabuses/curriculum frameworks across the country?
• What is considered to be essential for all students studying those subjects?
• What standard are students currently required to attain across the country to be awarded the highest available grade in each of those subjects?
Research 3

Comparability of the IB diploma and the Australian states’ curricula
Curriculum is a complex construct

• Curriculum is not merely about the 'stuff' of teaching and learning as captured by a list of subject offerings or a school timetable.
• Investigations must address at least five categories.
Curriculum verification chain

1. Desired curriculum
2. Developed curriculum
3. Enacted curriculum
4. Assessed curriculum
5. Learnt curriculum
About Research 1

Australian Certificate of Education: Exploring a way forward (ACE)

National consistency and comparability? (Amongst other questions)
Rationale for national consistency

• Reduce difficulties for students moving between states and territories
• Assist national reporting on student learning outcomes
• Identify essential learnings that prepare students for an Australian and global society
Rationale for national consistency (contd)

• Utilise to the maximum effect scarce curriculum resources
• Assist universities to develop teacher programs that are appropriate to all Australian students
• Reduce the new learning required of teachers who move between jurisdictions
National consistency and comparability?

• There are similarities
• There are differences
Similarities

• In intentions
• In helicopter view
Clear differences

- In curriculum
- In assessment
- In certification
- Of a general nature
Curriculum differences

• In models of curriculum/syllabus development/frameworks
• In subjects given same name or very similar name (and vice versa)
Subject offerings
## Family of names

<table>
<thead>
<tr>
<th>Ancient History</th>
<th>Ancient Civilisations</th>
<th>Ancient History</th>
<th>History: Renaissance</th>
<th>Classical Studies</th>
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<td>History: Revolutions</td>
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## Same name

<table>
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## Overlap

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<th>Legal Studies</th>
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<tr>
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<td>Political Studies</td>
<td>Political Studies</td>
<td><strong>Australian &amp; International Politics</strong></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>Politics &amp; Law</strong></td>
</tr>
</tbody>
</table>
Similar names

- Agriculture
- Nil
- Agricultural Science
- Agriculture & Horticultural Studies
- Agricultural & Horticultural Science
- Agriculture
- Business Studies
- Nil
- Business Organisation & Management
- Business Management
- Nil
- Business Management & Enterprise
**Mix and match**

|-----------------------------|------------------------|------------------------|-------------------------------|-------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------|
## English (TER) offerings

<table>
<thead>
<tr>
<th>English (Advanced)</th>
<th>English Studies</th>
<th>Senior English</th>
<th>English</th>
<th>English Studies</th>
<th>Year 12 English</th>
<th>English (T)</th>
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<tbody>
<tr>
<td></td>
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<td>Senior English</td>
<td>English (A)</td>
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<td>English (Standard )</td>
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<td>English Extension Course 1</td>
<td>English Extension (Literature)</td>
<td>Literature</td>
<td>English Literature</td>
<td>World Literature (T)</td>
<td></td>
</tr>
<tr>
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<td></td>
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<tr>
<td></td>
<td>English Writing</td>
<td></td>
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<tr>
<td></td>
<td>English Communications</td>
<td>English Communications</td>
<td>Vocational English</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESL</td>
<td>ESL</td>
<td></td>
<td>ESL</td>
<td>ESL</td>
<td>ESL</td>
<td>ESL (T) ESL (A)</td>
</tr>
</tbody>
</table>
What the English table shows

• 18 TER English courses on offer across Australia, not including courses in ESL
• Four of these courses contain the word ‘Literature’ in their title.
• A literature component exists, more or less, in most of the 14 other TER English courses
• Either way, ‘literature’ includes not only English Literature but also Australian Literature and literary texts from other
Huge range of TER courses on offer

Messages conveyed

1: Response to the increased retention rates and concomitant variation in learning needs of students in recent years.

2. Extent to which the jurisdictions have deliberately chosen names for new subjects or for extra levels of existing subjects that are not the same as those chosen by other jurisdictions.

The phenomenon of unpredictable variations on a theme (such as subject name or assessment method) is an issue that pervades all comparability
Assessment differences

• In balance of arrangements and modes of assessment
• In underpinnings of assessment and standards
  - Methods for measuring/judging student achievement
• Procedures for ensuring comparability of standards in reported results
• Procedures for combining results in different subjects (for devising tertiary
High-stakes assessment

- Internal
- External
- Mixture

- Criteria-based
  - Standards-referenced
  - Normative
  - None of the above

- Social moderation (consensus)
  - Social moderation (visitation)
  - Statistical moderation
  - Calibration
Certification differences

- In eligibility requirements for the award
- In nomenclature for reporting results
Top grades

- ACT
- New South Wales
- Queensland
- Victoria
- Tasmania
- South Australia

- A
- Band 6
- Very High Achievement
- 40+
- Exceptional Achievement
- Outstanding Achievement
General differences

• In rationale given for certain procedures
• In usage of fundamental terms
There are reasons for the differences

- Accidental
- Historical
- Conceptual
- Compromise
Helicopter view

• Would show major commonalities.
• Major commonalities have historical origins in the culture and values of Australia.
• Pilot would know she is hovering over Australia and not somewhere else.
ACE Report: Recommendation 2

That achievement standards (described and illustrated levels of achievement) be developed to make students’ results in [those] subjects more comparable across Australia.
About Research 2

Year 12 Curriculum Content and Achievement Standards (CAS)

• What is currently offered in syllabuses/curriculum frameworks across the country?
• What is considered to be essential for all students studying those subjects?
• What standard are students currently required to attain across the country to be awarded the highest available grade in each of those subjects?
Subjects for CAS study

- English (including Literature)
- Mathematics
- Chemistry
- Physics
- Australian History
Curriculum content and achievement standards

- **Offered** → **Common**
  - **Consistent**

- **Common** → **Essential**, desirable, possible, not desirable, left out

- **Expected, assessed, rewarded** → **Comparable**
Commonality

- Mapping
  - Desk analysis
- Product = % estimate of consistency
  - Subject matter
  - Skills
Skills, values

- English (incl. Lit.) 30% +
- Australian History 75% +
English skills

- Making meaning through texts
- Understanding the role of context in text construction and interpretation
- Critical thinking
- Participating in society
- Social cohesion
- Effective communication skills
- Using correct spelling, punctuation and grammar
- Self-understanding
- Developing personal identity
- Understanding values, ideas, attitudes, beliefs; past, present and change
- Understanding cultural diversity
<table>
<thead>
<tr>
<th>Text type</th>
<th>Cross-AU mandated texts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total texts over 2 years</td>
<td>Variation across jurisdictions&lt;br&gt;Common requirement is min. 2</td>
</tr>
<tr>
<td>Shakespeare</td>
<td>No mandatory requirement&lt;br&gt;Could be selected for study from lists</td>
</tr>
<tr>
<td>World literature</td>
<td>No mandatory requirement&lt;br&gt;Could be selected for study from lists</td>
</tr>
<tr>
<td>Poetry</td>
<td>No mandatory requirement&lt;br&gt;Could be selected for study from lists</td>
</tr>
<tr>
<td>Prose: Novel or Short story</td>
<td>Mandatory</td>
</tr>
<tr>
<td>Prose: Other than Novel or Short story</td>
<td>No mandatory requirement&lt;br&gt;Autobiography, biography, travel narratives, common in text lists, can be selected</td>
</tr>
<tr>
<td>Film</td>
<td>Films and Film Scripts, in text lists across states, can be selected</td>
</tr>
<tr>
<td>Media texts</td>
<td>Mandated in some states as part of Study of Language and/or Issues</td>
</tr>
<tr>
<td>Australian Literature</td>
<td>Mandated in some states</td>
</tr>
</tbody>
</table>
Essentialness

- Reviewing
  - Survey (blind)
  - Subject experts
  - Four perspectives
- Products = set of bar graphs + comments
Reviewers

1. Academic
2. Professional
3. Teacher-educator
4. Practitioner
Reviewers’ ratings: Text types

Three groups
1. Essential
   • Top three: Prose fiction, Australian author/content, and
   • Contemporary literature
2. Intermediate
   • Film to Shakespearean drama
3. Non-essential
Comparability?

- Aspirational standard
- Aspects of performance
- Difficulty of items, questions, exams, tasks
- Assessment differences
• Possible to identify the **kinds of achievements** that states/territories expect, value and assess

• Not possible to draw conclusions about **relative performance**
  - Different terminology
  - Different assessment regimes
  - Requires primary evidence (i.e. student
Common intentions, different practices, eight jurisdictions, Australia circa 2006

- In particular, assessment
  - In particular, getting comparability
Linking results from distinct assessments

Making results of one test or set of assessment tasks comparable to those of another
Comparability

Standards are applied consistently across judges (teacher-assessors) and across sites (schools, regions, jurisdictions) so that student performances of equivalent standard are recognised as such (e.g. assigned the same grade)
# Moderation

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Form</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Social moderation</td>
<td>Statistical moderation</td>
</tr>
<tr>
<td>Validation</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>Scaling</td>
<td>N</td>
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</table>
## Standardised tests and scaling

<table>
<thead>
<tr>
<th></th>
<th>AST in ACT</th>
<th>GAT in VIC</th>
<th>QCS in QLD</th>
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<tbody>
<tr>
<td><strong>Name of test</strong></td>
<td>ACT Scaling Test</td>
<td>General Achievement Test</td>
<td>Queensland Core Skills Test</td>
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<td><strong>Used ASAT before</strong></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Developed in present form</strong></td>
<td>1992</td>
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<td><strong>Individual results reported</strong></td>
<td>No</td>
<td>No (but available to schools)</td>
<td>Yes (A–E)</td>
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<tr>
<td><strong>Scaling device</strong></td>
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<td>Yes</td>
<td>Yes</td>
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<tr>
<td><strong>Validation device</strong></td>
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## Purpose: Validating teacher judgments

<table>
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<tr>
<th>Form</th>
<th>Technique</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Social</td>
<td>Panels; teacher meetings</td>
<td>ACT, QLD, SA, TAS, WA</td>
</tr>
<tr>
<td></td>
<td>Visitation</td>
<td>SA, WA</td>
</tr>
<tr>
<td>Statistical</td>
<td>Using external examinations</td>
<td>NSW, SA, TAS, VIC, (WA)</td>
</tr>
<tr>
<td></td>
<td>Using other measures</td>
<td>VIC (GAT)</td>
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</table>
**Purpose: Putting results onto common scale for TE**

<table>
<thead>
<tr>
<th>Form</th>
<th>Technique</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statistical</td>
<td>Using a standardised test</td>
<td>ACT (AST)</td>
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<td>QLD (QCS)</td>
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<td></td>
<td>Using external examinations</td>
<td>VIC</td>
</tr>
<tr>
<td></td>
<td>Using other measures</td>
<td>NSW (other subjects)</td>
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</table>
'A dog’s breakfast'

- Situation with Australian curriculum
- Geoff Masters, CEO of ACER, in 'The Sydney Morning Herald' etc.
This mapped against that

<table>
<thead>
<tr>
<th>AEA</th>
<th>AUS</th>
<th>Australian states</th>
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<tr>
<td>AP (USA)</td>
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<td>IB</td>
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<td>AU states</td>
<td>GCE</td>
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<td>This is Research 3</td>
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<td>AP (USA)</td>
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</table>
About Research 3

Terms of reference

1. Investigate the depth, breadth and standards of four HL subjects in the IBD
   - Language A1
   - Mathematics
   - Chemistry
   - History

2. Draw conclusions about they compare
Comparing like with like?

• Matching partners
• AU subset or superset as basis
• Within-AU variation
• Interaction of depth, breadth and time
• 'All exercises in examination comparability present formidable problems ... some of the questions are almost impossible to answer' (QCA, 2003)
Our way of thinking

1. Multiple possible comparisons
2. What determines the answer
3. Assumption about professionalism
1. Multiple possible comparisons

IB curriculum design ↔ AU curriculum design

IB assessment (the instrument: exams) ↔ AU assessment (the instrument: exams)

IB assessment (the student: performance) ↔ AU assessment (the student: performance)
2. Relativity of standards of outcomes delivered by different systems/organisations

• Students in IB courses with IB assessments are privileged over students in IB courses assessed under AU conditions
• Students in AU courses with their particular state’s assessment system are privileged over students in AU courses assessed under IB conditions
• Can’t really compare X and Y but could compare how X and Y go at Z
3. Assumptions about professionalism

I believe that it is highly unlikely that professionals would design a course or adopt procedures for assessment that would overtly deliver sub-standard outcomes for young people, be they IB candidates or students in the AU states’ curricula.

It can happen with the IBD, of course, if:

• Excellence gets confused with elitism
Impressions about IBD

• Definite philosophy
• Packaging (vs fragmentation, cherry picking)
• Precision of expression
  - Content specification
  - Mark schemes
• Rigour
  - Rhetoric meets reality
• Combining modes/format
  - Exploiting
By-products of IB study

• Nuanced understanding of the limitations of comparative studies
• Clarity about the desirable features of an assessment program, specifically one that includes external examinations
• Being in a prepared state for the period ahead nationally and