Competency based assessment of practicum

Lessons learned from Downunder

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Team Acknowledgements

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Overview
What we have learned about assessment
• Strong theoretical grounding
• Good development process
• Keep it up! Ongoing attention to validation and implementation
• And more…
Demonstration of COMPASS® 2 Online

1. Strong theoretical grounding
• Valid test design
• Competency: Know what you mean
• Assessment and learning

Valid test design
Modern test theory (Brualdi, 1999)
• Tools are not valid: Judgements made based on scores should be
• Validating the proposed interpretation and use of the test scores (AERA 1999)
Validation involves collecting, evaluating and integrating evidence across interrelated aspects of validity.

Validity cont.
Messick's model (adapted from McAllister et al, 2010)

<table>
<thead>
<tr>
<th>Validity</th>
<th>Focus</th>
<th>Strategy e.g.s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>Is the content relevant and representative of speech pathology competencies?</td>
<td>Generics and occupational competencies, consultation</td>
</tr>
<tr>
<td>Substantive</td>
<td>Is the assessment process and data derived consistent with theoretical models of competency development?</td>
<td>Does the data behave as expected e.g. more experience = improved performance</td>
</tr>
<tr>
<td>Generalizability</td>
<td>Can the assessment results be generalised across the student’s whole performance in the placement, or even across other fieldwork placements and caseloads?</td>
<td>Sufficient observations, similarity of ratings, reliability</td>
</tr>
<tr>
<td>External</td>
<td>Does the assessment yield similar results to other assessments of competent performance on placement?</td>
<td>Not available</td>
</tr>
<tr>
<td>Structural</td>
<td>Does the rating scale accurately measure a range of competent performance?</td>
<td>Rasch analysis: Rating Scale model</td>
</tr>
<tr>
<td>Consequences</td>
<td>Are the assessment results a good basis for action? Are there other consequences to consider?</td>
<td>Caution: weigh in other evidence</td>
</tr>
</tbody>
</table>

Discussion

Defining competency
Pair up.
Brainstorm:
What would you see a student DO that would give you confidence that they are ready to enter the profession?

Feedback
Defining competency

Professional competence is the competent exercise of complex professional judgement to inform action across all tasks and contexts of the profession. (McAllister, 2006; Hager, 2000)

Combination of

- Occupational competencies (CBOS)
  What do we want graduates to be able to DO?
- Professional competencies (CBOS + COMPASS®)
  HOW do we want them to do these things?

Competency Units descriptors


Australian SLP competencies

<table>
<thead>
<tr>
<th>Occupational Competencies</th>
<th>Professional Competencies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>Learning</td>
</tr>
<tr>
<td>Analysis &amp; Interpretation</td>
<td>Reasoning</td>
</tr>
<tr>
<td>Planning EB SLP services</td>
<td>Professionalism</td>
</tr>
<tr>
<td>Implementation of SLP practice</td>
<td>Communication</td>
</tr>
<tr>
<td>Planning, providing, managing SLP services</td>
<td></td>
</tr>
<tr>
<td>Professional and supervisory practice</td>
<td></td>
</tr>
<tr>
<td>Lifelong learning and reflective practice</td>
<td></td>
</tr>
</tbody>
</table>
Assessment and learning

Assessment drives learning, therefore
• Assessment should serve curriculum goals
• Formative and summative
• Content should
  – Have good coverage of the domain i.e. defines the profession
  – Be clearly expressed (unit, elements, performance indicators, cues)
• Incorporate into educational design

Assessment and subjectivity

Assessment is subjective = process should support ethical and attentive judgement
– Occurs in the workplace
– Based on sufficient evidence
– Supported with good design and resources
– Clearly expressed criteria
– Rating scales reflect judgment process
Discussion

Making judgements
Groups
2013 - training - module 1 learning activities EXCERPT.pdf

Task A
- materials include next slide +
  behavioural descriptors on last page
- Work on Novice & Intermediate

Competency to discuss

Unit 1: Assessment
- 1.1 Investigate and document the client’s communication and/or
  swallowing condition and explore the primary concerns of the
  client.
- 1.2 Identify the communication and/or swallowing conditions
  requiring investigation and use the best available scientific and
  clinical evidence to determine the most suitable assessment
  procedures in partnership with the client.
- 1.3 Administer speech pathology assessment relevant to the
  communication and/or swallowing condition.
- 1.4 Undertake assessment within the ethical guidelines of the
  profession and all relevant legislation and legal constraints,
  including medico-legal responsibilities.

Feedback
Novice student: Behavioural exemplars
The following are examples of the types of behaviours that may be shown by a Novice-level student. The student may:
• identify the presenting condition, related issues and the significant people in the client’s life, with a high level of input from the CE
• develop an adequate assessment plan, with a high level of support from the CE, including discussion, reference to theory and direct feedback
• suggest assessment options and procedures based on his or her recall and understanding of relevant theory, usually focused on formal, rather than informal, assessment
• perform informal assessment in close collaboration with his or her CE
• administer formal assessments according to the manual instruction, and after discussion and practice
• focus on his or her own performance of the formal assessment process and not on the client
• apply ethical and legal guidelines involved in assessment, with direction from the CE.

Intermediate student: Behavioural exemplars. The student may:
• establish the nature of the primary presenting communication and/or swallowing condition, with support and some direction from the CE to ensure all relevant information is accessed and collated, and a comprehensive picture developed
• develop an assessment plan with discussion, reference to theory and evidence and reflection on feedback from the CE
• identify key components of a quality assessment procedure for simple or previously experienced cases, but may neglect some aspects
• generate suggestions for more complex cases based on his or her prior experience with assessment and with reference to his or her understanding of relevant theory and current evidence
• finalise a quality assessment plan for more complex cases, with a high level of assistance
• recognise the role of informal assessment, and develop and implement informal assessment with significant support
• administer formal assessments consistently and efficiently, but may neglect qualitative information that is yielded during the process
• apply ethical and legal guidelines for assessment, with support.

After completing the mid-placement Assessment sheet for this unit, overall competency on this unit at mid-placement is judged to be at this point of the rating scale.

After reviewing progress over the placement, overall competency is judged as being at this point of the rating scale.
2. Development process

1st edition (launched 2006)
• 18 months consultative design phase
• 12 month field trial
• Qualitative and quantitative data analysis

2nd edition (launched 2013)
• Expert team
• Aust & NZ online consultation
  – 381 Clinical educators
  – 293 Students

Key features
• Involve students, clinical educators and university educators
• Consult, collaborate and build consensus
• Attend to quality:
  – Development
  – Consultation
  – Teamwork

3. Keep it up!

Ongoing attention to validation and implementation
• Multiple national projects
• Key themes in project evaluation
  – Collaborative not competitive
  – Consultative
  – Communicative
  – Cyclical: Plan, Do, Study, Act
2001 – 2005
ARC Linkage Grant
Development and testing of a competency based assessment tool

2006
Speech Pathology Australia (SPA)
Published tool + training resources as COMPASS®. Provided to all Australian universities

2006 - 2008
Carrick Leadership Project
National roll-out and training in use of the assessment tool

2006 – 2008
Carrick Priority Project
Development of the process and trial of national benchmarking of student learning outcomes in speech pathology

2006 - 2010
SPA
Developed and launched COMPASS® Online

2009 – 2011
ALTC Priority Project
Infrastructure and implementation of national benchmarking in speech pathology for curriculum renewal

2011
SPA
Revised Competency Based Occupational Standards

2012-2013
HWA/SPA grant
Developing training and support resources and upgrading to include 2011 competencies

2014
Revalidation of new format

Success drivers

- Attending to impact on learning and teaching as well as assessment
- Outcomes focus
- Genuine intention to create outcomes the discipline wanted
- Committed teams
- Timing
  - Meeting current/emerging needs
  - National agendas

4. And more…!

How the Australian (and NZ) speech pathology discipline conceptualised competency

- Combination of occupational and professional competencies
- Developmental
- Inferred through observation

Clinical educators

- wanted to remain central to the decision making process
- made valid judgements
- value their educator role
And more…! cont

CEs and students remain anxious about 'fairness'
Rater training not essential, hypothesise
• Assessment design supports quality judgement
• Strong shared understanding of competency approach already exists
Rater training is desirable because
• Supports quality judgement and management of bias
  (http://www.flinders.edu.au/medicine/sites/better-judgement/)
• Strengthens relationship with university
• Develops confidence and provides support
• Provides opportunity to move beyond accurate rating into teaching and learning strategies and skills

Assessment design important
• delivering information needed at point of decision
• ensuring integration of teaching/learning with assessment
• clinical educators as partners/facilitators of process with students
Clinical educators and students still like it (2013 survey)
Clinical Educators: Students:

<table>
<thead>
<tr>
<th>Frequency (%) (N=381)</th>
<th>Frequency (%) (N=381)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definitely</td>
<td>Definitely</td>
</tr>
<tr>
<td>17.6 (67)</td>
<td>7.2 (21)</td>
</tr>
<tr>
<td>Mostly</td>
<td>Mostly</td>
</tr>
<tr>
<td>57.5 (219)</td>
<td>57.3 (198)</td>
</tr>
<tr>
<td>Somewhat</td>
<td>Somewhat</td>
</tr>
<tr>
<td>18.4 (70)</td>
<td>23.9 (76)</td>
</tr>
<tr>
<td>Marginally</td>
<td>Marginally</td>
</tr>
<tr>
<td>3.9 (15)</td>
<td>7.2 (21)</td>
</tr>
<tr>
<td>Not at all</td>
<td>Not at all</td>
</tr>
<tr>
<td>1.6 (6)</td>
<td>8.9</td>
</tr>
<tr>
<td>No response</td>
<td>No response</td>
</tr>
<tr>
<td>1.0 (4)</td>
<td>7.2 (21)</td>
</tr>
</tbody>
</table>

And more…! cont

Takes time
• Majority take 30 to 60 minutes (54% Mid placement, 59.8% End placement)
• Mid placement takes longer (41.5% longer than 60 minutes vs 22.8% at End placement)
• ? Relates to assessment culture
  – Collaborative
  – Learning oriented
Development and QI takes TIME and EXPERTISE and MONEY
Must be cautious and realistic about data
Nothing is ever perfect!
Things keep changing
Demonstration

Key features
• Online and hard copy
• Formative and summative assessments
• Rating on competency based on observed behaviours & guided by Behavioural Descriptors
• Supported with Behavioural Exemplars and training materials

COMPASS® Online

3 interfaces
• Student
• Clinical educator
• University coordinator

More than just an online form!
Learning activity

COMPASS Workshop activity - module 3
learning activities EXCERPT

And even more…

- University coordinator application
- Benchmarking
- Research

External benchmarking
**Internal benchmarking**

20 students in each stream (N=40).

**Research**

Data available from COMPASS® Online

- ALL placement information (where, with whom, services, intensity of placement, development over time)
- Measures
  - Ratings on each competency (interval like data)
  - Competency score based on all 11 ratings of competency
  - Zone of Competency score: places score in band of performance
  - Variability Indicator
  - Overall rating: non interval overall rating as quality control check against final score
Correlation – First year only

- First placement year - Correlation (Spearman's rho)
  - Between CE and ST at MID .575**
  - Between CE and ST at END .857**