The development and implementation of COMPASS®: Competency Based Assessment in Speech Pathology

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What is COMPASS®?

- COMPASS® is a validated, standardised assessment of observed workplace performance of speech pathology students. Ratings of competency development on a continuum from novice to entry level are made by clinical educators in relation to both generic and occupational competencies.
- Two versions: paper based and online
- Components:
  - Assessment Booklet
  - Resource Manual
  - Technical Manual
  - Training Modules
COMPASS® Online

- Developed by SPA and launched Feb 2010
- Integrates clinical education topic and placement management with assessment
- Web based application with powerful and ‘open-ended’ linked database
- Advantages = no paper handling +
  - Clinical educators
    - One stop shop for all student assessments and resources needed to complete them
    - Communication with university
  - Students
    - Secure collection and transfer of confidential information
  - Universities
    - Storage and management of information to assist with administrating units of study
    - Integrated reports on student performance
    - Communication with clinical educators
- Also – high integrity data for Quality Improvement activities to benefit all 3 parties through internal and external benchmarking, and research
Who’s using COMPASS®?

- All Australian universities providing speech pathology education:
  - Charles Sturt University
  - Curtin University of Technology
  - Edith Cowan University
  - Flinders University of South Australia
  - James Cook University
  - La Trobe University
  - Macquarie University
  - University of Newcastle
  - University of Queensland
  - University of Sydney
  - Griffith University (intake 2012)
  - University of Melbourne (intake 2012)
  - University of Central Queensland (intake 2013)
- All New Zealand universities providing speech pathology education:
  - University of Auckland
  - University of Canterbury
  - Massey University
- Several South East Asian universities
  - National University of Singapore
  - Hong Kong University
  - National University of Malaysia (trialling)
Assessment overview

Rating booklet PLUS Assessment Resource Manual with ‘layers’ of information

1. Clearly described professional competencies
   - 4 Generic Professional Competencies + 7 Competency Based Occupational Standards
2. Visual Analogue Rating Scale
3. Behavioural Descriptors
4. Supports valid judgement
   - Based on sufficient evidence
   - Occurs in a valid context: the workplace
5. Formative and Summative
   - Mid and End placement ratings
6. Scorable – validated as a measure of performance
Generic Professional Competencies

4 Generic Professional Competencies
- Reasoning
- Communication
- Lifelong Learning
- Professional

For example: Unit 3: Lifelong learning
3.1 Reflects on performance
3.2 Structures own learning/professional development
3.3 Demonstrates an appropriate attitude to learning
3.4 Able to change performance

Extract from COMPASS® (McAllister et al, 2006)
Competency Based Occupational Standards

7 Competencies, Speech Pathology Association of Aust. (2001)

- Assessment
- Analysis and Interpretation
- Planning Speech Pathology Intervention
- Speech Pathology Intervention
- Planning, Maintaining and Delivering Speech Pathology Services
- Professional, Group and Community Education
- Professional Development

To be updated with 2011 competencies
Behavioural Descriptors

Competence develops along a continuum from novice to entry-level

3 levels described: Novice, Intermediate, Entry-Level

Developed with reference to

- SOLO Taxonomy (Biggs & Collis, 1982)
- Stages in skill acquisition (Benner, 1984; Dreyfus & Dreyfus, 1996)
- Degree of support required (Anderson, 1998; Brasseur, 1989)

Describe the development of student’s ability to

- Manage complexity
- Transform knowledge into practice
- Work independently
Behavioural Descriptors + VAS

- Observed behaviours and judgment against the descriptors determine where the mark is made on the rating line of the VAS for each competency
- Always visible when rating
- E.G. Mid Placement Assessment

Extract from COMPASS® (McAllister et al, 2006)
Activity A

Observable performances

- Handout one: identifying observable performances for each of the 3 described levels of development
- Handout two: discuss and reflect against those provided in COMPASS®
Visual Analogue Scale

- Used Rasch analysis to identify where the categories actually fall
- Allows to show change without worrying about whether it warrants changing up or down a category of performance
- Well received by students and clinical educators
Entry-level (Competent) Student

The student is able to

- Performs the majority of his/her work independently and competently.
- Seek support if the situation is new or a number of features about the client or workplace setting combine to create complexity.
- Identify the meaningful aspects of problems and integrate these to generate a number of logically possible conclusions. Conclusions/actions will be modified with new information.
- Prioritise appropriately.
- Be sufficiently automatic and maintains a focus on the client or situation.
- The student is efficient and timely in carrying out his/her work.

Would this descriptor apply for graduates in your country?

Extract from COMPASS® (McAllister et al, 2006.)
Instructional Design

Aims to support learning and teaching as well as assessment judgments

- Supports rater judgement
- Acknowledging subjectivity/role of professional judgment in assessment
- Formative and summative
- Assessment validity
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
Benchmarking

Benchmarking COMPASS® for Curriculum Renewal Project (2008-2011)

AIMS

• Establish an ethical, efficient and sustainable cross-institutional strategy to use COMPASS® data to benchmark assessment of speech pathology student workplace performance;

• Facilitate ongoing engagement with and effective use of benchmarked data to inform curriculum and research on preparing students for practice.
Features of the Benchmarking COMPASS® Database

- Access and terms of use controlled by MOU and Code of Conduct
- Confidentially harvests data
- Controlled confidential access by users
- Confidential student and university results
External Benchmarking

- New courses
- Compare and investigate differences, plan to make changes
- Highlight innovative practices of others
- Raise or maintain standards in the Asia Pacific Region
Example
Limitations

- Clinical competence is one educational measure in speech pathology
- No way to measure and benchmark beyond competent performance
- Nature of “rough” data
Internal benchmarking

20 students in each stream (N=40).

Competencies

1 Reasoning
2 Communication
3 Lifelong learning
4 Professionalism
5 Assessment
6 Diagnosis
7 Planning
8 Intervention
9 Service Manag.
10 Community Ed
11 Professional Dev.

First ADULT CLINIC - 25 days

Zone of Competency (0-7)

Competencies

Average S1
Average S2
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
Current research

- Primarily descriptive – unpacking ‘received wisdom’
- Higher degree students
- Flinders/Sydney/Newcastle research group
Research in progress

- Lyndall Sheepway, University of Sydney
  - An investigation of the impact of placement type on competency development in speech pathology students (sub project)
    - Measures
      - COMPASS® assessment scores
      - Change scores for ratings of individual units

- Stacie Attrill, University of Sydney
  - Influence of cultural and linguistic background on competency development (sub project)
    - Measures
      - COMPASS® assessment scores
      - CALD demographics

- Multi university COMPASS® research
  - Patterns of student development of competency and influencing factors
    - Measures
      - COMPASS® assessment scores
      - Demographics
      - Academic measures
Outcomes: COMPASS

- Psychometrically validated assessment tool generating research quality data
- Wide uptake
- Development of a shared understanding and language between all parties on the nature and process of developing professional competency
- Improved confidence in the assessment process and outcomes by all parties
- Supports accreditation processes

Official Launch of COMPASS®, 2006
Outcomes: Benchmarking

- Supports faster quality improvement cycles
- Universities can identify and share useful educational inputs and processes
- Cross institutional collaboration makes us all stronger (and more enthusiastic)
- Development of research questions
- Strengthens connection between knowledge and skills delivered at university in supporting development of clinical skills
Learnings

Quality of tool enhanced through rigor re understanding of:
- Nature of professional competency and relationship with knowledge, skills and personal qualities
- Assessment and relationship with learning
- Student, clinical educator, employer, profession and university needs re student competency and achievement

Process supported by
- Team members who have been clear about what they are committing to, understand the reality of the risks and have invested in identifying and addressing them.
- Provision of orderly information, consistent and meaningful consultation, effective listening, time to contemplate and debate ideas and opportunities
- Creating environments in which it is safe to debate and in which all contributions are respected
- Mixing old and new hands in the project teams and therefore building and widening capacity within the profession over time
- Funds to support engagement
- Speech Pathology Australia support
For further information

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