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Abstract: This paper presents key results of an evaluation of a project (funded by ALTC), that led the integration of a newly developed competency based assessment tool (COMPASS-™) within all 13 speech pathology education programs nationally. As part of the roll-out process, workshops were provided to close to 1,000 speech pathology clinical educators and students were introduced to the new tool through their lectures and tutorials. In order to provide formative feedback in the early stages of the project (end 2006 - early 2007); a questionnaire (designed to elicit both quantitative and qualitative data) was used following the first 6 workshops (214 educators) and after the first lectures to students at 2 universities (145students). Most educators (95-97%) and students (74-85%) reported understanding the main concepts that inform key components of COMPASSTM (behavioural descriptors, generic competencies, and use of the Visual Analogue Scale). Qualitative feedback indicated a need for further support in relation to understanding the need for direct observation and the use of the Visual Analogue Scale. Toward the completion of the project (end 2007 - early 2008), a similar questionnaire was distributed to clinical educators (33 respondents) and to students in 3 universities (76 respondents). Results continued to be positive for understanding of main concepts for educators (79-100%) and for students (75-92%). An important finding was the close similarity between educators and students in relation to their understandings about the tool, the areas in which they reported wanting more support/training, and the ways in which they would like to obtain further experience. The implications of these findings for the further embedding of the new assessment tool are discussed.

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Engaging educators and students in the roll-out COMPASS™ - a new assessment tool

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This paper presents key results of an evaluation of a project (funded by ALTC), that led the integration of a newly developed competency based assessment tool (COMPASS™) within all 13 speech pathology education programs nationally. As part of the roll-out process, workshops were provided to close to 1,000 speech pathology clinical educators and students were introduced to the new tool through their lectures and tutorials.   In order to provide formative feedback in the early stages of the project (end 2006 – early 2007); a questionnaire (designed to elicit both quantitative and qualitative data) was used following the first 6 workshops (214 educators) and after the first lectures to students at 2 universities (145 students). Most educators (95-97%) and students (74-85%) reported understanding the main concepts that inform key components of COMPASS^{TM} (behavioural descriptors, generic competencies, and use of the Visual Analogue Scale). Qualitative feedback indicated a need for further support in relation to understanding the need for direct observation and the use of the Visual Analogue Scale. Toward the completion of the project (end 2007 – early 2008), a similar questionnaire was distributed to clinical educators (33 respondents) and to students in 3 universities (76 respondents). Results continued to be positive for understanding of main concepts for educators (79-100%) and for students (75-92%). An important finding was the close similarity between educators and students in relation to their understandings about the tool, the areas in which they reported wanting more support/training, and the ways in which they would like to obtain further experience.   The implications of these findings for the further embedding of the new assessment tool are discussed.

Keywords: *assessment, professional education, speech pathology*

Introduction

This paper reports on part of the evaluation process for a project that aimed to build the capacity of speech pathology academic and clinical education leaders, to integrate a newly developed competency based assessment tool within their learning, teaching and assessment practices in curriculum across all 13 higher education speech pathology programs in Australia. The COMPASS™ assessment approach is based on sound educational theory and practice, and has been empirically validated (McAllister, 2005; McAllister, Lincoln, Ferguson, & McAllister, 2007, 2004). Speech Pathology Australia supported the development of the tool to final stage, including the development of training modules to introduce the tool to community speech pathologists, and published the tool in late May 2006 and provided it free of charge to all Australian programs (McAllister, Lincoln, Ferguson, & McAllister, 2006).

Effective uptake and integration of COMPASS™ into both university and workplace based learning, teaching and assessment practice would rely on the entire community of practice (Wenger, 1998) understanding the relevance of the tool to their current practice, and actively engaging in understanding and applying COMPASS™ in a wide variety of relevant contexts. The degree of the community's engagement was anticipated to have a significant impact upon the learning associated with the assessment process (Boud, 2000) and the validity of the assessment generated by the tool and subsequent actions based on that assessment (Messick, 1996; McAlister, Lincoln, Ferguson, & McAllister, 2008). Engagement with the new assessment tool was facilitated by active collaboration with the community of practice in its development (McAllister, Lincoln, Ferguson, & McAllister, 2008). The community of practice included both expert members, as well as 'novices', i.e. speech pathology students at the 'periphery' of the community (Lave & Wenger, 1991).

Engagement with educators and students was maintained through the subsequent national roll-out of the tool, by the adoption of a strategic approach using a three layer 'cross level' implementation process. This approach used a multi-level model of leadership with reference groups established to reflect the distribution of key stakeholders: professional association representatives, higher education institutions (involving university heads of programs, university clinical education coordinators), the professional community of speech pathologists providing clinical education, as well as student representatives. The project focused in particular on a high engagement strategy with the university academic staff with primary responsibility for the development and management of the speech pathology clinical education experience component of the programs (described in this paper as 'university clinical education coordinators'), identifying these educators as the major active catalysts for change (Kotter, 1996). The Project Team supported this group through a range of activities e.g. face-to-face individual and group skill development, telephone, email, web-based discussion groups, teaching materials and activities. This support was designed to increase this group's capacity to engage others in integrating the new tool into the curriculum, in a manner that would maximise its usefulness as a strategy for high quality learning, teaching and assessment process, that is, through engaging with their fellow academic speech pathology staff, speech pathologists who provide clinical education in their program(s) (whether directly employed by the university or by other employing agencies – described in this paper as 'field educators'), and their students.

The focus of the evaluation process during this roll-out phase was both formative and summative. Evaluations were carried out both over the early stages of the project to inform project activities and at the end of the project to evaluate the extent to which the tool was effectively integrated. Effective integration was defined as the users of the tool being able to apply the key principles of COMPASS™, and understand and be confident in using the new assessment tool.

Methods
The evaluation process involved the use of a mixed methodological approach (Creswell, 2003), in order to obtain quantitative data through a questionnaire with scaled responses that would enable comparisons across groups of participants, as well as qualitative data through written responses to brief scenarios, that would act formatively to inform the ongoing process of rolling out the new tool.

Participants

Field educators completed the questionnaire immediately after attending a workshop that introduced the new assessment tool: 214 field educators (response rate 89%). Students completed the questionnaire after attending a 2 hour lecture that introduced the new tool: 145 students (response rate 92%).

At the end of the project period, the summative evaluation questionnaire was completed by 33 field educators and 76 students, with additional information provided by 6 university clinical education coordinators (from a total of 9 universities).

Content of workshops & lectures

The workshops made use of the educational materials that are included in the published version of the tool (McAllister et al., 2006). These training materials consist of three Modules: the first Module involving an introduction to the concepts and processes involved in COMPASS™, the second Module involving a more detailed focus on the assessment for learning, and the third Module on ways to use the tool to assess and support the learning of marginal students. The workshops in the formative evaluation stage primarily involved both Modules 1 and 2. The materials include content provided on PowerPoint® slides, including a script and voice-over option for self study. The training is highly replicable, while providing for responsive and individualised tailoring of content for participants in the range of interactive learning activities provided.

The prototype module presented in the lectures to students was designed as an introduction to COMPASS™ for students in advance of their first practicum, in which they would be assessed using the tool. The module included PowerPoint® slides prepared as part of the Module 1 Training for speech pathologists, as well as further detail on the Units of competency, and how COMPASS™ would be used within the degree program at the students' University.

Evaluation tool

The questionnaire required three types of responses: responses in relation to brief scenarios that tapped ability to apply the content of the educational experience, self ratings of perceived understanding and confidence in using various aspects of the COMPASS™, and open ended questions. The questionnaire was adapted for use in the evaluation of the lectures to students, and selected questions were also used in the questionnaire for university clinical education coordinators. The current report presents the results from the shared items from the questionnaires.

Results

Indicators of ability to apply content of the new assessment tool

Indicators of educators' and students' ability to apply the content of the new assessment tool were sought only in the formative evaluation stage. The ability of field educators and students to apply the content of the tool was tapped through brief scenarios with questions covering the need for direct observation of competency, and how to use the tool to assess collaboratively. The written responses were rated in terms of the extent of application of the principles and procedures involved in the new assessment tool ('full', 'partial', 'none').

For the field educators, consideration of the frequency distribution of ratings of responses (see Table 1), provided feedback that further support was required for both field educators and students, to recognise the importance of direct observation in the assessment of competency

(i.e. rather than inferring competency based on other performance). Approximately ten per cent (9.6%) of field educators and 17.6% of students' responses indicated no application of this central principle. On the other hand, the collaborative processes involved in the use of the tool appeared to have been well understood through the educational experience, given that 99% of field educators' and 98.5% of students' responses indicated partial or full application of this process.

Table 1: Field educators' ability to apply content of COMPASS™ – frequency distribution

Response indicates application of content regarding:	*Respondent*	*n*	*No Application (1)* *#(%)*	*Partial Application (2)* *#(%)*	*Full Application (3)* *#(%)*
The need for direct observation of competency	Field educators	208	20 (9.6%)	50 (24.1%)	138 (66.3%)
	Students	131	23 (17.6%)	25 (19.1%)	83 (63.3%)
How to work collaboratively with the student using the tool	Field educators	204	2 (0.9%)	70 (34.3%)	132 (64.7%)
	Students	135	2 (1.5%)	53 (39.3%)	80 (59.2%)

Indicators of perceived understanding and confidence in using COMPASS™
All 6 university clinical education coordinators rated their confidence as 'much higher compared to before the project started' (compared with 'higher', 'no difference', 'lower', 'much lower') in using COMPASS™ in their speech pathology program as a learning, teaching and assessment tool.

Indicators of field educators and students perceived understanding and confidence in using the new assessment tool were sought in both the formative and summative evaluations. Respondents were asked to rate their level of agreement with four statements regarding their perception that they understood how to use the tool's behavioural descriptors, that they could use the generic competencies to judge behaviour, were able to represent their judgement on the Visual Analogue rating scale (VAS), and were confident that they knew how to use the tool.

The perceived understanding and confidence in the use of the Visual Analogue rating scale was a source of some concern. Immediately after their introduction to the tool, 9 of 147 students (6.1%) disagreed or strongly disagreed that they were able to represent their judgement on the VAS. This perception continued at follow-up, with 8 of 76 students (10.5%) disagreeing or strongly disagreeing that they were able to represent their judgement on the VAS. However, for other aspects of the tool, and in relation to their overall confidence with the tool, the results indicated that most field educators and students were feeling comfortable with the new assessment tool, both immediately after their introduction to the tool, and with an increased proportion of agreement by the end of the roll-out period.

Table 2: Perceived understanding and confidence in using COMPASS™ - frequency distribution of ratings

Self-rating regarding:	*Respondent*	*Form /summ-ative* *n*	*Strongly disagree* *# (%)*	*Disagree* *# (%)*	*Neither agree nor disagree* *# (%)*	*Agree* *# (%)*	*Strongly Agree* *# (%)*
Understand how to use the behavioural descriptors	Field educators	212 33	0 0	2 (0.9%) 0	4 (1.9%) 0	125 (58.9%) 22 (66.7%)	81 (38.2%) 11 (33.3%)
	Students	148 76	0 0	7 (4.7%) 4 (5.3%)	15 (10.1%) 6 (7.9%)	113 (76.4%) 56 (73.6%)	13 (8.8%) 10 (13.2%)
Can use the generic competencies to judge behaviour	Field educators	211 33	0 0	3 (1.4%) 0	7 (3.3%) 0	137 (64.9%) 19 (57.7%)	64 (30.3%) 14 (42.3%)
	Students	148 76	0 0	13(8.8%) 9(11.8%)	26 (17.6%) 5 (6.6%)	98 (66.2%) 52 (68.4%)	11 (7.4%) 10 (13.2%)
Are able to represent your judgement on the VAS	Field educators	212 33	0 0	1 (0.5%) 1 (3%)	6 (2.8%) 6 (18.2%)	108 (50.9%) 18 (54.6%)	97 (45.8%) 8 (24.2%)
	Students	147 76	1 (0.7%) 2 (2.6%)	8 (5.4%) 6 (7.9%)	17 (11.4%) 11 (14.5%)	90 (61.2%) 40 (52.6%)	31 (21%) 17 (22.4%)
Are confident that you know how to use COMPASS™	Field educators	212 33	0 0	3 (1.4%) 0	21 (9.9%) 0	132 (62.3%) 18 (54.5%)	56 (26.4%) 15 (45.5%)
	Students	148 76	3 (2%) 0	2 (1.4%) 1 (1.3%)	8 (5.4%) 5 (6.6%)	103 (69.6%) 46 (60.5%)	32 (21.6%) 24 (31.6%)

Qualitative feedback

Qualitative comments from field educators and students were strikingly similar. Both groups were highly positive about the design of the interactive learning experiences provided, while at the same time there were suggestions made independently from both groups that more 'real-life' scenarios and learning experiences would assist the development of their understanding and competence with the tool.

For the purposes of this paper, qualitative comments have been summarised (see Table 3) with reference to feedback that indicated engagement or difficulties in engagement with the new assessment tool. As a guide to the features in the discursive feedback that indicated the concept of 'engagement', the features of engagement which have been discussed in the literature were used, i.e. active learning, collaborative learning amongst students, student-educator interaction, high level of academic challenge, respect for diverse skills and ways of learning, supportive and enriching environment (Chickering & Gamson,1999, 1987; Coates, 2007; Kuh, Pace, & Vesper, 1997; NSSE, 2003; Pollard, 2008). Actual comments have been chosen to represent main issues that emerged from analysing the content of the feedback (Lupton, 1999).

Table 3: Summary of qualitative feedback

	Comments indicate engagement with the new tool	*Comments indicate difficulties in engagement with the new tool*
University clinical education coordinators	*I plan to find time to read and contribute more to the group website this year as this is also a great resource for our program.*	*Different foci of clinical education in different universities and different previous forms of assessment impact on implementation, acceptance of COMPASS™*
Field educators	*(Tool helps) understanding specific areas that are being assessed.*	*(Need) more scenarios re how to score students on particular competencies.*

	The generic components together with their respective descriptors have been invaluable in framing feedback and setting goals in the formative assessment *Having the one line/scale perhaps helps supervisors/students to see their clinical learning as an overall continuum rather than separate pracs/units.*	*It compartmentalizes students and doesn't allow for the measurement of some really important skills.* *Students have mentioned that supervisors still use the visual scale in different ways, so that they can't really compare their progress against their friends in another similar placement.*	
Students	*I felt I wasn't competing for marks to prove myself as a clinician, but rather it became more holistic. Rather than thinking about what I could do to get the next mark, I was thinking of how to improve myself overall on the scales. Also, when a placement was over, the COMPASS™ helped in seeing how far I still have to go and it reinforced the concept of lifelong learning.* *The analogue scale is a helpful way to mentally track my own progress and competence in various communication and swallowing areas. I think I will be borrowing this idea for my reflective learning as a new graduate.*	*My main concern was the lack of experience/training both myself and final 2 clinical educators had in using tool – took more time than needed in organising hard copy etc.* *I found that I was not sure of how I should rate myself, especially on my first clinical placement. I felt unsure of how to rate my performance, especially as a novice student, as we have not had experience in clinic.*	

Discussion

Overall, both the results of formative and summative evaluation suggested that the educational experiences and support provided by the project to university clinical educators, field educators and students were successful in supporting the uptake of the new tool as an assessment, learning and teaching strategy. By the end of the roll-out period, all 13 programs in all 9 universities in Australia that provide speech pathology professional preparation degrees had integrated the new assessment tool into their program. Feedback was obtained from 6 of the 9 programs, and qualitative data from the questionnaire indicated a high level of confidence with the tool and its continued use. By the end of the roll-out period, close to 1,000 field educators had been provided with direct educational experiences led by the university clinical education coordinators, supported through the Project Team. Formative evaluation from the first 214 field educators and 76 students introduced to the tool, provided an important source of feedback to the university clinical education coordinators and by the end of the roll-out period, there was a highly positive response to educational experiences designed to support the use of the tool. Summative evaluation and the analysis of qualitative comments from educators and students provides an important source of information for the future – particularly in relation to support needed in the use of the Visual Analogue rating scale as an assessment of progress towards entry-level competence. In view of the similarity between both educators and students in relation to this learning need, and in light of their shared interest in learning experiences closer to the real-world, it will be worth considering more innovative partnership models of education in relation to the assessment of the development of students' clinical competence, for example, in the provision of shared educator and student workshops.

Engagement with the new assessment process was created through the authentic and integral part that all groups within the community of practice of speech pathology played in its creation and implementation. The high degree of engagement ensured that the large majority of the community understood how to use COMPASS™ as an assessment and learning tool and has optimised the positive impact of its introduction to the speech pathology discipline. As Roodhouse points out, workplace learning and higher education have a mutual interest in assessment (Roodhouse, 2007), particularly as it relates to professional accreditation. Engagement across the community is both a necessary prerequisite for the development of valid assessment processes, and an emergent outcome when such processes reflect the theories and practices of that community.

Acknowledgements

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