

An evaluation of a collaborative approach to the assessment of competence among nursing students of three universities in Ireland

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ARTICLE INFO

Article history:

Accepted 9 November 2008

Keywords:

Competence
Clinical assessment
Ireland
Collaboration

SUMMARY

This paper describes a collaborative project conducted by the three principal universities in Dublin to implement and evaluate a competence assessment tool for use by nursing students and their assessors while on clinical placements.

In the greater Dublin area, students from three universities are required to share clinical placement sites in specialist practice areas. Accordingly, a liaison group was established among the three universities, in order to develop a common competence-based assessment tool and related protocols for its use. The newly developed competence assessment tool was implemented in 2004, and in 2006, an evaluation of its use was conducted by means of a survey among a non-probability sample of students and their preceptors. Results from the survey data indicate generally positive attitudes to the structure of the tool and positive experiences of its operation in practice. However, respondents indicated dissatisfaction with the amount of time spent completing the assessment tool and the amount of preparation needed to carry out the assessment process.

Recommendations for practice include the need to consider placement length in the design process and the need to focus on user preparation. This study also points to the benefits of inter-institutional collaboration in competence assessment and the possible implications for future work in this area.

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Background

Nursing education in Ireland has undergone a profound transformation in recent times. In 2002 all pre-registration nursing courses were upgraded to bachelor's degree status (previously having been certificate and latterly diploma). This change also saw the full integration of pre-registration nursing education into the higher education sector replacing existing arrangements whereby training and education was carried out in Schools of Nursing attached to health service providers. In planning curricula for the clinical assessment element of the degree courses, educators were guided by a further development, the introduction of the domains of competence framework, as set out by An Bord Altranais, the professional regulatory authority for nursing in Ireland (An Bord Altranais, 2000). These Domains of competence represent the criteria for registration with the Irish nursing board and are broken down into five areas in which any person wishing to register as a nurse must be deemed competent. These areas are: Professional/Ethical practice, Approaches to care and the integration of knowl-

edge, Interpersonal relationships, Organisation and management of care and Personal and professional development.

Since the introduction of this competence framework, assessment strategies based on the five domains have been developed by higher education institutes and their clinical partners. This marked a departure from the previous situation in which clinical assessments were carried out universally using a common assessment tool produced by An Bord Altranais. Competence assessment strategies are therefore now tailored to the needs of individual curricula and the clinical settings associated with each higher education institution. This tailoring of clinical assessment approaches to local needs was promoted as desirable by the nursing board, which permitted each higher education institution to develop its own specific approach. This was seen as a means of alleviating the perceived problems associated with the 'one size fits all' approach which had existed previously.

This new approach was however predicated on the idea of clinical placement sites being associated with one particular programme and one affiliated higher education institution. As part of the requirements for registration, students are afforded the opportunity to undertake clinical placements in a number of specialist settings, such as maternity care, paediatrics, care of the older

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person and mental health. Due to the limited availability of specialist care sites, students from all three Dublin universities attend placements in the same sites and units. This presented a problem in terms of assessment in these areas as students from the three universities were now being assessed using different methods. Aside from the difficulties that individual preceptors might experience in having to become proficient in the use of multiple assessment tools, this situation was also seen as a risk to the overall reliability of assessments. As a consequence of this situation a group was formed between the three universities and their clinical partners to formulate a common assessment strategy. This process was endorsed and supported by the Nursing and Midwifery Planning and Development Unit (NMPDU) of the Health Service Executive (HSE) Eastern Region.

Literature

Competence

While definitions of competence are much discussed in nursing literature, competence is not easily defined (Eraut, 1994; McMullen et al., 2003; Woodruffe, 1993; Cowan et al., 2005) and among researchers there is no single agreed method of defining or measuring competence. Historically, definitions of competence were sought to differentiate between professionals and non-professionals (Eraut, 1994), when competence was based on intellectual training and did not recognise levels of performance. Modern interpretations of competence however emphasise performance and capabilities as is demonstrated by the adoption of competence models for education in the United States throughout the 1960s and 1970s. Competence and competence-based education were seen as a counterbalance to determining ability through intelligence testing, especially in occupations where 'high levels' of intellect were not deemed necessary (Eraut, 1994). Competence-based education is now firmly established in many professions such as nursing, teaching and medicine (Watson et al., 2002).

Despite the embracement of competence as a useful concept by professional groupings, precise definitions of competence are difficult to identify, a point which led Girot (1993) to reflect that competence rather than being ill defined is over defined. Debates often rage within professions as to the competencies required for that profession, a process which can be confounded by governments and others attempting to demarcate the boundaries of professional groupings (Watson et al., 2002; Gonczi, 1994). The concept therefore often lacks clarity and is subject to debate and interpretation.

Conceptualising competence in nursing

Despite the lack of agreement on a single approach or definition of competence, literature in the area can be narrowed to three broad conceptualisations, viz., the performance or behavioural approach (where competence is a measure of behaviour and is observable and measurable for the purposes of assessment), the generic approach (with the focus on broad clusters of ability and knowledge, ignoring context), and a holistic approach (which examines behaviours, underlying attributes and context and allows for the notion that there is more than one way of practising correctly) (Short, 1984; Gonczi, 1994; Eraut, 1994; Watson et al., 2002).

While evidence of all three of these approaches can be found in nursing education literature, it would appear that the current literature supports a holistic approach as being the most appropriate for nursing practice. As Dolan (2003) points out, the ultimate aim of producing competent nurses is to ensure that patients receive a high standard of care. It would therefore seem more logical in considering nursing competence to look at a broad range of knowledge, performance and abilities across a range of contexts.

Assessing competence

Watson et al. (2002) investigated the evidence for the use of clinical competence assessment in nursing and suggested that assessment of clinical competence is almost universally accepted but some aspects of it remain at odds with the higher education of nurses. Watson (2002) notes that there is little evidence of a systematic approach to competence assessment, no evidence for the reliability and validity of instruments, and he expresses a concern that competence is a barrier to the higher education of nurses. In the United Kingdom, Norman et al. (2000) recommended that there should be a national system of competence testing that should encompass expert evaluation, simulated situations, self-evaluation by students, and the involvement of patients. Dolan (2003) reported on an evaluative study of a revised system at the University of Glamorgan. This system, introduced in 1997 to assess student nurses' clinical competence, was evaluated using focus groups and content analysis to gain insight into the experiences of students, tutors and clinical preceptors in using the system. Concerns were raised about consistency and uncertainty in the assessment process and the need for further revision was identified as the system was not perceived to be effective at measuring all of the attributes of clinical competency. In contrast, Meretoja et al. (2004) reported that the Finnish Nurse Competency Scale was reliable and valid. The Scale was derived from Benner's Novice to Expert model of skill acquisition and was constructed through a seven-step approach including literature review and the use of expert groups to identify and validate the indicators of nurse competence. The authors concluded that self-assessment assists nurses to maintain and improve their practice by identifying their strengths and areas that may need to be developed further.

The papers mentioned above and a range of others (see for example Flanagan et al. (2000), McGaughey (2004), Defloor et al. (2006), Khomeiran et al. (2006) are indicative of a significant body of nursing literature that is now emerging around the issue of competence and competence assessment in nursing. Within these a variety of methods for the development and implementation of competence assessment strategies are described. This variety, while undoubtedly testament to innovation in nursing education, may ultimately point to a weakness; the lack of a unified approach. Calls for collaborative unified approaches (for example Watson (2002), Norman et al. (2002) will however fall on deaf ears if differences remain as to the nature of competence. Developing competence assessment strategies based on a holistic notion of competence necessitate broad and complex approaches which will be difficult to reconcile with measurement type approaches used in a behavioural interpretation of the concept (McMullen et al., 2003). Debates around the validation and testing of competence assessment methods (significant debates beyond the scope of this paper) revolve largely around these divides also.

Besides philosophical differences collaboration may also be hampered by institutional rivalry where, despite preparing nurses to the same core competencies, importance is placed on ownership of the strategy and the primacy of institutional values (DiCenso et al., 2008).

Methods

Development of the assessment tool

Having identified the need for a common strategy, a process was put in place to develop a competence assessment tool involving clinicians from the various clinical sites and academics from the three universities. The process involved the drafting of standards for practice under each domain of competence and subsequent discussion

in small groups, for the purpose of verification and validation. This process was repeated until a consensus was reached as to what the standards of practice under each domain ought to be. The combination of clinicians and educators in this process served to enhance content and face validity of the produced tool. The process resulted in the production of the *Shared Specialist Placement Document (SSPD)* (Fig. 1).

The SSPD was developed on the assumptions that assessments are criterion referenced based on the Standards for practice under each domain of competence and that the assessment process is a collaborative exercise between student and the preceptor. The completion of the SSPD requires the student and the preceptor to follow a protocol, which comprises a series of three formal meetings, a record of which are maintained, within the tool. The SSPD is designed as a generic assessment document and standards of practice may therefore be attained in a range of clinical settings, and are not specific to any one clinical discipline.

Before implementation of the tool for use in practice, training days were held with key staff in the clinical organisations. This involved an introduction to the tool and practical sessions in using the tool through the use of role play, practice scenarios and group discussion.

Evaluation

Following implementation of the SSPD for use in 2004, a formal evaluation process was put in place in late 2005. The aims of the evaluation were to evaluate the usability and suitability of the SSPD and the learning process surrounding it and to determine whether both students and preceptors considered the tool provided an accurate indicator of student competence.

This evaluation study employed a cross-sectional survey design using a questionnaire enquiring into structure, process and outcome of using the tool. The questionnaire, designed specifically

for the study, comprised a short demographic section, a series of statements with a five-point Likert type scale on a continuum from strongly disagree to strongly agree, and a section for open comments. A high level of face and content validity were achieved through the use of an expert panel in the development of the questionnaire.

Sample

For the purpose of the evaluation study, a non-probability sample of students and their preceptors who had used the SSPD was recruited. The study participants were B.Sc. nursing students (*n* = 29) from the three Dublin universities on placements in a care of the older person site, a children’s nursing site and a mental health nursing site, and preceptors (*n* = 27) also from these clinical sites. All participants were guaranteed of their anonymity and confidentiality with regard to their responses. Ethical approval was sought and obtained from the hospitals and universities involved and completion of the questionnaire was taken as consent to participate in the evaluation.

Data was collected from January to June 2006 and analysed using descriptive and some correlation statistics (using SPSS v11.0.1) with the qualitative data being analysed using thematic analysis.

Results

The first section of the questionnaire sought participant’s views on the structure and usability of the SSPD asking them to indicate their level of agreement with 13 statements relating to the guidelines for use, preparation for use and usefulness in guiding learning.

In this section both preceptors and students reported broad satisfaction with both the structure and usability of the tool. Areas in

Shared Specialist Placement Documentation

| Domain 3: Interpersonal Relationships | Attained Yes No | Comments | Initials Student & Co-/Preceptor |
|---|---|----------|----------------------------------|
| 3.1 Utilises effective communication skills in interaction with others | <input type="checkbox"/> <input type="checkbox"/> | 3.1 | |
| 3.2 Participates under supervision in maintaining clear, accurate and current documentation | <input type="checkbox"/> <input type="checkbox"/> | 3.2 | |
| 3.3 Identifies the factors which enhance or inhibit effective communication between members of the multidisciplinary team | <input type="checkbox"/> <input type="checkbox"/> | 3.3 | |
| Signatures: Co/Preceptor/Co-Preceptor _____ Student _____ Date _____ | | | |

| Domain 4: Organisation and Management of Care | Attained Yes No | Comments | Initials Student & Co-/Preceptor |
|---|---|----------|----------------------------------|
| 4.1 Identifies structures and organisations of services that support the relevant client/patient/pupil/family | <input type="checkbox"/> <input type="checkbox"/> | 4.1 | |
| 4.2 Participates under supervision as a member of the interdisciplinary team | <input type="checkbox"/> <input type="checkbox"/> | 4.2 | |
| 4.3 Demonstrates the ability to work as member of the multidisciplinary team | <input type="checkbox"/> <input type="checkbox"/> | 4.3 | |
| Signatures: Preceptor/Co-Preceptor _____ Student _____ Date _____ | | | |

Fig. 1. Excerpt from the SSPD.

which participants were less satisfied were, for both groups, Statement 2; 'I was sufficiently prepared for using the SSPD', and for preceptors Statement 9; 'The standards for practice in Domain 1 were useful for the assessment of student competence' (Figs. 2 and 3).

The second section of the survey sought participant's views on the process of carrying out assessments using the tool. Again both preceptors and students indicated broad satisfaction with four statements in this area. Areas of less agreement were for both preceptors and students Statement 4; 'I was sufficiently supported while using the SSPD' (Figs. 4 and 5).

We also enquired as to the participants overall satisfaction levels in using the tool. Both groups indicated broad satisfaction with preceptors being more satisfied than students. We tested this area further using a Mann-Whitney test and found no statistical significance between the groups ($p > 0.05$) (Fig. 6).

We explored the data further to see if any correlations existed between the overall outcome variable and structure and process variables. The most highly positive correlations for both groups were in the areas of positive perceptions of the learning plan that is formulated using the tool (Preceptors $r = .839$, $p < 0.01$, Students $r = .579$, $p < 0.01$).

The second most positive correlations again for both groups related to the guidelines for use that accompany the tool (Preceptors $r = .622$, $p < 0.01$, Students $r = .472$, $p < 0.05$).

In the data from preceptors we also found statistically significant correlations between overall adequacy of the tool and positive perceptions of the tool being easy to use ($r = .481$, $p < 0.05$) and the tool and learning outcomes being useful in guiding learning ($r = .760$, $p < 0.01$).

Findings from qualitative data (open-ended items)

Both students and preceptors were given the opportunity to comment on the use of the SSPD. Responses to the open-ended items generated a range of comments, from which two broad themes emerged.

Theme: 'Time issues'

The amount of time required to complete the assessment process and the difficulties raised by short clinical placements were recurring themes in both student and preceptor comments as is demonstrated below.

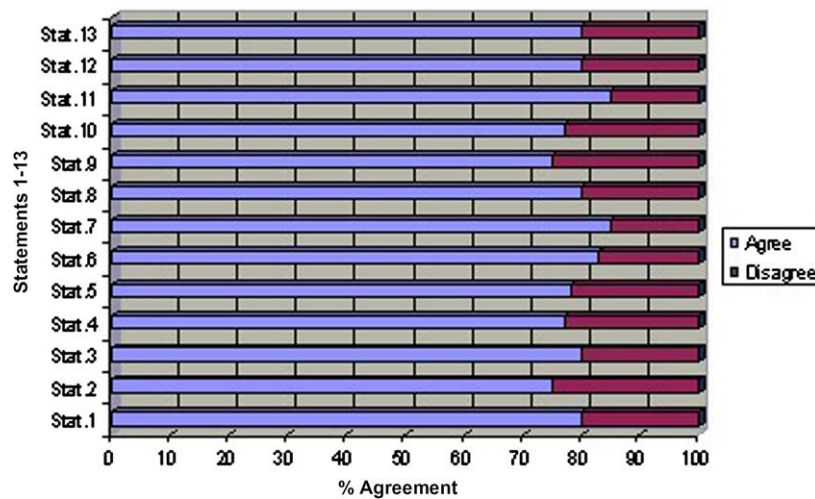


Fig. 2. Structure of the SSPD: Preceptor responses.

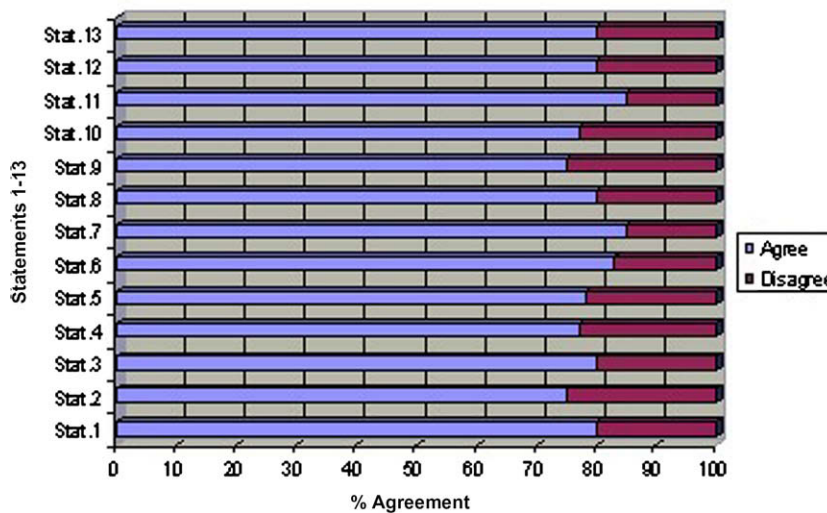


Fig. 3. Structure of the SSPD: Preceptor responses.

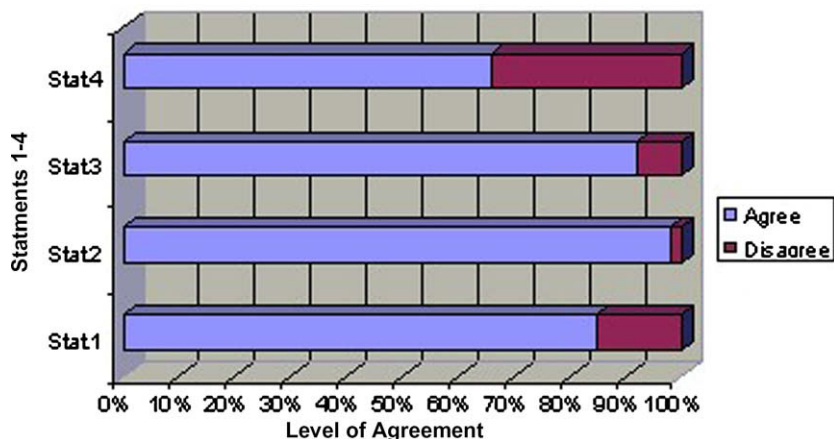


Fig. 4. Assessment process using the SSPD: Preceptor responses.

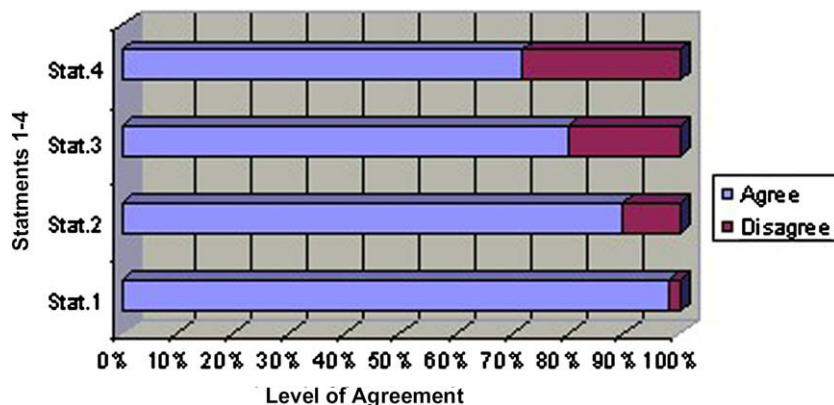


Fig. 5. Assessment process using the SSPD: Student responses.

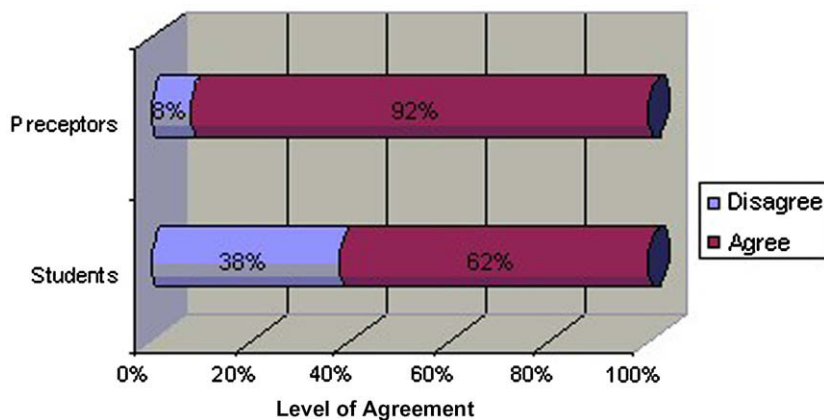


Fig. 6. Overall satisfaction with the SSPD.

Some students remarked that the preceptors did not wish to sign off the documentation because of the short duration of time spend on placement:

'[the] preceptor did not feel comfortable signing off learning outcomes as we only had five days on the ward';

'for a three-week placement there was insufficient information gathered to ensure the domains were covered'.

Preceptors also commented that the SSPD had too many learning outcomes for the students to complete, but many were satisfied

that each domain *'covered aspects of care provided'*; some commented that the expectations of students on a short placement were really too high and that it was unfair to expect them to achieve all of the outcomes in the various domains in a period of a few weeks. Preceptors commented on the fact that the outcomes in all five domains are difficult to assess fully in the course of a two-week placement and question the validity of assessing students' in a two to three week placement where they are attending in a supernumerary capacity. In this connection, one preceptor commented:

'I think it can be unrealistic, particularly Domain 4 (Organisation and Management of Care), when the student is here for two weeks out of the year. It is insufficient time to become familiar with MD (multidisciplinary) and ID (interdisciplinary) Team'.

The process of arranging and carrying out meetings also appears to have caused some difficulties. Some students commented that arranging meetings with their preceptors was often difficult due to time constraints, and one student remarked that

'time constraints inhibited [the attainment of the] learning outcomes'.

Some students wrote that they encountered constraints to completing the assessment, in particular the constraint of shift work, whereby it was difficult to arrange meetings with their preceptors to sign off on the material. Some students also advocated an increase in the duration of clinical placements in specialist areas and the introduction of more specific domains and/or learning outcomes to permit the development of better guided learning plans.

Commenting on the difficulties in fitting everything into a placement, one preceptor expressed concern that the assessment process was hindered by the competing demands from other groups of learners, such as new staff, adaptation groups, and so forth. Many preceptors expressed their concern and disappointment that the duration of clinical placements in specialist areas was much too short, and that this hindered the attainment of learning outcomes and the effective administration of the assessment process.

Theme: 'Preparation and support'

Preparation for the use of the assessment documentation and support while using it were also recurrent themes emerging from the qualitative data. Some students recommended that there should be more support for students in relation to the assessment process. Some students also commented that their preceptor had not received training in the use of the assessment tool; one student wrote that:

'my preceptor hadn't even done the preceptors' course, and although she was nice, she wasn't in the best person to help my leaning and achieving my standards'.

As with students, a small number of preceptors commented on the need for preparation and support. In commenting on their own preparedness for use of the tool some preceptors also felt it important that students be well prepared, with some remarking that students are often unaware and unfamiliar with the assessment format and what is expected of them. In terms of support preceptors suggested that they had rarely received direct support from lecturers/tutors/clinical placements coordinators. Commenting on their own preparation, one preceptor requested the provision of 'a refresher course' on the assessment process for preceptors.

Discussion

The findings of this evaluation are consistent with other studies in this area. Scholes et al. (2004) emphasise the need for adequate preparation of assessors in order to maintain consistency in the assessment process. In their study into the use of portfolios to assess competence, they found that there was a wide variation in the preparation which assessors received and this in turn had the potential to negatively impact on the assessment process. Calman et al. (2002) reported that students were frequently unfamiliar with the assessment tools for their specific programmes and as a result did not have confidence in them. Hence, preparation for use of any assessment tool and method would seem to be important in achieving users' confidence in them.

In relation to support while conducting the assessment process, a number of studies have identified a lack of support as being

problematic for both students and their assessors (McGaughey, 2004; Dolan, 2003; Scholes and Endacott, 2003). Lack of support is seen by some authors as being a contributory factor in inconsistent assessments. In this evaluation it is recognised that while preparation for the use of the tool was given to both students and preceptors, ongoing support was not sufficiently available thus creating less favourable outcomes in this regard.

When offered the facility to provide additional comments on aspects of the SSPD tool, many students and their preceptors used the facility to comment on aspects of the programme and clinical placements in particular. The principle theme emerging from the qualitative data was the fact that both preceptors and students found the assessment process using the tool time consuming. In a number of studies, students have reported difficulties in working with their assessment tool and have reported that the requirements to complete their assessment could dominate their placements, that the assessment and the demand for competence inhibited them from gaining a holistic experience of care, and that the assessors were often unable to provide adequate support (Norman et al., 2002, Calman et al., 2002; Dolan, 2003, Meretoja et al., 2004).

The finding in this area may however have been effected by changes in the requirements for specialist placements which were introduced by An Bord Altranais in 2005 reducing most placements from 5 weeks to 2 weeks (An Bord Altranais, 2005). This resulted perhaps in difficulties in this area as the SSPD was originally designed with 5 week placements in mind. On a broader issue, the value of assessments in specialist practice exposures of such short time duration could be questioned. While there is undoubted value in exposing students to areas of specialist practice, assessment on a series of 2 week placements (as currently required An Bord Altranais) may not offer a fair indicator of student competence. Perhaps it would be more useful to limit the amount of specialist placements and offer students longer placements in one or two specialist sites.

The process of constructing this tool also offered an interesting insight into the advantages of collaborative work between academics and clinicians from differing institutions and clinical backgrounds in designing and implementing assessment strategies. We feel that the evaluation of the tool, while acknowledging the small sample size, has shown that the core concept of the tool as an assessment method is vindicated despite the work that is needed in the area of support and preparation for students and preceptors. This we consider to be as a direct result of the collaborative process and it offers a way forward in future developments. Collaborative approaches in nurse education have been acknowledged as beneficial in the international arena (DiCenso et al., 2008). Therefore despite the move in recent years in Ireland towards individual approaches to the development of competence assessments methods perhaps it is time to consider collaboration on a national basis in developing aspects of assessment tools and procedures.

Conclusions

The results of this evaluation offer a promising starting point for the further development of competence-based assessment strategies for nursing in Ireland. While the results are positive in relation to the usability and suitability of the assessment tool developed, more work needs to be done on preparation for use and support for both assessors and students. The principle limitation of this study is the small sample size which prevents predictions of generalisability being made with any confidence. The study would therefore benefit from replication with a larger sample. Finally, this process also offers valuable insights into collaborative approaches

to such development work and points to the value of collaboration for future work in this area.

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