



Development of a Criterion-Based Assessment form for Clinical Radiographic Practice

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Abstract

The presentation focuses on the pros and cons of engaging relevant stakeholders in the development of the assessment form. The assessment form was used in assessing learners' competency in clinical radiographic practice. The objective behind the development of the form was to improve consistency among the various assessors who conduct assessments on radiography learners in the clinical environment. Practitioner action research was identified as the appropriate design for the study. I was the researcher and lecturer (practitioner). As a lecturer I had the responsibility of coordinating the clinical radiographic program between the university and the clinical training centres. I also had the responsibility of ensuring that clinical training at the various centres complied with the university policies and professional standards. As a researcher, I was the main driver of the study, with learners and assessors acting as information providers and validation groups. Literature reviewed included consistency in the way assessments are conducted with more emphasis being placed on the clinical training of diagnostic radiography learners. Assessment instruments described in most of the literature consulted were among others, rubrics and scoring guides. The instruments used in collecting research data were questionnaires, focus group interviews, workshops as well as observations. Constant analysis method was used to analyse the collected data. Active engagement of both the learners and assessors seemed to have contributed positively to the development of the criterion-based assessment form. There were however some challenges due to this active engagement. Some of the challenges related to focus group interviews, like poor attendance, conducting the interviews and ensuring that as a researcher, I stay focused on the interview and do not allow the participants to deviate from the main objective of the research. Based on the research findings and my experience as a researcher, active engagement of the stakeholders, resulted in positive attitude which is essential for the implementation phase.

Background and research problem

The Department of Radiography at the University of Johannesburg, has more than 22 clinical training centres. Assessments for learner competency in the practical environment is conducted by both the UJ lecturers and the clinical tutors (collectively referred to as assessors) at the various clinical training centres. It is expected that the learners will all graduate with the same standards as they will all be awarded the UJ diploma at the end of the three year training.

The learners identified the following as problems in the Clinical Radiographic Practice (CRP) program.

- Assessors are inconsistent in the way they give feedback and award marks for assessments.
- Because of the perceived subjectivity and inconsistency among the assessors, we are always nervous before assessments.
- Types and quality of questions asked during assessments are not standardised.

The assessors acknowledged that they were subjecting the assessment form to different interpretations as they understood it differently.

Aim of the study

- Determine if the criterion-based assessment form will assist in improving consistency.
- Consistency among the various assessors will lead to achieving :
 - Standards for assessment,
 - Higher learners satisfaction with the CRP program.

Research methodology

Practitioner action research, which is based on the qualitative approach was identified as the appropriate design for the study as it would allow for active participation of the research participants and offer them the opportunity to:

- Learn and reflect on the situation under investigation, while
- Acting as information providers and validation groups.

Participants selection: All assessors were invited to participate in the study. All learners enrolled for the National Diploma Radiography from 2002 to 2005 participated in the study.

Data collection: Triangulation

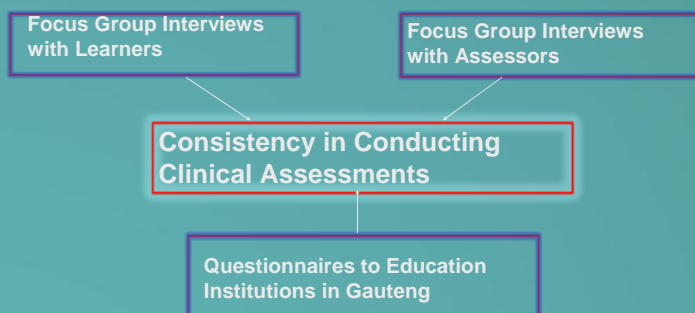


Figure1: Triangulation

Challenges:

- Piloting the criterion-based form
- Participants attendance of focus group interviews
- Facilitating a focus group interview and interviewing skills
- Simultaneous data collection and analysis

Data analysis

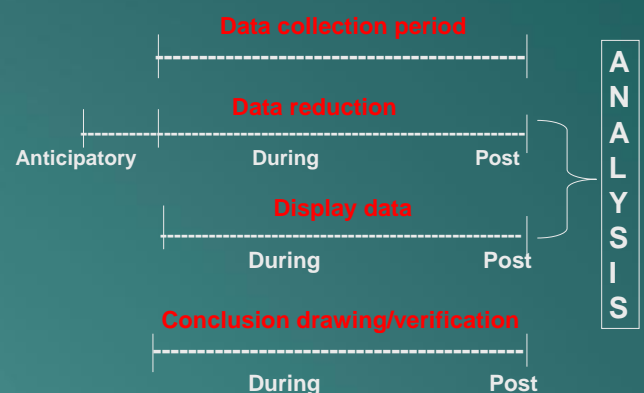


Figure 2: Data Analysis (Reproduced from Miles & Huberman, 1994:10)

Research findings

- Improvement was evident in the way assessors were:
 - Awarding of marks, and
 - Giving feedback on learner's performance.
- There was no improvement in the way assessors asked questions during the assessment process and even on the types of questions asked.
- It was also found that the use of the criterion-based assessment form could contribute towards achieving standards for assessment.

Conclusion and recommendations

Assessment criteria help identify the essential evidence the assessor requires of a learner to prove that the outcome has been achieved. This is also in line with SAQA's principles of good assessment, which stipulate that to achieve credibility in assessment, the assessor should ensure that the assessment conducted are "Fair, Valid, Reliable and Practicable" (Saq, 2001:19)

The active involvement and participation of both learners and assessors in the research project was beneficial to both in that:

- Assessors gained an understanding of why they were conducting assessments. In line with Stiggins' recommendations, they understood; what they wanted to assess, if this was appropriate to help them gather the information they needed about the learner, whether enough information was gathered to make valid judgement on learner's performance and also helped them understand the need to eliminate bias in assessment.
- Learners needed to understand the objective of the assessment, the feedback given and that the whole assessment process was transparent.

Recommendations made related to the need for continued evaluation of the CRP program by the learners and continuous education for all assessors. The other recommendation made was that, before the implementation of the criterion-based assessment form, thorough orientation of both the learners and assessors was essential.

References

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3. Stiggins, R. 2003. **Classroom assessment. In the Encyclopedia of Education.**1;123-137. New York. Encyclopedia Education.