EXISTING ASSESSMENT INDUCTION PROGRAMMES AND ASSESSMENT LITERACY AS CO-DETERMINANTS FOR DEVELOPING AN ASSESSMENT INDUCTION PROGRAMME FOR MIDRAND GRADUATE INSTITUTE

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DECLARATION

I, MARIA JOHANNA PIENAAR, solemnly declare this thesis entitled: EXISTING ASSESSMENT INDUCTION PROGRAMMES AND ASSESSMENT LITERACY AS CO-DETERMINANTS FOR DEVELOPING AN ASSESSMENT INDUCTION PROGRAMME FOR MIDRAND GRADUATE INSTITUTE is original and the result of my own work. It has never, on any previous occasion, been presented in part or whole to any institution or Board for the award of any degree. I further declare that all information used and quoted has been duly acknowledged by means of complete reference.

Signature: Date:

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DEDICATION

I dedicate this work and give special thanks to my husband Marius for his remarkable patience and unwavering love and support, and my wonderful children Ruan and Ockert for their encouragement to me throughout the entire study.

SUMMARY

Title: Existing assessment induction programmes and assessment literacy as co-determinants for developing an assessment induction programme for Midrand Graduate Institute

Key words: Induction, staff induction in higher education, assessment, assessment literacy.

Many lecturers at South African Higher Education Institutions (HEIs) are not necessarily equipped for the challenges imposed on them. Some academic staff join HEIs as subject specific experts from industry and the corporate world and do not necessarily have education qualifications or experience in lecturing and assessing students.

This research was prompted by the researcher's observations that newly appointed academic staff at Midrand Graduate Institute (MGI) are not formally inducted into their primary duties as lecturers encompassing general classroom practices related to teaching, learning and assessment. Academic staff at MGI have also reported specific concerns about their preparedness to utilize assessment effectively. As a result, there appeared to be a need to gather information which could inform the development of an assessment induction programme for MGI.

By conducting a literature and an empirical study, existing assessment induction programmes and assessment literacy as co-determinants for developing an assessment induction programme for MGI were investigated. The literature study focused on the theoretical foundations of induction programmes, assessment and assessment literacy. For the empirical part of the study a mixed method, multiphase design was applied. By means of a document analysis the nature and scope of existing assessment induction programmes at purposively selected South African HEIs was examined. The quality of assessment literacy of academic staff at MGI was determined through questionnaires and interviews. A total number of 101 academic staff, representing various post levels, participated in the research.

The key findings of the empirical study revealed that existing assessment induction programmes at South African HEIs are offered at times when academic staff are

available and that the duration of such programmes differs significantly from institution to institution. It is expected that new and experienced staff must attend the programmes and although the programmes appear to be unique, they all share common content. In all cases, Staff Development Units are responsible for facilitating the assessment induction programmes. With regard to the assessment literacy of academic staff at MGI, it was determined that their assessment literacy is not compatible with the levels on which they lecture. This was revealed through the challenges they experienced when they were required to explain the assessment process, order the levels of Bloom's taxonomy and match assessment concepts with appropriate explanations. It was further discovered that the respondents regarded induction programmes which are specifically aimed at academic elements such as lecturing responsibilities, classroom management and assessment as essential for their personal development.

From the research findings the researcher developed a set of guidelines which are proposed for developing an assessment induction programme for MGI.

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1.1 INTRODUCTION AND RATIONALE

Globally, changes in the contexts in which higher educational institutions (HEIs) operate, led to pressures to change approaches to teaching and learning and to the ways in which these are managed (CHE, 2004a:4). In order to respond to these pressures the Council on Higher Education (CHE) (CHE, 2004a:5) indicates that training of higher education (HE) academics as lecturers has become common practice during the last two decades. In corroboration, Wong (2004:52) maintains that academic staff at HEIs who are enabled to adjust to the world of teaching and learning will provide better work and achieve better results. Viewed from a universal perspective, Robbins *et al.* (2004:430) also refer to the fact that new employees are often unfamiliar with an organisation's character and require assistance to adapt to such an organisation's milieu and ethos.

Newly appointed academic staff at HEIs, and more particularly those who do not have a sound background in education as a field of study, often experience considerable challenges in meeting job expectations and responsibilities. Buchner and Hay (1999:320), affirm these challenges, while Van Deventer and Kruger (2003:210) postulate that newly appointed academic staff are often not given clear guidelines and support on what is expected with regard to preparation, presentation and appraisal since they are not exposed to appropriate induction programmes. These inadequacies are also reflected in terms of assessment. According to Mertler and Campbell (2005) it has been widely reported that many academic staff induction programmes do not include a suitable course in assessment. As induction is essential in developing and achieving educational objectives in accordance with the Employment of Educators Act (76 of 1998) it is vital that all academic staff at HEIs should receive proper induction training (Carrel *et al*., 1998:209), which also includes the subject of assessment.

While induction programmes, irrespective of their scope, quality and successfulness, exist at the majority of South African HEIs, the study was prompted by the researcher's observations that newly appointed academic staff at a Private Higher Education

Institution (PHEI), the Midrand Graduate Institute (MGI), are not subjected to a formal induction programme. Lecturers at this institution are merely provided with information of general nature which includes an overview of the campus and an awareness of the location of various venues such as the library and lecture halls. Moreover, this information is communicated in an impersonal "faceless" manner by means of a Lecturing Handbook (MGI, 2007). It is assumed that for many academic staff at MGI the mentioned procedure create uncertainty towards the milieu and ethos of the organisation, but more alarming, also towards their primary duties as lecturers encompassing general classroom practices related to teaching, learning and assessment. Academic staff at MGI have reported specific concerns about their preparedness to utilize assessment effectively. This concern is justified by Struyven *et al.* (2002) who assert that the repertoire of assessment methods used in higher education has expanded considerably in recent years. Moreover, in an era in which the purpose of assessment is no longer limited to the measurement of academic performance (Bezuidenhout & Alt, 2011; Boud, 2007; Heywood, 2000) many academic staff encounter problems with the increasing demand to employ assessment for multiple purposes; including to support learning. Boud (1995:37) contends that "assessment is the most significant prompt for learning" and continues by saying that "assessment can encourage passive, reproductive forms of learning while simultaneously hiding the inadequate understanding to which such forms of learning inevitably lead" (38). Consequently, Stiggins (1995:238) declares that academic staff will remain unable to assist students in obtaining higher levels of academic success if they do not have a crystal clear vision of the meaning of academic success and if they are unable to translate that vision into high-quality assessments as supportive measures to realise the vision.

By highlighting the improvement of assessment practices as one of the key research areas in South African higher education (Le Grange, 2009), it is also imperative to address it during the induction of academic staff.

It can be assumed that assessment literacy is fundamental to knowledge and skills to successfully implement assessment. However, no instrument for establishing the assessment literacy of academic staff at South African HEIs or research evidence providing an assessment literacy profile of academic staff at South African HEIs could

be found. As a result, there appeared to be a need to gather information from academic staff at MGI about their knowledge and skills to plan and design assessment, and their abilities to conduct assessment and use assessment results to make appropriate educational decisions for developing an assessment induction programme. It was also expected that the aforementioned knowledge and skills also impact on staff members' beliefs in terms of assessment.

1.2 PRIMARY RESEARCH QUESTION

Derived from the above discussion a two-pronged or hybrid (Creswell & Plano Clark, 2011:163) primary research question initiating this research was formulated as follows:

What is the nature and scope of existing assessment induction programmes at selected South African HEIs and the quality of assessment literacy of academic staff at MGI and how could these inform the development of an assessment induction programme for MGI?

1.3 PURPOSE STATEMENT

The purpose of this study was thus to uncover the nature and scope of existing assessment induction programmes at selected South African HEIs as well as the quality of assessment literacy of academic staff at MGI in order to inform the development of an assessment induction programme for MGI.

1.3.1 Secondary research questions and objectives of the study

The primary research question of this research was encapsulated in the following secondary research questions:

- What does the notion of induction entail in the context of higher education?
- What are the implications of induction for the quality of teaching, learning and assessment?
- What exactly does assessment literacy imply?
- How does assessment relate to assessment literacy?
- What is the nature and scope of existing assessment induction programmes at selected South African HEIs?
- What is the quality of the assessment literacy of academic staff at MGI?

- How can the results of an evaluation of existing assessment induction programmes at selected South African HEIs be operationalized for developing an assessment induction programme for academic staff at MGI?
- How does the assessment literacy of academic staff at MGI inform the development of an assessment induction programme for academic staff at MGI?

Following the respective secondary research questions, the related objectives of the study were expressed as follows:

- To determine what the notion of induction entails in the context of higher education.
- To determine the implications of induction for the quality of teaching, learning and assessment.
- To determine what exactly assessment literacy implies.
- To determine the relation between assessment and assessment literacy.
- To ascertain the nature and scope of existing assessment induction programmes at selected South African HEIs.
- To uncover the quality of assessment literacy of academic staff at MGI.
- To operationalize the results of an evaluation of existing assessment induction programmes at selected South African HEIs for developing an assessment induction programme for academic staff at MGI.
- To operationalize the quality of assessment literacy of academic staff at MGI for developing an assessment induction programme for academic staff at MGI.

1.4 CONCEPTUAL FRAMEWORK

It was the intention of the researcher to specifically determine the nature and scope of existing assessment induction programmes at selected South African HEIs and the quality of assessment literacy of academic staff at MGI. As these two aspects were used to serve as determinants for developing an assessment induction programme for academic staff at one of the country's PHEIs, the following concepts warranted further exploration: induction, assessment and assessment literacy.

1.4.1 Induction

Le Grange (2005:11) states that South Africa is embarking on a new education dispensation while most lecturers at Higher Education institutions are not necessarily equipped for the current challenges imposed on them. Some academic staff joins the higher education environment as subject specific experts from industry and the corporate world and do not necessarily have education qualifications or experience in lecturing and assessing students. Such academic staff needs to be informed and supported to adapt to their new environments to develop and deliver learning programmes to address the needs of students and to be able to monitor students' progress by applying appropriate assessment methods.

Induction is defined as an institution's efforts to assist academic staff to adjust effectively to its milieu and ethos with minimum disruption and as quickly as possible, so that the institution's functioning can proceed as effectively as possible (Steyn & Van Niekerk, 2002:232). Peloyahae (2005:9) defines induction as the action or process of inducting someone to a post. Furthermore, Grobler *et al*. (2002:208), state that induction can be accurately defined as the process of introducing academic staff to the goals of the institution, its policies and procedures, its values and co-workers, as well as the activities to be performed and the teaching aids to be used. Mothata and Mda (2000:84) describe induction as a process of training newly appointed academic staff to their teaching job. The purpose is to initiate the academic staff into teaching. Castetter (1992:186) sees induction as an institution's effort to assist academic staff to adjust readily and effectively to teaching, so that they can make a meaningful contribution to the institution. Induction could also serve as support systems for those academic staff who have worked in the institution for a longer period. In this regard, Van Deventer and Kruger (2003:209) see induction as a continuous process that begins when an academic staff member accepts appointment to a post and continues throughout his/her appointment. Thus, the management of induction is critical to effective institutional performance.

1.4.2 Assessment

In general terms, *assessment* is what teaching staff do when they take stock of how students are progressing. How staff do this, and why they do it, varies tremendously.

In an educational context, assessment is a complex process of observation and monitoring by describing, collecting, recording, scoring and interpreting information about students' learning (Anon, 2002:1). In addition to designing quality assessment tasks, academic staff also need to be competent in using the assessment information to assist student learning through timely and informative feedback (Black & Wiliam, 1998; Hattie & Timperley, 2007). In this case assessment also serves a supporting role for improving learning and teaching (Fredricksen & Collins, 1989:32).

Plake and Impara (in Phye, 1997:54) report on a set of competences for educational assessment. Seven assessment competencies are specified:

i. Choosing assessment methods appropriate for lecturing.
ii. Developing of the chosen assessment methods.
iii. Scoring, interpreting and administering of the results.
iv. Using the results for:
    a) Assisting students
    b) Planning
    c) Developing curriculum
    d) Improving lecturing
v. Developing valid grading procedures.
vi. Communicating results to:
    a) Students
    b) Parents/Sponsors
    c) Other academic staff
vii. Recognising unethical, illegal and inappropriate methods and uses of assessment information.

These competencies are also associated with assessment literacy as outlined in the following sub-section. In higher education institutions academic staff must be accountable for conducting assessment in their classrooms. They must be able to use their expertise and must understand their students' needs and learning styles to enable them to develop and implement sound assessment practices which include both assessment of learning (summative assessment) and assessment for learning (formative assessment). Assessment of learning is described by Earl (2003:45) as the final check on students' achievements, while assessment for learning is meant to

be “any assessment for which the first priority in its design and practice is to serve the purpose of promoting learners’ learning” (Black *et al*., 2004:10).

1.4.3 Assessment literacy

Though the term *assessment literacy* is not commonly known among academic staff, Popham (2009:11) argues that it is “a commodity needed by teachers for their own long-term well-being, and for the educational well-being of their students”. The same author further reasons that “educational accountability and assessment literacy are almost joined at the hip” (Popham, 2004:82). The term assessment literacy was introduced by Stiggins (1991:534-539) who coined it as an understanding of the principles of sound assessment and also as a way of defining the particular kinds of assessment skills required for conducting sound assessment. Quilter (1998:3) confirms and elaborates on the aforementioned definition by indicating that assessment literacy reflects an academic staff member’s knowledge and skills about:

i. Choosing assessment
ii. Developing assessments tasks
iii. Scoring, interpreting and administering assessment results
iv. Using assessment results for decisions
v. Using assessment in grading
vi. Communicating assessment results
vii. Recognising unethical assessment practices.

Academic staff who are assessment literate will be familiar with the above abilities and will be able to apply it to their assessment practice.

White (2006:5) states that assessment literate lecturers should have a range of skills related to the basic principles of quality assessment practice. The following are mentioned:

- How to define clear learning goals, which are the basis of developing or choosing ways to assess student learning.
- How to make use of a variety of assessment methods to gather evidence of student learning.
- How to analyse achievement data (both quantitative and qualitative) and make good inferences from the data gathered.

- How to provide appropriate feedback to students.
- How to make appropriate instructional modifications to help students improve.
- How to involve students in the assessment process (e.g. self and peer assessment), and effectively communicate results.
- How to engineer an effective classroom assessment environment that boosts student motivation to learn.

It can thus be said that assessment literacy is knowledge about the basic principles of sound assessment practice, including terminology, the development and use of assessment methodologies and techniques and familiarity with the standard of quality in assessment. As stated earlier, most of the academic staff at MGI are subject specialists and do not have an educational background of study. According to information available to the researcher, not all academic staff are well prepared to deal with the realities of planning, choosing and developing assessment tasks, and to analyse, interpret, evaluate and using the results of such tasks, even though they may have an educational background.

1.5 RESEARCH METHODOLOGY

1.5.1 Research paradigm

A researcher usually works within a particular paradigm or system of ideas. This means that the researcher has to use particular methods of data collection and interpretation. Terre Blanche and Durrheim (1999:36) indicate that the principle of coherence in research can be obtained by making sure that the research question and methods fit within the paradigm.

This study was founded on Pragmatism in which combined qualitative and quantitative research designs were applied. Pragmatists believe that the truth lies in “what works best” to address the research question (Ivankova *et al*., 2007:263). Creswell (2009:11) argues that Pragmatism is the appropriate philosophical underpinning for mixed methods research since it is concerned with applications, or working solutions to problems. It also allows for the use of multiple research methods and different forms of data collection and analysis to enable the researcher to understand the research problem better (Creswell, 2009:10). Creswell and Plano Clark (2011:41) also state

that Pragmatism allows the researcher to focus on the consequences of the research. In this study, combined qualitative and quantitative research designs were used to collect and analyse both text and numerical data to address the primary research question from different angles. Consequently, the research results were used to inform the development of an assessment induction programme for MGI.

1.5.2 Research design

The study comprised of a literature study and an empirical study.

1.5.2.1 Literature study

An extensive literature study covering the focus of the research topic was done. For this purpose national and international literature were accessed and a variety of primary and secondary sources such as books, journals, dissertations and theses, conference papers and official documents were consulted. Databases which include, amongst others, catalogues of South African and International University libraries and the World Wide Web, EBSCOHost, ERIC, ETD and SABINET were used to gather information on the following keywords:

Induction, staff induction in higher education, assessment, summative assessment, assessment of learning, formative assessment, assessment for learning, assessment literacy.

1.5.2.2 Empirical study

The empirical study outlined below covered the empirical research design, the strategy of inquiry, the population and sampling, data collection methods, data collection process, the role of the researcher, data analysis, quality criteria, and ethical considerations.

1.6 EMPIRICAL RESEARCH

1.6.1 Empirical research design

This study used a mixed methods design or a combination of qualitative and quantitative research approaches in order to add greater strength to the findings (Maree & Van der Westhuizen, 2007:34). The researcher decided on a multiphase

design, also known as the “sandwich design” (Creswell & Plano Clark, 2011:100) since the research alternated between the qualitative and quantitative methods across two phases. These phases were sequential in nature. During the first phase of the research, data were collected by means of a qualitative approach, while the data collection in the second phase comprised of a combination of quantitative and qualitative approaches. The rationale behind the combined approach in the second phase was to make provision for triangulation. According to Morse (1991) cited by Creswell and Plano Clark (2011:77), the purpose of triangulation is “to obtain different but complementary data on the same topic”.

By following the above outlined process, the researcher was confident to arrive at well-validated findings to inform the development of an assessment induction programme for MGI.

1.6.2 Strategy of inquiry

An appropriate research methodology or strategy of inquiry was required to uncover the nature and scope of existing assessment induction programmes at selected South African HEIs as well as the quality of assessment literacy of academic staff at MGI in order to inform the development of an assessment induction programme for MGI. Creswell (2009:12) states that although the multiphase research design represents a strategy of inquiry within mixed methods research, strategies of inquiry can also be seen as “types of qualitative, quantitative, and mixed methods designs or models that provide specific direction for procedures in a research design” (Creswell, 2009:11). In the event of this study, the strategy of inquiry or the type of multiphase design used, was typified as a case study (Leedy & Ormrod, 2005:108; Nieuwenhuis, 2012:75). In more particular terms, the case study was recognised as an instrumental case study (McMillan & Schumacher 2010:345) since it focused on an in-depth understanding of identified determinants that might inform the development of an assessment induction programme for MGI. To operationalise the said strategy of inquiry, the first phase of the study comprised of a qualitative approach to ascertain the nature and scope of existing assessment induction programmes at selected South African HEIs. In the second phase of the study, the quality of assessment literacy of academic staff at MGI

was determined by means of a quantitative approach which was followed by a qualitative approach.

1.6.3 Population and sampling

Selected South African HEIs and all academic staff attached to MGI formed the initial population of the study.

Kumar (1999:148) defines sampling as “the process of selecting a few (sample) from a bigger group (the sampled population) to become the basis for estimating or predicting a fact, situation or outcome regarding the bigger group.

Non-probability sampling was applied throughout the study. The researcher utilized purposive sampling and convenience sampling. According to McMillan and Schumacher (2006:319) purposive sampling is appropriate when the researcher wants to understand something in-depth by including information-rich research participants. With reference to the first phase of the study, South African public HEIs, representing traditional Universities and Universities of Technology, were considered for inclusion in the study. Private HEIs were not considered to form part of the study, based on the researcher’s assumption that induction programmes of public HEIs featured more prominently. Sufficiency of data (Greeff, 2005:294) was used to determine the sample size. Eventually, six institutions participated in the research.

For the second phase of the study, two parts were distinguished to determine the quality of assessment literacy of academic staff of MGI to inform the development of an assessment induction programme. During the period of the research, MGI had 101 academic staff members of which 39 were full time staff members, 11 fixed term staff members and 51 were part-time staff members. This sample represented different academic levels, ranging from Deans, Head of Programmes and lecturers since all were involved in lecturing. With reference to the part-time staff, it needs to be mentioned that the average retention period of such staff was three years. With regard to the first part (quantitative part) of this phase of the study, all 101 academic staff members were included since they were all considered as information-rich. Convenience sampling was used for the qualitative part (second part) of this phase of the study as it was envisaged to include only full time academic staff, irrespective of

their ranks, representing each faculty. In convenience sampling research participants are selected on the basis of their accessibility (McMillan & Schumacher, 2006:125). Although all academic staff who participated in the research were considered to be information-rich, those who were available and willing to participate were included in this qualitative, second phase of the study. In the end, 13 lecturers formed part of this part of the study.

1.6.4 Data collection methods

Both qualitative and quantitative data were collected and this was done by means of document analysis, questionnaires and interviews.

1.6.4.1 Qualitative data collection method: Document analysis (Phase one)

To uncover the nature and scope of existing assessment induction programmes at selected South African HEIs, a non-interactive, qualitative research design (McMillan & Schumacher, 2006:26) was applied. According to McMillan and Schumacher (2006:27), non-interactive designs are sometimes also referred to as analytical research and are mostly used to analyse documents. Since Henning *et al*. (2004:99) argue that documents are "valuable sources of information" a document analysis of official and appropriate documents pertaining to assessment induction programmes at selected South African HEIs was done.

1.6.4.2 Quantitative data collection method: Questionnaires (Phase two, part one)

Questionnaires are written lists of questions, and the answers on these questions are recorded by respondents (Kumar, 1999:110). To conduct the quantitative part of the second phase of the study, namely to determine the quality of assessment literacy amongst MGI academic staff, a self-generated questionnaire which included closed-ended and open-ended questions were administered. For the construction of the questionnaires, guidelines provided by Struwig and Stead (2004), Cooper and Schindler (2006), McMillan and Schumacher (2006) and Leedy and Ormrod (2005) were observed. The closed-ended questions comprised of a variation of questions (Maree & Pietersen, 2007:161-165), while the open-ended questions enabled research participants to express their ideas, feelings and impressions freely and

spontaneously. The questionnaire was constructed to allow for approximately 20 to 30 minutes for completion.

1.6.4.3 Qualitative data collection method: Interviews (Phase two, part two)

Interviews are regarded as the primary data collection methods for gathering data in qualitative research. Greeff (2005:292,299) differentiates between one-to-one interviews and focus group interviews. One-to-one interviews are further classified as unstructured interviews, semi-structured interviews, open-ended or guided interviews and ethnographic interviews (Greeff, 2005:292).

One-to-one interviews, composed of semi-structured questions to allow the pre-determined questions to "define the line of inquiry" (Nieuwenhuis, 2007a:87), were conducted. Twenty to thirty minutes were allowed as time frame for each interview. The purpose of the interviews was to elaborate on the quantitative data obtained in the same phase of the study and to generate qualitative data on more refined, detailed views and opinions regarding the quality of assessment literacy of academic staff with the aim to develop an induction programme. The researcher prepared the interview questions beforehand. By using a detailed interview guide similar to a questionnaire, the questioning order and consistent phrasing of questions were maintained.

1.6.5 Data collection process

For the first phase of the study, data with regard to the nature and scope of existing assessment induction programmes at selected South African HEIs were collected. The data for the second phase of the study, which was primarily concerned with the quality of assessment literacy, were collected within MGI. For this latter phase of the study all academic staff were included in the quantitative part of the research, while the qualitative part of the study comprised of 13 full time academic staff (*cf.* 1.6.3). Provision was made to conduct the research at a time that was convenient for the staff. The collection of data was not done during lecturing time, but only during consultation hours. The study, being a multiphase, mixed methods design, included the following stages of data collection:

- Public accessible documents (via request from institutions or available on their websites), pertaining to existing assessment induction programmes at South African HEIs, were analysed to determine the nature and scope of such induction. Analysis continued until data saturation was attained.
- Permission was obtained in writing from the Senate of MGI and the Research Committee of MGI to conduct the research within the institution.
- All academic staff of MGI completed the questionnaires during faculty meetings, which took place during the first semester of 2013.
- Academic staff members who were interviewed were conveniently selected.
- One-to-one interviews were conducted with the sampled staff members during their consultation hours in the first semester of 2013.

1.6.6 Role of the researcher

McMillan and Schumacher (2006:344) describe the role of the researcher as "a relationship acquired by and ascribed to the researcher in interactive data collection". For the non-interactive, qualitative part of the study (Phase one), the researcher personally requested or accessed documents after which it was analysed in terms of the nature and scope of existing assessment induction programmes at South African HEIs. After piloting, researcher personally administered the questionnaire and interviews for Phase two of the study. Since the researcher was alert that her position as Dean of the Faculty of Commerce at MGI may have impacted on the research results, she was especially thoughtful with regard to conducting the interviews as colleagues might feel intimidated during these. Furthermore, the researcher observed the protection of the rights of the various institutions, including MGI, as well as the welfare of the individual research participants. These matters were dealt with in an ethically responsible manner.

1.6.7 Data analysis and interpretation

The sets of data gathered through the process outlined in 1.6.5 above, were analysed separately and independently. Thereafter, the sets of data were merged for comparative purposes and interpreted to the extent to which the two data sets related to each other to gain a better understanding of the research question.

The Statistical Consultancy Services of the North West University: Vaal Triangle Campus was consulted for assistance with the capturing, analysis and interpretation of the quantitative data. Descriptive statistics were applied to determine the frequency, means and percentages reflected by the quantitative data. The researcher also made use of visual representations and graphical techniques to help her to identify patterns in analysing the quantitative data. According to Leedy and Ormrod (2005:30) descriptive statistics summarize the general nature of the data. Since the purpose of qualitative analysis is to obtain a deeper understanding of the researched phenomenon, the researcher constantly engaged with the collected information obtained through the document analysis and individual interviews. With regard to the analysis and interpretation of the interviews, the researcher dealt with it in a deductive manner by means of identifying *a priori* categories (Nieuwenhuis, 2012:99). After transcribing the obtained information, research participants' responses were assigned codes. Struwig and Stead (2004:169) define codes as "labels that assign units of meaning to the information obtained". With the coding process the data were organised, structured and condensed. The codes were then clustered into *a priori* categories. Through constant comparison, data were checked for distinctive elements or to establish generalities within categories. This process continued until the researcher was satisfied that no new issues were overlooked (Dawson, 2006:117).

1.6.8 Quality criteria

This study used triangulation which is the adoption of more than one research approach, methodology and instrumentation to ensure the trustworthiness of the data that have been collected (Leedy, 1993:143). Methodological and data triangulation were ensured by applying both qualitative and quantitative research designs. In this study the respective phases of the research and the methodologies used were reinforced by each other. Data triangulation was incorporated in the form of

questionnaires and interviews. According to De Vos (2005a:361) triangulation allows the researcher to take multiple measures of the same phenomenon, and to have confidence in the research results. In this study the procedure of data triangulation (De Vos, 2005b:346) enhanced the study's transferability.

For the development of the data collection instruments the researcher focused on reliability by obtaining "consistent and stable measurement of data" (Welman *et al.*, 2005:9) and on validity to ensure that the research is "representative of what the researcher was investigating" (Welman *et al.*, 2005:9). The researcher attempted to promote reliability by checking that the questionnaire and interview questions were carefully worded to ensure that its meaning was the same for all participants, that there were not leading questions which influence participants to respond in a particular way or that there were not double-barrelled questions where the same question has many parts which often results in participants not answering all the parts and thus compromising the reliability of the data (Maree & Pietersen, 2007:160). Internal validity was ensured by checking that the all questions posed to participants were related to the focus of the research; therefore applying face and content validity (Pietersen & Maree, 2007:217). Although the study centred on the development of an assessment induction programme for MGI, multiple data sources assured external validity or the extent to which the conclusions drawn from the research can be generalized to other contexts (Leedy & Ormrod, 2005:99; McMillan & Schumacher, 2006:134). Moreover, external validity was also attempted by conducting part of the study (Phase two), in a real life setting (Leedy & Ormrod, 2005:99).

By conducting a pilot study with willing participants, similar to the research participants, at a neighbouring PHEI prior to the actual research, the research instruments were audited for reliability and validity.

To ensure the trustworthiness of the qualitative part of the study, **credibility** (De Vos (2005b:346) was ensured by tape recording the responses of the research participants during the interviews and asking the participants to verify selected responses. **Dependability** (De Vos, 2005b:346) was ensured by examining the documentation, such as the interview notes and interpretations made by the researcher to secure accuracy. For **conformability** (De Vos, 2005b:347) or for ensuring unbiased findings, the researcher based all interpretations solely on the raw data gathered from the

recorded tapes and made use of a knowledgeable colleague in the field to verify the verbatim transcripts and the findings to ensure that the researcher was not biased, but based all interpretations only on the data.

1.6.9 Ethical considerations

All professionals are guided by a code of ethics and therefore all parties in research should exhibit ethical behaviour. Cooper and Schindler (2006:116) define ethics as "norms or standards of behaviour that guide moral choices about our behaviour and our relationships with others". According to the same authors, the goal of ethics is that no one is harmed or suffers adverse consequences from research activities. Based on the guidelines provided by Strydom (2013:115-129), the researcher adhered to the following ethical principles when conducting the research, namely: confidentiality, anonymity, privacy, informed consent from participants and the principle of full disclosure of information about the research. The researcher considered a range of ethical matters which included the following (*cf.* 4.11):

- Application for ethical clearance from the North-West University, Vaal Triangle Campus **(Appendix A).**
- Permission to conduct the research at MGI from the Research Committee of MGI **(Appendix B).**
- Informed consent from all the academic staff of MGI to participate in the research **(Appendix C).**
- Managing and conducting the research in a scientific appropriate manner.

1.7 DELIMITATIONS OF THE STUDY

Delimitations refer to the restrictions imposed on the study by the researcher (Best & Kahn, 2003:37). A major delimitation of the study was its restriction to one institution (MGI) only. However, it was argued that the research has the potential to serve as thrust for similar research in other contexts or to improve existing assessment induction programmes of other institutions. The limitations related to the generalizability of the research results were thus observed very carefully when reporting data.

It is also true that individuals sometimes have negative attitudes toward studies conducted in their institutions. The researcher however, tried to convince such individuals about the value of the research towards improving teaching, learning and particularly assessment at MGI.

1.8 SIGNIFICANCE AND POSSIBLE CONTRIBUTIONS OF THE STUDY

The study aimed to inform the development of an assessment induction programme at a specific institution. This implies that assessment could be introduced in future to newly appointed academic staff to the institution in a more structured manner founded on scientific evidence. It also implies the enhancement of academic staff's reflexive abilities about assessment and the consequential improvement of their assessment practices, which could impact positively on students' results. Furthermore, the researcher was confident that the research results would encourage similar research at other HEIs to improve on their existing assessment induction programmes or to initiate better-quality assessment practices at higher education level.

1.9 POSSIBLE CHALLENGES OF THE STUDY

Availability of and access to relevant documents from HEIs as well as the divergence in existing assessment induction programmes posed challenges to the researcher. Taking performance appraisal into consideration, a challenge was foreseen that academic staff at MGI would supply information that they felt will better their position. The completion of the questionnaires during a faculty meeting, was also regarded as a possible challenge since this could have caused anxiety among some participants. Other potential challenges were that questionnaires might not have been completed fully or the unwillingness of identified participants to participate in the interviews.

The researcher attempted to deal with these challenges by explaining the purpose and importance of the research and by personally administering the data collection process.

1.10 LAYOUT OF THE STUDY

Chapter 1: Orientation, description of the problem and purpose of the study, overview of the research methodology, theoretical framework and the research outlay.

Chapter 2: Literature review: An explanation of induction and an outline of induction in the context of higher education

Chapter 3: Literature review: Assessment and assessment literacy

Chapter 4: The empirical research: description of the research paradigm, design, sample, data collection methods, quality criteria, data collection process and ethical considerations.

Chapter 5: Data analysis and interpretation

Chapter 6: Findings, conclusions and recommendations

1.11 CONCLUSION

In this chapter, a brief overview of the study was provided to serve as orientation to the study. Aspects that were included are an outline of the rationale for the study, the purpose of the study, the research questions and objectives. The conceptual framework, research methodology and the delimitations of the study were also presented. The significance and the possible contributions as well as possible anticipated challenges were also presented. The chapter was concluded by delineating the structure of the study. In the chapter which follows, induction will be examined.

CHAPTER TWO
LITERATURE REVIEW: INDUCTION PROGRAMMES

"Best induction is a process not an event" (Stirzanker, 2004:31)

2.1 INTRODUCTION

This study aims to examine the nature and scope of existing induction programmes and the quality of assessment literacy as co-determinants for developing an assessment induction programme for MGI. Hence, it will be imperative to gain a theoretical understanding of what induction and assessment literacy entail. Consequently, this chapter will focus on the following secondary research questions (*cf*. 1.3.1):

- What does the notion of induction entail in the context of higher education?
- What are the implications of induction for the quality of teaching, learning and assessment?

In order to address the stated secondary research questions, this chapter intends to define induction, consider the purpose of induction and discuss the types of induction programmes. The value of induction programmes will also be examined and possible weaknesses threatening the effectiveness of induction programmes will be identified. Thereafter, the management of an induction programme will be considered, followed by a discussion on the planning, organising and designing of an induction programme. The chapter will be concluded with an outline of the stages of the induction process and a synopsis of current induction at MGI.

2.2 DEFINING INDUCTION

Buchner and Hay (1999:321) are of the opinion that induction is essentially an initiation to the position of work and the organisation. According to Cascio (2003:310) induction is the "familiarisation with and adaptation to a situation or an environment". Grobler *et al*. (2006:206, 207) define induction as "the process of integrating the new employee into the organisation and acquainting him or her with the details and requirements of the job."

Related to an academic environment, Castetter (1992:186) sees induction as the effort by the institution to assist academic staff to adjust enthusiastically and efficiently to teaching, so that they can make a meaningful impact to learning. Mothata (2000:84) furthermore defines induction as a process of training a newly appointed academic staff member to the teaching job. Relatedly, Steyn and Van Niekerk (2002:232) regard academic induction as the institutions' efforts to assist academic staff to adjust effectively to their new work environment with the lowest interruption and as quickly as possible, so that the institution's functioning can proceed effectively. Grobler *et al.* (2006:208) characterise induction as the process of introducing academic staff to the:

- goals of the institution;
- policies and procedures of the institution;
- values and co-workers of the institution;
- activities to be performed in the institution, and
- the teaching aids to be used in the classroom.

In a similar way, Neilsen *et al*. (2006:15) describe induction as "a period when academic staff have their first teaching experience and adjust to the roles and the responsibilities of teaching."

Derived from above, it is evident that induction is not only a process of introducing newly appointed academic staff to the staff of the institution, but also to the goals of the institution. Induction programmes can thus be seen as a structured form of support for newly appointed academic staff. Affirming the aforementioned, Tickle (2000:143) suggests that induction is a phase where newly appointed academic staff are introduced and guided into the practice of teaching and learning. Kessels (2010:85) concludes that an induction programme is meant to support new academic staffs' professional development.

In addition to the above definitions, the researcher's definition of induction is guided by a number of perspectives. Firstly, the researcher concurs with Moir (2009:15) who declares that an effective induction programme requires the representation of all stakeholders in the induction programme design. In terms of this study, the opinions of research respondents will be considered for proposing an assessment induction programme for MGI. Secondly, the researcher associates with Gill (2010:10), who suggests that induction is the process used in training academic staff in the skills

necessary for being successful. With regard to this study, assessment is considered to be an essential skill of academic staff. Thirdly, the researcher can align herself with Kempen's (2010:46) statement that a well-designed and implemented induction programme can improve practice, since it is envisaged that this study will contribute towards the improvement of assessment at MGI. In conclusion, for the purpose of this study, induction is defined as an inclusive process for developing a well-designed programme to enhance the assessment knowledge and skills of MGI academic staff to make a meaningful impact on students' learning.

Besides defining induction, the phenomenon can further be clarified by delving into its purpose.

2.3 PURPOSE OF INDUCTION

Hicks (2000:59) is of the opinion that four objectives can be accomplished by induction, namely:

- to make a new employee feel welcome,
- to ensure that a new employee acquires the basic information to function effectively,
- to help a new employee to understand the organisation in a broad sense, and
- to support a new employee in the process of becoming socialised into the organisation's culture, values and ways of doing things.

For Grobler *et al.* (2002:207) successful induction serves as buffer to overcome the initial shock of a new position and work environment; recognises the need to learn new skills or to re-apply learned skills, and consolidates one's position in the institution by applying new behaviours and skills or by integrating newly formed attitudes with those held from the past in order to become effective. Considering the important role of induction on future performance, Grobler *et al.* (2006:207) identify the following purposes of induction:

- To familiarise new employees with job procedures.
- To establish relationships with co-workers; including subordinates and supervisors.
- To create a sense of belonging among employees by showing them how their job fits into the overall organisation.

- To familiarise new employees with the goals of the organisation.
- To specify the preferred means by which these goals should be attained.
- To identify the basic responsibilities of the job.
- To indicate the required behaviour patterns for effective job performance.

Dessler *et al.* (2011:256) maintain that the overall purpose of induction is to ensure that employees know what to do and how to do it.

With reference to an academic environment, Huling-Austin (1990:536) sets out three purposes that have typically been included in many teaching induction programmes across America:

- to improve teaching performance,
- to increase the retention of promising beginning academic staff, and
- to promote the personal and professional well-being of beginning academic staff.

Carrel *et al.* (1998:204) regard the incorporation of academic staff into the institution to become effective staff members as soon as possible and the development of a culture of teaching and learning as main purposes of an induction programme. Cole and McNay, as quoted by Buchner and Hay (1999:321), consider the guidance of newly appointed academic staff to become involved in advanced, effective and professional activities as the central purpose of an induction programme within an academic environment. In an analysis of the purpose of an induction programme, Steyn (2004:84) concludes that a successful induction programme should provide evidence of the following features:

- Orientation, to assist in the integration of beginner academic staff into the profession.
- Psychological support, to reduce feelings of fear, anxiety, insecurity and stress and to enhance the personal and professional welfare of beginner academic staff. Supporting this, Grobler *et al.* (2002:210) state that an effective induction programme will reduce possible adjustment problems for newly appointed academic staff by creating a sense of security, confidence and belonging.
- Development, to assist in the attainment and development of the necessary knowledge, skills and attitudes for the classroom situation. Acknowledging changing and more demanding classroom situations, Long *et al*. (2012:19) also

includes the ability to cope with increasingly complex situations in terms of heterogeneous student populations and large and often under-resourced classes, as part of the developmental feature.

- Philosophy of education, to stimulate the development of reflective skills and a commitment to continuous professional growth. Long *et al*. (2012:19) affirms this feature by reasoning that the notion of induction must be expanded from a narrow, technical and fixed goal-oriented occasion to a developmental process.
- Reducing staff turnover, to retain staff. Reinforcing this feature, Long *et al*. (2012:9) motivate that an induction programme should not only help to develop quality academic staff members but also to encourage and support them to remain in the educational profession.
- Illuminating realistic staff expectations, to candidly inform academic staff of anticipated outcomes.
- Inspiring job satisfaction and a positive attitude towards the institution, to create a supportive situation which may contribute to job satisfaction and staff motivation.

According to Bush and Middlewood (2005:142) the purpose of induction centres on socialisation, since induction is intended to cultivate an appreciation of the core values and beliefs of the institution which will enable a new employee to become a contributing member of the organisation. Sharing the same sentiment, Torrington *et al.* (2008:203) assert that an effective and timely induction programme ensures that academic staff are properly introduced to the institution and to their particular role within the institution. In conclusion, Kessel (2010:87) states that induction programmes are expected to strongly influence the professional development of new academic staff.

Whereas the aforementioned purposes are concerned with the professional development and socialisation of new staff, Wong (2004:41) emphasises the fact that any institution should be dedicated towards the success and achievement of its students. Rebore (2007:156,157) relates to this opinion when stating that the promotion of quality education for students is the ultimate purpose of an induction programme.

Derived from the above, it is evident that although the purposes of induction vary, staff socialisation and development are prominent goals of any induction programme. With regard to academic environments, it appears as if student success can be added to these goals. In the context of this study, it can be concluded that the purpose of induction is to integrate academic staff into the institution and its core business, namely teaching and learning, by providing personal and professional support with the ultimate aim of improving student performance.

2.4 TYPES OF INDUCTION PROGRAMMES

Three types of induction programmes are recognised by Seyfarth (1996:114). These are orientation programmes, performance improvement programmes and induction programmes for certification. Guided by Seyfarth (1996:114), Steyn and Schulze (2005:241), Grobler *et al.* (2006:212), Torrington *et al.* (2008:203), Wood and Stanulis (2009:13) and Kempen (2010:51), the essences of these three types of induction programmes are summarised in Table 2.1.

Table 2.1: An adapted overview of three types of induction programmes

Orientation programmes "Human resource related matters"	Performance improvement programmes "Induction at the beginning of a career"	Induction for certification
• Distinctive components of an orientation programme include an overview of the institution's mission, curricula, policies and procedures related to teaching and/or academic content standards. • Aimed at providing new academic staff with essential information. • Duration is short and the emphasis is on information distribution. • During orientation, the new staff member may be introduced to staff members and have his/her timetable and tasks explained.	• Performance improvement programmes aim at improving the instructional efficiency of newly academic staff. • Workshops arranged cover discipline and classroom management procedures, performance assessment procedures, conversations with subject-area specialists and assistance in preparing a professional development plan. • Performance improvement programmes could take many forms: – Formal, planned and officially conducted by the organisation at set times.	• Usually operates under state mandate. • Academic staff need to demonstrate the mastering of certain teaching competencies in order to receive a certificate. • An assessment team is assigned to assess the competence of academic staff.

Orientation programmes "Human resource related matters"	Performance improvement programmes "Induction at the beginning of a career"	Induction for certification
• Organisational orientation could include a tour of the institution or take the form of a presentation.	– Informal, unplanned and unofficially conducted by co-workers. • Three basic approaches could be followed during the Performance improvement programme: – A verbal approach which is normally used in a one-to-one situation or within small groups. It is time-consuming and expensive but provides good feedback and promotes maximum understanding. – A written approach with the main advantage that everything is on record. – An audio-visual approach in which verbal and written approaches are combined. The main advantage is that once it is developed it can be used repeatedly if it is continuously updated.	

Although all three programme types are probably needed to develop well-rounded academic staff, Kardos, as quoted by Wong (2004:48), also points to the fact that on-going professional development opportunities for improving the professional skills of academic staff are prerequisites for raising the competency levels of staff. Based on the aforementioned, it seems appropriate that this study adopts an induction programme which starts as an initial event but culminates into follow-up professional development sessions. Thus, the researcher contends that the proposed assessment induction programme for MGI will be best typified as a performance improvement programme with further developmental opportunities. Based on this argument, it can

be concluded that an ideal induction programme in an academic context could comprise of the components as portrayed in Figure 2.1.

Figure 2.1: Components of an induction programme within an academic context

2.5 THE VALUE OF INDUCTION PROGRAMMES

The researcher's observation that newly appointed academic staff at MGI, particularly those who do not have a sound background in education as a field of study, often experience challenges in meeting job expectations and responsibilities. This observation is affirmed by Buchner and Hay (1999:320) and Martinez (2008:46). Van Deventer and Kruger (2003:210), Dessler *et al.* (2011:256) and Wadesango and Machingambi (2011:4) also postulate that newly appointed academic staff is often not given clear guidelines and support on what is expected with regard to preparation, presentation and appraisal since they are not exposed to appropriate and necessary induction programmes. While it is acknowledged that induction programmes are essential in addressing the mentioned concerns (Carrel *et al.,* 1998:209; Employment of Educators Act (76 of 1998), it is also necessary to contemplate the value of induction programmes.

Whereas research by Wong (2004:52) indicates that induction programmes enable academic staff to adjust to the environment of teaching, it is also suggested that staff exposed to induction, are most likely to produce their best work and achieve the objectives of the institution. Algozzine *et al.* (2007:137) claim that high quality induction programmes develop and support quality academic staff. This is affirmed by O'Brien (2009:43) who postulates that appropriate induction plays a significant role in the early professional development of academic staff, by also enhancing their skills and abilities.

Darling-Hammond (2003:11) reckons that the value and importance of induction programmes should not be underestimated, as it aims at raising retention rates of new academic staff by improving attitudes, feelings of efficacy, and instructional skills. Gilles, Davis and McGlamery (2009:44) agree that induction programmes will increase retention rates of staff, while Fenton-Smith and Torpey (2013:230) believe that induction programmes have been proven effective in raising competencies and retention rates of academic staff. Raman *et al*. (2013:421) further state that induction of new staff can reduce anxiety and fear of failure on the job.

By recognising the value of induction programmes, Wadesango and Machingambi (2011:1) infer that appropriate and well-planned induction programmes result in staff who:

- are more motivated,
- can extend their range of skills and knowledge,
- are more adaptable,
- are less likely to waste the institutions resources and staff time, and
- benefit from reduced levels of stress and anxiety.

Derived from above the researcher concedes that induction programmes are valued for a variety of reasons. However, in the context of this study, the enabling value of induction programmes in terms of teaching, learning and assessment is vital. In this regard, it is important to recognise the value on induction programmes on student performance and achievement (Joyce & Showers, 2002:4; Hopkins & Harris, 2013:6).

2.6 POSSIBLE WEAKNESSES OF INDUCTION PROGRAMMES

A prevalent shortcoming with regard to many induction programmes is that it is not easily identifiable as an induction programme (Tickle, 1994:179) or that it is often informal and not properly planned or structured (Tickle, 1994:172). Such programmes are referred to as “corridor programmes” (Tickle, 1994:172). Furthermore, the needs of the institution and the staff concerned are not always determined for developing induction programmes (Gerber *et al*. (1998: 128); Steyn & Van Niekerk (2002:233)). Grobler *et al.* (2006:209-210) state that where induction programmes are introduced, the key components are lacking. Taking this observation even further, Wadesango and Machingambi (2011:3) state: “The thrust of induction as it prevails in many SA Universities is confined to HR-related issues and in some cases to issues that relate to actual teaching in the lecture hall.” To conclude, Davis and Field-Waite (2006:1) warn that inadequate induction of newly appointed academic staff is one of the major barriers towards the improvement of teaching.

In addition to the already mentioned weaknesses, Grobler *et al.* (2006:209-210) identify several other shortcomings with regard to induction programmes. These include:

- Supervisors responsible for the induction task either lack the time, ability or motivation to fulfil this obligation.
- Either organisations do not consider anxiety and stress (due to insecurity and unfulfilled expectations) to be a primary cause of labour turnover among new employees or they are totally unaware of the important role it plays in this regard.
- Organisations consider effective recruitment, selection, training and development as substitutes for induction.
- Overemphasis on adherence to organisational practices and procedures while little attention is paid to instilling loyalty and commitment to the organisation.
- Existing employees, who are transferred or promoted within the organisation, are not subjected to induction programmes.
- The effectiveness of induction programmes is not assessed.
- Induction programmes are more focused on promoting the image of the organisation.

In the context of this study it is also important to take note of the following assertions to confirm the viability of the research. While Taranto (2011:6) indicate that assessment should form part of an induction programme for academic staff, Allen (2003:3) and Mertler and Campbell (2005:3) claim that it has been widely reported that many academic staff induction programmes do not include a course in assessment. This is confirmed by Gill (2010:8) who continues by stating that this state of affairs makes academic staff to feel inadequately prepared to assess their students' performance.

2.7 MANAGING INDUCTION PROGRAMMES

In order to address the successful management of induction programmes, the researcher resolved that a brief discussion of the following questions would be helpful. These questions include: Who should attend induction programmes? Who should take responsibility for induction programmes? What should be the duration of induction programmes? How should quality control be done?

2.7.1 Who should attend induction programmes?

According to Grobler *et al*. (2006:210), the following employees could benefit from attending induction programmes:

- New employees.
- Current employees who were transferred within the organisation.
- Current employees who were promoted within the organisation.
- All current employees in the case of major organisational changes.

In addition, Raman *et al.* (2013:420) indicate that "all staff new to the institution or the role, needs to receive a timely induction".

The researcher concurs with the above suggestions, but also beliefs that with regard to further development opportunities (*cf.* 2.4) all academic staff should be invited to attend induction programmes.

2.7.2 Who should take responsibility for induction programmes?

Based on the view of Tickle (2000:8), the researcher is of meaning that there is a shared responsibility between individuals, line managers and training and development providers for the development of staff. Inferred from this view, all mentioned parties are responsible for the success of induction programmes. Rhode Island Department of Education (2008:8) and Brock and Chatlain (2008:383) agree that induction and professional development opportunities may be provided by mentors, colleagues, administrators, or a combination of all of these positions. Torrington *et al.* (2008:203) deem that induction programmes and development opportunities are best handled by different people within an organisation and continue by indicating that organisational induction (Orientation programme) is normally conducted by the HR department, while job-based induction (Performance improvement programmes) should be carried out by the direct supervisor or line-manager.

Table 2.2 below reflects a synopsis of the role players and responsibilities of the various levels of employees that could be involved in induction programmes.

Table 2.2: Possible role players and their responsibilities (Adapted from Grobler *et al*., 2006:210)

ROLE PLAYERS	TYPE OF PROGRAMME	RESPONSIBILITIES
The supervisor	• Orientation • Induction programme at the beginning of an employee's career.	• Introducing new employees to co-workers. • Explaining job duties, responsibilities, policies, procedures, rules and regulations. • Taking the employees on a familiarisation tour of the workplace.
The HR department	• Orientation	• The employment contract. • Compensation and loan facilities. • Medical schemes, pension plans and other benefits. • Developing, coordinating and monitoring the programme. • Assessing the effectiveness of the programme. • Explaining issues such as disciplinary code and procedures, grievance procedures, and other collective agreements.

ROLE PLAYERS	TYPE OF PROGRAMME	RESPONSIBILITIES
'Mentor' or 'Buddy'	• Development opportunities	• Assisting the new employee regarding how to operate basic equipment such as photocopiers, telephones and faxes and how to dispose of the mail. • Demonstrating how to log on to computers, generate passwords and use basic programmes (junior member of the workgroup).
New employee	• Orientation • Induction programme at the beginning of an employee's career. • Development opportunities.	• Actively participate in the programme. • Completing induction evaluation forms. • Providing informal feedback to the HR department and supervisors if requested.

In an academic environment the role players may differ from the traditional role players in the corporate workplace. In an academic environment the supervisors may be referred to as the Dean of Faculty and/or Head of Programmes. These role players could introduce the newly appointed academic staff member to the other academic staff in the faculty or department and explain all work-related duties, responsibilities and policies. The aforementioned could take the form of an informal orientation programme (*cf.* 2.4). All administrative responsibilities lie with the HR department of institutions. HR staff should provide newly appointed academic staff with contracts, explain all benefits included in the contract and also explain issues such as disciplinary codes and procedures, grievance procedures, and other collective agreements. Induction programmes of this nature could take the form of a formal orientation programme (*cf.* 2.4).

For a newly appointed academic staff member, uncertainty about many issues related to teaching and learning can be frightening (Steyn & Van Niekerk, 2002:234). Hence, the appointment of a mentor could be helpful. Rhode Island Department of Education (2008:9) states that a mentor is able to provide on-going orientation and could serve as a catalyst for engaging academic staff in professional development experiences to increase their effectiveness. In this regard, mentor assistance could be regarded as informal, performance improvement programmes (*cf.* 2.4). Institutions of Higher Education usually have units to which academic staff development is assigned. These units could take responsibility for offering induction in the form of formal performance

improvement programmes which could be extended to further developmental opportunities (*cf.* 2.4).

For the purpose of this study, it appears as if the following role players could take responsibility for assessment induction: Deans of Faculty and/or Head of Programmes, mentors within Faculties and staff development units.

2.7.3 What should be the duration of induction programmes?

Grobler *et al*. (2006:212) suggests that induction sessions should not exceed two hours, while the period of induction should be linked to the time an individual takes to become successful in his/her work. Grobler *et al*. (2006:212) are also adamant that follow-up sessions should be conducted after an initial induction programme. According to Torrington *et al.* (2008:203), there is no "right" length for an induction programme. To be effective, it can be a few days in some organisations, while in others it may need an extended period of time. This is also confirmed by Dessler *et al.* (2011:256) who maintain that the induction approach may impact on the duration of the induction programme.

With regard to this study, the researcher reasons that the type of induction programme would, to a large degree, determine the duration of such a programme. For example, orientation of an informal nature may take less time than orientation of a formal nature. Likewise, the duration of informal performance improvement programmes, may have a shorter duration than formal performance improvement programmes. The same may also apply to further developmental opportunities.

2.7.4 How should quality control of induction programmes be done?

Pienaar and Subramoney (2012:185) defines control as the process of monitoring activities to make sure that they are executed in the same way that was outlined at the planning stage. Applicable to induction programmes, Lussier (1997:11) states that controlling implies establishing as to whether the goals of the institution were met. Said differently: control is an essential process to determine whether the induction programme has achieved what it set out to achieve (Steyn & Van Niekerk, 2002:261). According to Van Deventer and Kruger (2003:127) control is the assessing and regulating process to ensure that the institution's outcomes were accomplished.

Control can be seen as similar to evaluation since Mothata and Mda (2000:62) state that evaluation is "a process of judging the worth of an educational programme, including judgments about the quality of its content and, more specifically, measurements of the effectiveness of learning experiences." In addition, Hamblin (as quoted by Armstrong, 2001:570) defines evaluation as an attempt to obtain feedback on the effects of a programme and to assess the value of the programme in light of that information.

The evaluation of induction programmes is considered by Grobler *et al.* (2006:215) as imperative and state that the benefits of such an evaluation could provide evidence in terms of the following:

- that the programme is cost-effective,
- that objectives were achieved,
- that the methods used were the most suitable.

In evaluating induction programmes, it is also important to obtain feedback from staff involved in a particular programme. Cascio (2003:314) distinguishes between several means of getting feedback from staff:

- through discussions with new employees after their first year of employment,
- through in-depth interviews with newly appointed academic staff members and
- through questionnaires to students.

With regard to feedback from staff, Peloyahae (2005:27) also adds evidence-bearing feedback in the form of portfolios which bears testimony of staffs' knowledge, understanding and skills regarding those aspects covered during induction; classroom or personal visits to evaluate staffs' teaching competence and the execution of administrative tasks.

Another way of getting feedback from staff following the attendance of an induction programme is more covert in character. Grobler *et al.* (2006:208-209) suggest that the behaviour and attitudes of staff could contain messages indicating the success of induction programmes. Behavioural indicators could include the following:

- Staff are able to carry out their assigned roles and meet the minimal levels of expected performance.
- Staff are eager to continue with their work and want to stay in the new job.
- Staff are innovative and cooperate spontaneously.

Attitudinal indicators include general work satisfaction, intrinsic motivation and high levels of work immersion.

From the information thus far and by also considering Barbazette's (2007:1) identification of some key elements of successful induction programmes, the researcher concludes that the following could serve as guidelines to control the quality of induction programmes:

- The cost effectiveness of the programme.
- The planning and design of the programme.
- The suitability, clarity and completeness of the programme material.
- The appropriateness of the delivery mode.
- The extent to which the intended outcomes were achieved.
- The extent to which provision is made to receive vigorous feedback from participants.

The undeniable importance of feedback from participants of induction programmes to control the quality of such programmes is also evident. In this regard overt and covert feedback should be valued.

In conclusion, the researcher is convinced that quality control of induction programmes should also be supplemented by pro-active measures in the form of quality assurance to ensure excellence. By considering the same guidelines for controlling the quality of induction programmes as mentioned earlier, quality assurance could serve to anticipate and prevent quality problems, rather than to detect these problems afterwards (Bell *et al.*, 1994:3).

2.8 PLANNING, ORGANISING AND DESIGNING INDUCTION PROGRAMMES

2.8.1 Planning

According to Squelch and Lemmer (1994:22) planning signifies a process by which aims are established and the attainment of these aims specified. Planning is described by Van der Westhuizen (1997:137) as a task which is concerned with purposely reflecting on the stated objectives, the available resources, as well as the activities involved, and drawing up the most suitable plan for effectively achieving the said objectives. Lussier (1997:11) describes planning as the process of setting objectives and determining in advance exactly how the objectives will be met. Van Deventer and Kruger (2003:80) state that planning is "in essence the forward thinking" that is required in order to determine in advance what is needed and how it should be attained. Understood in this way, planning denotes a blueprint or a detailed guide for attaining specified goals.

There are several important reasons for planning. Hinging on Van der Westhuizen (1997:139) as well as Banhegyi *et al.* (2009:205-206), the following motives for planning can be distinguished:

- Planning gives a sense of direction and purpose and makes provision for focused attention on the goals and objectives to be achieved.
- Planning is future-oriented and allows for the anticipation of possible threats and opportunities and how to best deal with these.
- Planning serves as a regulatory device to check and monitor progress towards the set goals and objectives.
- Planning can minimise negative outcomes of change and uncertainty.
- Planning lays down the guidelines used in controlling performance standards.

Consequently, it appears as if planning is an obvious starting point for launching induction programmes (Lussier, 1997:11). In accordance with Grobler *et al.* (2006:212; 267) and Fenton-Smith and Torpey (2013:230), the researcher suggests the consideration of the following matters when planning induction programmes:

- policy and budgetary issues;
- the time required to plan and implement the programme;
- determining the general organisational topics, departmental needs and work-related topics to be included in the programme;
- specifying the programme goals, topics to be included, methods of organising and presenting these topics and the duration of induction sessions, and
- materials, facilities and personnel required to present the programme.

2.8.2 Organising

Lussier (1997:11) describes organising as the process of delegating and coordinating tasks and resources to achieve objectives. Lussier (1997:11) is also of the opinion that good organisation is a requisite of success. Van Deventer and Kruger (2003:109) describe organising as the process of creating a structure for effectively achieving the intended outcomes. Through properly structured and paced induction programmes (Fenton-Smith & Torpey, 2013:230), academic staff could experience higher job satisfaction, higher commitment to the organisational values and goals, increased performance as a result of faster learning times, improved classroom management through heightened productivity, improved relationships and better understanding of institutional policies, goals and procedures.

Deduced from the above, it is gathered that the envisaged goal will dictate which type of induction programme will be most appropriate (*cf.* 2.4) and how such a programme should be managed (*cf.* 2.7).

2.8.3 Designing

The significance of well-planned and designed induction programmes is raised by Fresko and Nasser-Abu (2009:281) who highlight that well-designed induction programmes help acclimatise new academic staff to an institution and their classroom responsibilities, and accelerate professional growth. According to Heyns (2000:161-162), the design of induction programmes should be underpinned by the needs of academic staff which can be translated into three basic kinds of support that can be provided. These three kinds of support include:

- Personal support, which embraces emotional support for a positive self-esteem, confidence and the development of 'feeling effective'. Academic staff need to feel motivated and competent.
- Social support, to enable new academic staff to become members of the professional community, to collaborate with other academic staff and to share ideas.
- Professional support, which is aimed at developing the competence of new academic staff. The support may centre on classroom organisation and management, lesson planning, student assessment, curriculum content and methodology.

Grobler *et al.* (2002:217), Kearnes (2006:32-36) and Kessels (2010:12) further state that a review of the following is required for designing effective induction programmes:

- The target audience, since needs may vary.
- A clear differentiation between essential (need to know) and desirable (nice to know) information.
- The competence and literacy level of the employees at which the programme is aimed.

As a result, it seems as though a well-designed and structured induction programme should include all the activities and processes necessary to successfully introduce skilled professionals to the profession (Sweeny, 2008:2; Raman *et al.,* 2013:431).

2.9 THE STAGES OF INDUCTION

The induction process at the beginning of the employee's career is important in familiarising newly appointed academic staff with work procedures, with establishing relations and to create a sense of belonging and an awareness of institutional policies and vision (Grobler *et al.*, 2002:208). In the discussion that follows the stages of induction programmes will be delineated.

Following the perennial model of Feldman (1981:309-318), De Cieri *et al.* (2003:265) and Nel *et al.* (2008:269) outline the stages of induction that could be followed to introduce and immerse newly appointed academic staff to their work environment and requirements. Favouring the initial model (Feldman), the stages of induction are presented (Table 2.3) and discussed below.

Table 2.3: Feldman model: stages of induction (Adapted from Feldman, 1981:309-318)

Phases	Description
Phase I – Anticipatory socialisation Learning that takes place before newly appointed academic staff members join the organisation. This will include information on the organisation, the job specifically, the skill and abilities needed and the needs and values of the organisation.	• Gaining a full picture on what the organisation is really like in terms of organisational goals and climate. • Gaining an accurate picture on what is expected in the job in terms of duties and responsibilities. • Gaining the necessary skills and abilities to successfully complete task assignments. • Sharing the values of the organisation and meeting personal needs.
Phase II – Encounter Experience the 'true face' of the organisation, the possible shift in values, skills and attitudes. This will include management of outside-life conflicts, intergroup role conflicts, role definitions and initiation to the tasks and the group.	• Having to make adjustments regarding the conflict between personal and work life. • Having to deal with conflicts between role demands of own group and the demands of the other groups in the organisation. • Clarifying own role within the immediate group, deciding on job duties, priorities and time allocation for tasks. • Having to learn new tasks. • Establishing new interpersonal relationships and learning group norms.
Phase III – Change and acquisition Relatively long-lasting changes take place. This includes resolution of the role demands, task mastery and adjustment to group's norms and values.	• Agreeing explicitly or implicitly with the work group on which tasks to perform, tasks priorities and time allocation. • Mastering the skills required and performing the new roles successfully. The tasks to be mastered are teaching methods, assessment strategies, lesson planning and classroom management. • Making adjustments to the work group's values and norms.

During the first stage (Anticipatory socialisation), institutional management needs to help newly appointed academic staff with information before joining the institution. Heyns (2000:163) is of the opinion that all newly appointed academic staff should report at the institution at least a week before the academic year starts. This stage can be regarded as a basic orientation to the new work environment.

With regard to this study, this stage could imply an institutional orientation, but also an introduction to the Faculty or Department.

The second stage (Encounter) is described by Grobler *et al.* (2002:208) as the stage during which academic staff are exposed to the inter-personal relationships and group norms of the institution. Heyns (2000:163) stresses that extreme care should be taken that unnecessary negative impressions are not created, since these impressions tend to be lasting. Robbins *et al.* (2004:430) allude to the fact that new employees are unfamiliar with an organisation's culture and need to be helped to adapt to the culture of the organisation.

The researcher is of the opinion that the newly appointed academic staff will best understand inter-personal relationships and group norms if the culture of the institution is properly explained. Academic staff may also have to learn new tasks pertinent to the institution and their work description during this stage. In the case of this study this also implies assessment and assessment related matters.

The third stage (Change and acquisition) is about "settling in" or integration into the work environment. During this stage newly appointed academic staff will be exposed to the ways things are done in the institution or Faculty. In terms of assessment this may imply adapting current practices and mastering new practices.

2.10 INDUCTION AT MGI

Newly appointed academic staff at Midrand Graduate Institute (MGI) are not formally initiated into their primary duties as lecturers. These duties, encompassing general classroom practices related to teaching, learning and assessment, are overshadowed by information dealing with lecture venues and a general impression of the campus. Moreover, even this information is not communicated through an induction programme but only by means of a Lecturing Handbook (MGI, 2007). In her capacity as Dean, it is the researcher's experience that for many academic staff at MGI the mentioned induction procedures create uncertainty towards the culture of the organisation, but more alarming, also towards the main business of the institution. Unfortunately, this practice is in total contrast with the supposition of Robbins *et al.* (2004:430) who are of meaning that new employees who are unfamiliar with an organisation's culture should be helped to adapt to that culture. The mentioned practice also affirms the hypothesis that "induction at most institutions of higher education is relatively, an informal process" (Raman *et al.,* 2013:420).

2.11 CONCLUSION

This chapter explored the meaning, purpose, types, value, processes and procedures of induction programmes. The chapter concluded with a glimpse at induction at MGI. Through this discussion the recognisable, positive implications of induction programmes on strengthening teaching, learning and assessment at HEIs also transpired.

With the focus on assessment as one of the factors which need to be addressed during the induction of academic staff, it is assumed that assessment literacy is fundamental to the successful implementation of effective assessment. Subsequently, attention will be given to assessment and assessment literacy.

CHAPTER THREE
LITERATURE REVIEW: ASSESSMENT AND ASSESSMENT LITERACY

3.1 INTRODUCTION

"Classroom assessments do more than just measure learning. What we assess, how we assess, and how we communicate the results send a clear message to students about what is worth learning, how it should be learned, and how well we expect them to perform" (Sikudhani, 2013:1). Deduced from this statement, assessment should be seen as a fundamental part of teaching and learning and not only as an action of measurement that follows after learning has occurred. Against this background, this chapter will entertain the following two secondary research questions (*cf*. 1.3.1):

- What exactly does assessment literacy imply?
- How does assessment relate to assessment literacy?

In order to address the mentioned questions, the chapter will define the term assessment by considering a variety of definitions and how assessment relates to measurement and evaluation. This will be followed by a discussion of assessment literacy in terms of how it is defined and characterized by means of criteria. The chapter will continue by examining how assessment literacy is entrenched in assessment theory. This will be accomplished through discussions on how assessment relates to learning, the purposes of assessment, the principles of quality assessment, the forms and methods of assessment. In concluding the chapter, the notion of feedback and instruments to facilitate feedback will be discussed followed by a brief look at using assessment results for making decisions.

3.2 DEFINING ASSESSMENT

According to Erwin (1991:16) assessment can be defined as "the systematic basis for making inferences about the learning and development of students", while Biggs (2000:155) regards assessment as the heart of learning, since it assists in determining if students understood the learning material. SAQA (2001:16) defines assessment as "a structured process for gathering evidence and making judgements about an individual's performance in relation to registered national standards and qualifications". Assessment is also described as a complex process of observation

and monitoring by describing, collecting, recording, scoring and interpreting information about a student's learning (Anon., 2002:1). Airasian (2005:2) defines assessment as "the process of collecting, synthesising and interpreting information to aid in decision making". On almost a similar note, McMillan (2007:5) explains assessment as "an umbrella concept that encompasses different techniques, strategies, and uses" to gather, interpret and use information to aid decision making. According to Lombard (2010:34), assessment fundamentally means to measure something by collecting information which will be used for some purpose. Besides mentioning that assessment is intended to obtain information for decision making purposes, Nitko and Brookhart (2011:3) also add that assessment is aimed at determining the extent to which learning targets have been achieved.

Measurement and *evaluation* are two assessment related terms that are sometimes used interchangeably with *assessment*. However, all three these terms can be differentiated. Nitko (1996:2) describes *measurement* as the procedure for assigning numbers (scores) to a specific element of a student's work in such a way that the numbers describe the degree to which the student possesses the element. Lombard (2010:33) indicates that measurement implies the use of scores to quantify students' knowledge to determine levels of mastering. According to Lombard (2010:33) *evaluation* encompasses decision making about the worth of something. Kizlik (2014:2) sees evaluation as engagement in some process that is designed to provide information that will enable someone to make a judgment. Nitko and Brookhart (2011:3) draw attention to the fact that "degrees of subjectivity, inconsistency, and bias influence all evaluations". From the aforementioned it appears as if assessment can be seen as an umbrella term, comprising of measurement and evaluation. To substantiate this view, the researcher concurs with Oosterhof (2009:10) who states that assessment is "a related series of measures" while evaluation is the "outcome of measurement after value has been added"; which implies that assessment is essentially the culmination of measurement and evaluation (*cf.* Figure 3.1).

Figure 3.1: Relation between measurement, evaluation and assessment (Adapted from Oosterhof, 2009:10-11)

For the purpose of this study, the researcher believes that assessment can be best described in terms of the following steps as suggested by Lombard (2010:34): the collection, analysis, interpretation, recording, reporting and using of information obtained from students' learning.

3.3 ASSESSMENT LITERACY

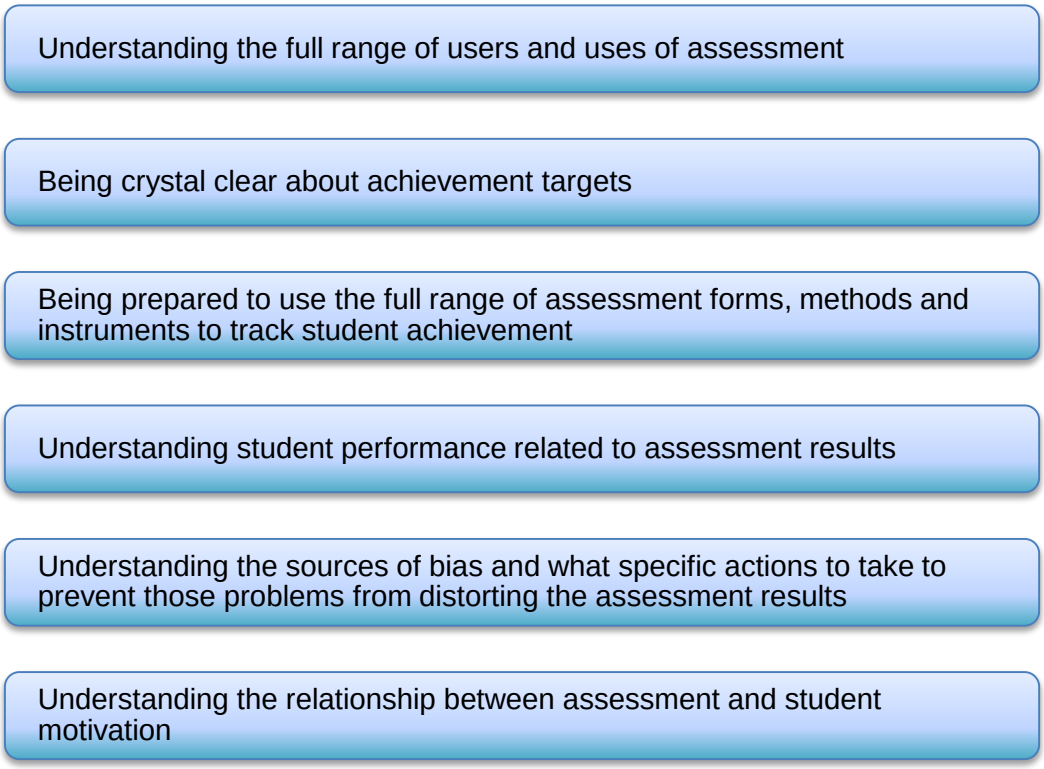
In this section, assessment literacy will be defined and criteria to determine the level of assessment literacy will be established.

3.3.1 The definition of assessment literacy

The exact meaning of the term *assessment literacy* is evasive. This is underscored by the assertion of Leightona *et al.* (2010:9) that *assessment literacy "*might be less widespread than anticipated" and is therefore "worthy of greater investigation". However, the importance of assessment literacy is accentuated in the literature when Brown and Knight (1994:160) declare that if assessment is flawed "the rest will collapse". The significance of assessment literacy is also evident in Popham's (2004:83) contention: "educational accountability and assessment literacy are almost joined at the hip". Alluding to assessment literacy, Chapman (2008:15) also claims that if academic staff do not have a clear understanding of how to assess and how to use the data to make decisions, they might become frustrated in the educational environment.

The term was coined by Stiggins (1991:534-539) who originally explained it as an understanding of the principles of assessment and the particular skills required for assessing. Later, Stiggins (2000:6) identified six features which characterise assessment literacy. These features are represented in Figure 3.2.

Figure 3.2: Features of assessment literacy (Adapted from Stiggins, 2000:6)



According to Swaffield and Dudley (2003:7) assessment literacy implies "an understanding of the issues surrounding assessment and performance data". In his version to describe the term, Popham (2006:84) contends that assessment literate lecturers "need to understand a relatively small number of common sense measurement fundamentals, not a stack of psychometric exotica", which suggests that assessors must know the basics of assessment. In a later description, the aforementioned is affirmed when it is stated: "The sort of assessment literacy that is typically recommended refers to a teacher's familiarity with those measurement basics related directly to what goes on in classrooms" (Popham, 2009:4). Chapman (2008:6) describes assessment literacy as essential knowledge and understanding of test characteristics and properties, the use and interpretation of the results and the ability to make educational decisions. Perry (2013:15) underscores this view by defining

assessment literacy as "the ability to gather dependable and quality information about student achievement and the ability to use information effectively to maximize student achievement."

For the purpose of this study the researcher defines assessment literacy as the knowledge and understanding of the fundamentals of assessment, such as defining assessment, the purposes, processes and taxonomies associated with assessment, the planning and designing of assessment and assessment related terminology.

3.3.2 Criteria to determine the level of assessment literacy

Originating from the above definitions, Quilter (1998:3) postulates that the following criteria could be helpful to determine the level of assessment literacy. These criteria include the ability of academic staff to:

- choose assessment,
- develop assessment,
- scoring, interpreting and administering assessment results,
- use assessment results for decision making,
- use assessment for grading purposes,
- communicate assessment results, and
- recognise unethical assessment practices.

Complementing the above criteria, White (2006:5) states that the level of assessment literacy should be reflected in terms of assessment related skills. These skills are presented as below.

- Defining clear learning goals. This is the basis for developing or choosing ways to assess student learning.
- Making use of a variety of assessment forms, methods and instruments to gather evidence of student learning.
- Analysing achievement data (both quantitative and qualitative) and making good inferences from the gathered data. This is the basis for scoring, interpreting and administering results.
- Using results to communicate appropriate feedback to students and other stakeholders.

- Making appropriate instructional modifications to help students to improve on their performance.

Based on this outline of criteria and skills appropriate for determining the level of assessment literacy, the researcher is of opinion that, based on their fundamental knowledge (*cf*. 3.3.1), assessment literate academic staff should be able to successfully choose, develop, score, interpret and administer results as well as using the results for decision making purposes.

3.4 ASSESSMENT AND ASSESSMENT LITERACY

Considering the researcher's definition of assessment (*cf.* 3.2), it is clear that assessment is a multifaceted phenomenon. In order to relate the complexity of this phenomenon to assessment literacy, it is necessary to provide an overview of the eminent constituents of assessment. In this regard, assessment related to learning, the purposes of assessment, the principles of quality assessment, the forms and methods of assessment and feedback and instruments to facilitate feedback will be discussed.

3.4.1 Assessment related to learning

Traditionally, learning has been seen as experiences which result in changes within an individual. However, learning can also be described as a process of active involvement by students to gather information and to construct meaning, which can be done independently or with the help of others (Du Toit & Du Toit, 2004:8). Additionally, McMillan (2007:12) remarks that learning is an on-going process of receiving, interpreting and relating new information to what is already known or understood.

Assessment could be regarded as a powerful tool for enhancing learning. When learning is considered to be the primary goal, Bryan and Clegg (2006:4) indicate that some questions could be helpful in determining the impact of assessment on student learning. These questions are:

- How does the assessment enhance the learning experience?
- Is provision made to provide useful and timely feedback to take learning forward?
- How will the assessment help students to understand and recognise quality?

- Will the assessment lead to improved performance?

According to Stiggins (cited by Arter, 2009:5), learning is also evident in students' responses towards their assessment results. These responses could include phrases such as: "I understand these results", "I know what to do next to learn more", "I can handle this" or "I choose to keep trying".

Hence, assessment could help to gain an understanding of students' beliefs and knowledge; in identifying incomplete understanding, and in giving feedback to improve learning. Reflection on assessment tasks in terms of how it supports student engagement to promote learning is therefore necessary (Lombard, 2010:50). The profound relation between assessment and learning further manifests in the distinction between *assessment **of** learning, assessment **for** learning and assessment **as** learning.*

*3.4.1.1 Assessment **of** learning*

Stiggins (2000:7) states that since assessment ***of*** learning is not primarily intended to diagnose students' needs, it serves as a poor mechanism of supporting students to achieve better results. Bennett (2009:5) indicates that assessment ***of*** learning is equal to summative assessment, while Earl (2003:22) and Harlen (2007:121) state that the results of assessment ***of*** learning are usually used for decision making purposes in terms of student promotion. In summary it can be said that assessment ***of*** learning refers to assessment intended to confirm what students know; to demonstrate whether students met the learning outcomes or goals and to certify students' competence.

*3.4.1.2 Assessment **for** learning*

Whereas assessment ***of*** learning focuses on summative assessment, assessment ***for*** learning puts more emphasis on formative assessment as it offers information for improving learning (Earl, 2003: 24, 27). Assessment ***for*** learning is concerned with the alignment of instruction with learning outcomes, the identification of students' learning needs, the selection and adaptation of learning material and resources, the application of different teaching strategies to help individual students, and the provision of immediate feedback and directions to the students (Harlen, 2007:119). This confirms Arter's (2009:4) observation that assessment ***for*** learning takes place

throughout the learning process. Assessment ***for*** learning can thus be regarded as a means to explore what students know and can do, and what misunderstandings, ideas or gaps there are to change or to fill. In this sense, assessment ***for*** learning serves a scaffolding purpose which Killen (2007:9) explains as assisting a student to complete a task and then gradually decreasing the assistance to enable the student to work independently.

*3.4.1.3 Assessment **as** learning*

According to Afflerbach (2002:99), assessment ***as*** learning focuses on students' reflection on their own learning and making adjustments to achieve deeper understanding. Earl (2003:25) contends that during assessment ***as*** learning students recursively question their success and consider alternative strategies to improve their success. Stiggins (2007:24) suggests that "assessment as learning turns day-to-day assessment into a teaching and learning process that enhances (instead of merely monitoring) student learning". Consequently, it can be inferred that reflection, metacognition and self-regulation feature prominently in assessment ***as*** learning.

In addition to the brief outline provided so far, Table 3.1 provides a summarised comparison between assessment ***of, for*** and ***as*** learning.

Table 3.1: A comparison between assessment *of*, *for* and *as* learning (Adapted from Manitoba Education, 2006:85)

	Assessment of Learning	Assessment for Learning	Assessment as Learning
Why Assess?	To certify or to provide information about competence in relation to learning outcomes	To determine the next steps in advancing student learning	To guide and provide opportunities for monitoring, critically reflecting on and identifying steps for improving learning
Assess what?	The extent to which students can apply the key concepts, knowledge, skills, and attitudes related to the learning outcomes	Individual students' progress and learning needs in relation to the learning outcomes	Individual students' thinking about learning, what strategies to use to support or challenge that learning and the mechanisms to use to adjust or advance learning
What forms, methods and instruments?	A range of forms, methods and instruments that mainly assess learning as a product	A range of forms, methods and instruments to make students' skills and understanding visible	A range of forms, methods and instruments that elicit students' learning and metacognitive processes

	Assessment of Learning	Assessment for Learning	Assessment as Learning
Ensuring Quality	Accuracy, consistency, and fairness of conclusive judgements based on information related to predetermined learning expectations	Accuracy and consistency of observations to provide descriptive feedback on student learning based on clear and detailed learning expectations	Accuracy and consistency of students' own reflection, monitoring and adjustment to engage successfully in personal improvement
Using the Information	Provide fair, accurate and detailed information with regard to students' levels of learning performance in relation to learning outcomes for promotional purposes	Continually checking students' progress and providing individual students with descriptive feedback in relation to stipulated learning outcomes to support and further learning	Provide individual students with ideas in the form of descriptive feedback for adjusting, rethinking, and articulating their learning and to nurture the development of appropriate learning habits to improve learning and performance

Derived from the discussion in this section, the harmony between assessment and learning is evident. Subsequently, the purposes of assessment will be discussed.

3.4.2 The purposes of assessment

3.4.2.1 Preface

Different interpretations of the purposes of assessment abound in the literature. Askov *et al.* (1997:65) state that assessment is done for the following purposes:

- To gather information to screen students,
- to place students in an instructional programme,
- to diagnose students' educational strengths and weaknesses,
- to evaluate an instructional plan,
- to measure student progress,
- to determine student growth, and
- to document programme accountability.

Brown (2001:6) comments that assessment has three purposes, namely: to give a permit to students to proceed to the next stage or to graduation, to classify the performance of students in rank order, and to improve students' learning. Implying the

purposes of assessment, Rust (2002:1) indicates that the reasons for assessment comprises of the following: to motivate students, to create learning opportunities, to provide feedback, to grade performance and to ensure quality teaching. According to Boud and Falchikov (2006:401) there are two purposes of assessment. The first is to provide certification of students' achievement and the second is to facilitate students' learning. Based on these views, the researcher finds it appropriate to differentiate between two interpretations of assessment purposes. One interpretation alleges that assessment is done for a variety of purposes which, among others, include screening, diagnosis and record keeping purposes. These purposes could resolve judgement or decision making (Newton, 2007:149-150). On the other hand, the purposes of assessment could reflect the intended use of the assessment results. This implies the way or manner in which assessment will be approached (Lombard, 2010:48) and could include, among others, formative, formal or diagnostic assessment. In the sub-sections which follow, this differentiation will be further clarified by drawing a distinction between general and specific purposes of assessment.

3.4.2.2 General purposes of assessment

Assessment is frequently trying to do a lot of things to varying degrees (Rust, 2002:1); for example to screen students, to select students, to diagnose students, to keep student records, to provide feedback to students or to certify competence. These appear to be general purposes of assessment.

3.4.2.2.1 <u>Screening</u>

Assessment done for screening purposes could shed light on a student's interests, talents or educational history. Through screening students who need assistance could also be identified (Askov *et al.*, 1997:66).

3.4.2.2.2 <u>Selection</u>

Randall *et al*. (2000:443-444) clarify assessment for selection purposes as assisting students in their decision-making about study related matters.

3.4.2.2.3 Diagnosis

Scaife and Wellington (2010:138) indicate that assessment could be applied to identify students' strengths and weaknesses or to determine why barriers to learning are experienced.

3.4.2.2.4 Record keeping

Especially assessment of formal nature, such as examinations, often requires that evidence, judgements and decisions related to a specific assessment, should be recorded and safely kept for possible verification, moderation or auditing obligations (Valencia, 1991:498).

3.4.2.2.5 Feedback

Another general purpose of assessment is to provide feedback. Since Cantillon and Sargeant (2008:1292) refer to feedback as "the cornerstone of effective teaching", students need to be informed about their performance and how to further improve on those performances (Brown, 2001:17; Cantillon & Sargeant, 2008:1292). Feedback on assessment also serves a motivational purpose and intends to provide information to students with regard to narrowing the gap between actual and desired performance.

3.4.2.2.6 Certification

Boud and Falchikov (2006:401) deem that certification of achievement is one of the most important purposes of assessment. They furthermore specify that this purpose enables students to graduate with a confirmed record of their performance.

3.4.2.3 Specific purposes of assessment

When choosing, planning or designing assessment, Ellington (2000:317) suggests that the first question that needs to be asked is *Why is the assessment being carried out?* In other words, in which way will the assessment be approached to realise the intended use of the assessment results? Verifying the aforementioned, Geyser (2012:92) announces that the purposes of assessment are guided by "the time when the learner will be assessed, as well as the assessor(s), and the methods and the techniques chosen". To clarify this announcement, diagnostic assessment is used as

example. Diagnostic assessment does not signify a type, form, method or instrument of assessment, but it represents assessment which is implemented by having a diagnostic purpose in mind. Through assessment for diagnostic purposes, factors that may limit students' learning engagement are identified to be addressed. Bryan and Clegg (2006:74) stress that assessment for diagnostic purposes will assist in gathering information about students' level of understanding in order to make adaptations to those aspects impacting of successful teaching and learning. Stemming from, amongst others, McTighe and O'Connor (2005), McMillan (2007), Oosterhof (2009), Lombard (2010) and Nitko and Brookhart (2011), other specific purposes of assessment are identified in the literature and will be briefly discussed below.

3.4.2.3.1 Informal and formal assessment

Council of Chief State School Officers (2007:4) defines assessment for informal purposes as "a procedure for obtaining information that can be used to make judgments … using means other than standardized instruments." According to Oosterhof (2009:6) informal assessment "happens on the spur of the moment". For this reason, it can be concluded that informal assessment forms part of day-to-day teaching and learning activities. Consequently, informal assessment has a strong monitoring function aimed at students' learning and requires no recording of assessment results. Asking questions during a lecture could be regarded as informal assessment.

On the other hand, assessment for formal purposes, gives insight into the academic strengths and weaknesses of each student. Oosterhof (2009:2) specify that formal assessment is "not spontaneous" and requires advance scheduling and development. Formal assessment has an evaluative function since judgements are made about students' progress. Tests and examinations are typical examples of formal assessment.

3.4.2.3.2 Baseline assessment

Wilkinson *et al.* (2001:33) mention that baseline assessment has two aims. Firstly, it intends to provide information on students' "educational attainment" and to help academic staff to "plan effectively" to meet the individual learning needs of students.

Secondly, by applying baseline assessment students' attainment is assessed, by using a number of outcomes which can later add value in the analyses of students' progress. Thus, assessment for baseline purposes represents the assessment of students' prior knowledge skills and abilities when entering a new programme, module or learning section. Through baseline assessment academic staff could gain information about students' competence levels which can help in their planning of how to proceed further (Dreyer, 2008:17).

3.4.2.3.3 Authentic assessment

Assessment for authentic purposes aims to assess students' abilities to perform under real-life or simulated circumstances. Fook and Sidhu (2010:154) emphasise that the real-life context can assist to make problems more engaging for the students and also assist academic staff to evaluate whether students who solve problems in one context can transfer the skills to a similar setting. Merckel and Van der Merwe (2010:112) associate authentic assessment with comprehensiveness, higher-order thinking, reflection and more complex behaviours. To assess students in an authentic manner requires a match between the physical context, the social context, the task, the assessment form and the assessment criteria of the assessment task and the real life setting (Gulikers *et al*., 2004:69).

3.4.2.3.4 Formative assessment

Sadler (1998:77) explains formative assessment as being "intended to provide feedback on performance to improve and accelerate learning" while Elton and Johnson (2002:14) describe it as assessment that "doesn't count". Fisher and Frey (2007:4) refer to formative assessment as enduring assessment which is aimed at the improvement of instructional methods and the provision of feedback to students throughout the teaching and learning process. Killen (2007:339) indicates that formative assessment "helps learners to identify gaps in their knowledge, understanding or skills and guides them towards closing those gaps". According to Reyneke (2008:35), formative assessment is not judgmental but rather focuses on constructive criticism to encourage and motivate students. Formative assessment is also referred to as "an active and intentional learning process that partners academic staff and students to continuously and systematically gather evidence of learning with

the express goal of improving students' achievements" (Moss & Brookhart, 2009:9). Brookhart (2013:102) concludes that formative assessment is about "forming learning". From the above it is resolved that through formative assessment learning is promoted by giving informative feedback. This implies that formative assessment is equivalent to assessment ***for*** and that it could be approached in an informal or formal manner. It is also important to note that formative assessment serves to assist academic staff to adjust their teaching in order to achieve greater learner success.

3.4.2.3.5 *Summative assessment*

For Marnewick and Rouhani (2006:269) summative assessment is associated with tests or examinations which are formal in nature and which are usually performed to collect recorded evidence to determine promotion. While Fisher and Frey (2007:4) state that the results of summative assessment also reflect lecturer and programme effectiveness, Dunn and Mulvenon (2009:8) assert that summative assessment is mainly conducted to establish student performance against specified performance criteria. Merckel and Van der Merwe (2010:112) also use the term "capstone assessment" to describe summative assessment to underline the fact that it represents final assessment for determining the achievement of learning outcomes. Therefore, it appears as if summative assessment aims to provide judgmental evidence about student competency after learning is completed. Major tests, examinations, portfolios, assignments and even case studies (Garrison & Ehringhaus, 2007:1) for assessing learning outcomes at the end of the semester or at the end of the year, are considered as summative assessment. In conclusion, it can be said that summative assessment is akin to assessment ***of*** learning since it is used to confirm what students know and can do, by demonstrating whether they have achieved the curriculum outcomes, and, occasionally, to show how they are placed in relation to others.

3.4.2.3.6 *Performance-based assessment*

McMillan (2007:229) describes performance-based assessment as assessment in which judgements are made about students' "demonstration of a skill or competency in creating a product, constructing a response, or making a presentation". Performance-based assessment depends on students' ability to follow a systematic procedure and to produce an end product (McMillan, 2007:229). Nitko and Brookhart

(2011: 246) indicate that performance-based assessment is sometimes referred to as alternative or authentic assessment, since it is seen to be different from traditional assessment and represents tasks which could be considered “realistic” and “meaningful”. However, McMillan (2007:229) cautions that the degree of authenticity of performance-based assessment tasks may differ.

3.4.2.3.7 *Continuous assessment*

The goal of assessment has to be, above all, to support the improvement of learning (Fredricksen & Collins, 1989:32). Therefore, the current trend noticeable in assessment is the use of continuous assessment to provide a richer and more complete representation of students’ learning. Smit (2008:16) states that there is a definite paradigm shift from traditional assessment that normally occurs at the end of the learning to more continuous assessment, which occurs throughout the learning experience. Lombard (2010:32) confirms the notion of continuous assessment when stating that “traditional assessment”, where reference is made to the traditionally known pen-and-paper tests or written examinations, made room for “alternative assessment”, which supports the notion that teaching, learning and assessment should be integrated.

Elaborating on the aforesaid, Garfield and Gal (1999:4) state that continuous assessment has the following advantages.

- It provides more complete information on what students have learned.
- It focuses equally on the processes and on the products of assessment.
- It provides more detailed and timely feedback to students on the quality of their learning.
- It captures how students think, reason and apply their knowledge better.

Killen (2007:340) also alludes to the fact that continuous assessment provides more reliable evidence of students’ learning which could result in more valid decisions about the attainment of learning outcomes. A word of caution regarding continuous assessment is voiced by Gouws (2008:55) when it is stated that continuous assessment “does not mean more tests, but rather different assessment methods to monitor learners’ progress”.

3.4.2.3.8 Norm referenced assessment

Norm-referenced assessment refers "to the practice of comparing learner performance to that of peers in the same class or cohort" (Merckel & Van der Merwe, 2010:108). Killen (2007:342) argues that the major limitation of norm-referenced assessment lies in the fact that the relative achievements of students distract attention from students' individual performance and achievement of the learning outcomes. Valid norm-referenced assessment depends on a well-defined norm group to which the same assessment was given under the same circumstances (Nitko & Brookhart, 2011:368).

3.4.2.3.9 Criterion referenced assessment

According to Killen (2007:342) the defining feature of criterion-referenced assessment is seated in the comparison of individual students' performances with predetermined performance criteria. This is underscored by Nitko and Brookhart (2011:369) who contend that criterion-referenced assessment allows for a focus on individual students' performance rather than on students' relative standing in a norm group.

3.4.2.3.10 Portfolio assessment

Assessment aimed at the compilation of students' work to demonstrate that learning took place, is referred to as portfolio assessment (Gouws, 2008:59). McMillan (2007: 269) maintains that portfolio assessment signals a high degree of student involvement and self-reflection. According to Oosterhof (2009:200) portfolio assessment has the potential to monitor student growth, to establish as to whether learning outcomes were adequately accomplished and to showcase students' evidence of best work.

3.4.2.4 Deduction

When considering the purposes of assessment, whether general or specific, it can be deduced that these could be regarded as guiding principles for selecting assessment suitable to the envisaged purpose. Therefore, it seems fair to assume that the purposes of assessment relates to one of the criteria for determining assessment literacy, namely the ability to choose appropriate assessment (*cf*.3.3.2).

3.4.3 The principles of quality assessment

3.4.3.1 Preface

To ensure the quality and credibility of assessment tasks, certain principles or quality criteria should be met. There appears to be a vast variety of such principles in the literature. Based on a comparative overview of three selected South African sources, Lombard (2010:39) draws attention to a range of existing principles of quality assessment (*cf.* Table 3.2).

Table 3.2: A comparative overview of assessment principles cited in selected sources (Lombard, 2010:39)

Van der Horst & McDonald (1997)	Department of Education (1998)	Marnewick & Rouhani (2006)
• Relevance • Balance • Efficiency • Objectivity • Specificity • Difficulty • Discrimination • Reliability • Fairness • Speed	• Accurate • Objective • Valid • Fair • Manageable • Time-efficient • Ongoing • Integrated	• Objectivity • Reliability • Validity • Discrimination • Balance

The principles presented in this study are a compilation of some of the principles generally found in the literature and include reliability, validity, fairness, discrimination, cognitive complexity, balance, transparency, feasibility and meaningfulness. The discussion will be concluded with a brief look at the notion of constructive alignment.

3.4.3.2 Assessment principles

3.4.3.2.1 <u>Reliability</u>

Nitko (1996:75) alludes that reliability refers to the consistency of assessment results. It is the degree to which students' assessment results remain stable when the same assessment procedures are repeated. Nitko (1996:75) offers some general guidelines for improving the reliability of assessment results:

- lengthen the assessment procedure,
- broaden the scope of the assessment procedure,
- include all the essential and important aspects of the target to be attained,
- improve objectivity by using systematic, more formal procedures for scoring,
- use multiple graders,
- combine results from several assessments,
- provide sufficient time to students,
- teach students how to perform their best,
- match the assessment difficulty to students' ability levels,
- select a variety of assessment tasks to differentiate between best and poor students.

Thus, an assessment task is reliable when it yields the same results when given on a number of occasions to the same student, or when it is used by different assessors and generates the same result.

3.4.3.2.2 Validity

Validity refers to the "soundness" in which the assessment results are *interpreted* and *used* (Nitko, 1996:36; Nitko & Brookhart, 2011:35). McMillan (2007:64) asserts that validity refers to "the appropriateness of the inferences, uses and consequences that result from the assessment". Messick (1989:5-11) suggests four principles for validating student assessment:

- The interpretations given to students' assessment results are valid only to the degree that one can point to evidence that supports their appropriateness and correctness.
- The uses of assessment results are valid only to the degree to which one can point to evidence that supports their correctness and appropriateness.
- The interpretations and uses of assessment results are valid only when the values implied by them are appropriate.
- The interpretations and uses of assessment results are valid only when the consequences of these interpretations and uses are consistent with appropriate values.

According to McMillan (2007:65) validity is mainly determined by means of content-related evidence, which implies that the assessment measures what it is supposed to measure. Assessment is thus valid if it measures the knowledge, skills and attitudes required by the learning outcomes and assessment criteria.

3.4.3.2.3 Fairness

Fairness in assessment indicates that no student is in any way impeded or advantaged in the assessment process. A fair assessment will not disadvantage any person and will take into account the characteristics of the person being assessed, since matters such as inequality of opportunities, resources, ethnicity, gender, age, disability, race and social class could influence judgements of students' performance (SAQA, 2001:16). According to Geyser (2004:97) and Le Roux (2004:61), fairness of an assessment task implies that it should be unbiased and that it should provide all students with equal opportunities to demonstrate their achievement. Besides being "unbiased" and "non-discriminatory", McMillan (2007:76) also state that assessment is fair when students are informed about the assessment and when they are provided with time and opportunities to prepare for the assessment. This is underscored by Lombard (2010:41) who declares that fair assessment is reasonable assessment.

3.4.3.2.4 Discrimination

Nieuwoudt and Reyneke (2011:291) refer to the motivational factor of discrimination when suggesting that if assessment simply relies on assessing general knowledge, hard-working, dedicated students will lose motivation because they will feel their preparation efforts were worthless. The opposite may of course, also be true when students who worked hard are rewarded with good results. University of Ulster (2013:4) is of opinion that assessment ought to assist academic staff to distinguish between students who meet the learning outcomes and those who fail to meet the planned outcomes. Good assessment should therefore aid academic staff to discriminate between capable students who have benefited from teaching and learning and less capable students who have not benefited.

3.4.3.2.5 Cognitive complexity

Assessment tasks need to be varied in such a manner that it reflects an assortment of cognitive challenges (Lombard, 2010:42). In addition to challenging students' thinking, Oosterhof (2009:34) also state that cognitive challenging assessment represents real-world applications better. According to Oosterhof (2009:42) cognitive challenging assessment could be based on:

- the abstractness of assessment components,
- the number of operations required to complete the task,
- the degree to which knowledge has to be generalised to different situations.

In order to determine and ensure cognitive complexity within an assessment task, Bloom's Taxonomy (1956), which was revised by Anderson and Krathwohl (2001) is always helpful. Bloom's taxonomy represents a categorisation of cognitive skills into six levels in ascending order, and allows differentiation between lower-order and higher-order cognitive demands. In addition to Bloom's taxonomy, other taxonomies are also available. Among these is the taxonomy of Webb (2002) which divides cognitive complexity into four levels of "depth of knowledge" (Oosterhof, 2009:34). Table 3.3 provides a synopsis of these two mentioned taxonomies.

Table 3.3: An overview of Webb and Bloom's taxonomies

Webb's taxonomy (2002)	Bloom's taxonomy (1956)	Revised Bloom's taxonomy (2001)
Re-call and reproduction • Requires memorisation responses such as recall of facts, terms and use of simple procedures	*Knowledge* • Ability to remember or recall information	*Remember* • Focuses on the recall or retrieving of relevant information
Skills and concepts • Requires use of some decisions as to how to approach the task, such as classifying, estimating, organising and comparing data	*Comprehension* • Processing of previously learnt information which implies a higher level than mere recall of information	*Understand* • Interpretation or construction of meaning from information
	Application • Ability to apply learnt information to new and concrete situations	*Apply* • Ability to use or implement information within a specific context
Strategic thinking • Involves abstraction and tasks requiring multiple operations such as observations, logical argument, and using existing procedures to solve new problems	*Analysis* • Ability to identify the elements of a theory	*Analysis* • Requires the break- down of information for possible relationships among constituent parts
	Synthesis • Capability of identifying the relations between concepts and theories and to integrate these into a new logical whole	*Evaluate* • Ability to make informed judgements
Extended thinking • Involves making multiple connections between ideas, often over an extended period, such as investigation and forming conclusions	*Evaluate* • To be able to make judgements	*Create* • Ability to construct or generate new ideas by reorganising known information

Two more taxonomies are Barrett's taxonomy (1976) which is widely used in Language teaching and the SOLO taxonomy (Structure of the Observed Learning Outcome) (Biggs & Collis, 1982), which is applicable to a large variety of content areas and which provides for a systematic way to describe the growth of learner performance in mastering academic tasks.

3.4.3.2.6 Balance

Balanced assessment is assessment that focuses on serving the diverse needs of students with the common purpose of improving student performance. Underscoring the aforesaid, Nieuwoudt and Reyneke (2011:291) state that balance implies making provision for different kinds of assessment. However, balance could also refer to ensuring symmetry between the time allocated to complete the assessment task and the complexity of the task at hand, or the inclusion of different items, such as essay questions and short questions in an assessment task (Lombard, 2010:42).

3.4.3.2.7 Transparency

For students and academic staff to have confidence in the assessment process, they need to be assured that the assessment process is well planned, that works in practice and it is regulated properly (Geyser, 2004:96). Measures for ensuring transparency include the following (Geyser, 2004:97):

- telling students in advance what is expected,
- providing clear indicators of what does and what does not constitute satisfactory performance,
- giving indicators of the weighting of the respective assessment elements,
- providing clear guidelines for submitting work,
- offering support to learners prior to the assessment,
- indicating how failure is communicated and could be avoided, and
- providing access to assessment regulations and information.

In turn, Bushney (2005:65) argues that transparent assessment is thoroughly planned and properly regulated, involving:

- informing students in advance about the assessment expectations,
- providing clear guidelines and deadlines, and
- giving support to students before the assessment.

Taking the above into consideration, it can be concluded that for assessment to be transparent, all relevant information, whether it concerns the assessment focus or process; the forms, methods or instruments, or the results, should be clear and understandable to everybody concerned with the particular assessment.

3.4.3.2.8 Feasibility

If not managed properly, assessment can become a burden. In this regard Mutch and Brown (2001:17) defend the implementation of alternative assessment since it could help to make assessment less difficult and less time consuming. Bushney (2005:65) indicates that for assessment to be feasible, time spend on the assessment should be seriously considered. This encompasses the preparation, marking, checking and reporting of the assessment. In addition, the cost-effectiveness of assessment in terms of monetary considerations is also implied in the principle of feasibility. This principle also relates to practicability SAQA (2001:19).

3.4.3.2.9 Meaningfulness

Without doubt, assessment is supposed to contribute towards learning. Moreover, assessment results not only reflect accountability of the education system, but also of all those involved in teaching and learning. For this reason, assessment should be experienced as meaningful or "worthwhile" (Reyneke, 2008:39) by the students as well as by their lecturers.

3.4.3.3 Constructive alignment

Though not always explicitly referred to as a principle of quality assessment, constructive alignment is recognised in this study as a norm on which quality assessment is founded. This concept entails two principles (Biggs & Tang, 2007:52). The first, "constructive" reflects the acceptance of the constructivist theory which

concedes to the idea that students should be actively involved in constructing their knowledge to attain the stated learning outcomes. The second, "alignment" ensures that the teaching and learning activities, together with assessment support the achievement of the learning outcomes. It is anticipated that the alignment of assessment, teaching and learning activities and learning outcomes, will "lock students into deep learning" (Biggs & Tang, 2007:54). Inferred from the above, constructive alignment is an analysis of "what is intended to be taught; how it will be taught and assessed" (Biggs, 2003:18) and is therefore important for the planning and development of quality assessment.

3.4.3.4 Deduction

When planning and developing assessment, it is necessary to take certain principles into account to ensure that the assessment is of high quality. By applying the mentioned principles in a reflective manner, the credibility of assessment tasks will be guaranteed, but most likely the quality of student learning will also be enhanced. In addition, it can be assumed that the principles discussed in this section relate to another criterion for determining assessment literacy, i.e. the ability to develop high quality assessment (*cf.* 3.3.2).

3.4.4 The forms and methods of assessment

3.4.4.1 Preface

Considering the discussion thus far, it is clear that effective assessment relies on deciding what purposes should be served by the assessment (*cf.* 3.4.2) and by applying specific principles to ensure the quality of the assessment (*cf.* 3.4.3). Before proceeding, the researcher wants to draw the attention to the apparent conceptual confusion which often reigns in terms of assessment terminology. In this regard, the terms "forms" (*c.f.* 3.4.4.2), "methods" (*c.f.* 3.4.4.3) and "instruments" (*c.f.* 3.4.5.3) as is used in this study need some justification. Without contributing to the apparent confusion the researcher's logical thinking guides her to the preferential use of the mentioned terms as explained here forth. Whereas assessment "forms" are used by SAQA (2001:25-26) to describe the specific purposes of assessment (c.f. 3.4.2.3), the researcher uses this description to refer to particular ways in which assessment could

be conducted, such as tests or examinations. With regard to assessment "methods", SAQA (2001:27-28) relates it to actions by the assessor, e.g. to observe or to verbally question. In the context of this study, assessment "methods" are used to answer to the question: "By whom is the assessment conducted?" This could imply peer- or self-assessment. Assessment "instruments" are used by SAQA (2001:27) to define assessment tasks such as tests or examinations. However, in this study, "instruments" refer to rubrics or memorandums utilised as instruments to judge student performance.

3.4.4.2 Forms of assessment

Different learning outcomes require different forms of assessment. Brown (2001:10) voices the opinion that the effectiveness of an assessment form relies not upon the type *per se*, but upon the learning outcomes to be assessed. This confirms the idea of constructive alignment (*cf*. 3.4.3.3). According to Lombard (2010:49) an assessment form refers to the "technique" that will be used to determine students' level of attainment of the required learning outcomes. A synoptic view of a variety of forms of assessment is presented below. It should be noted, that the researcher does not claim that the listed forms represents an exhaustive list of all possible assessment forms.

3.4.4.2.1 <u>Tests</u>

Next to examinations, tests are probably the most used form of assessment. Tests can be used for a variety of purposes (*cf.* 3.4.2). Gravett and Geyser (2004:200-201) indicate that tests could consist of a range of items, which could include multiple choice questions, true and false questions, short answer questions and essay type questions. Nieuwoudt and Reyneke (2011:295) also add matching questions. The same authors also differentiate between objective and subjective tests. Whereas objective tests consist mainly of short questions which require structured responses and a fixed memorandum, subjective tests consist of essay type questions which are more open for interpretations (Nieuwoudt and Reyneke (2011:293, 299).

3.4.4.2.2 <u>Examinations</u>

As in the case of tests, examination could also include a variety of items. According to Gravett and Geyser (2004:200), examinations are relatively economical, allow for equal opportunities to showcase learning and cause students to "get down to learning".

However, examinations could also encourage surface learning and is not always regarded as "a realistic indicator of competence" (Gravett & Geyser, 2004:200). Nieman (2008:91) indicates that examinations are highly structured and that it can take either the form of an open-book or closed-book assessment.

3.4.4.2.3 Portfolios

Whereas portfolio assessment could be seen as one of the purposes of assessment (cf. 3.4.2) it can also be regarded as a form. In recent years, portfolios became more popular and widely used as an assessment form. Portfolios contain samples of students' work and are compiled according to specified guidelines by lecturers (Oosterhof, 2009:195). Nieman (2008:93) distinguishes between different types of portfolio: a portfolio of cumulative attempts over a period of time which focuses on a specific task; a comprehensive portfolio which indicate development and progress and a limited portfolio which include deliberately chosen documents related to a specific task. Establishing its authenticity, is considered one of the major challenges regarding portfolios (Nieman, 2008:93).

3.4.4.2.4 Assignments/Essays

Assignments or essays are problem solving exercises based on clear guidelines provided by academic staff (Warnich, 2010:98). Gravett and Geyser (2004:203) state that students are required to adhere to certain specifications, such as the length of the assignment/essay and that it has to be submitted by a given time. The objective of an assignment or essay is to assess abilities to discuss, evaluate, analyse, summarise and criticise.

3.4.4.2.5 Case studies

With case studies, students are challenged individually or in groups to practise their problem-solving skills on the basis of concrete and realistic cases or situations. Van Rooyen and Prinsloo (2003:44) reiterate that case studies require students to suggest possible solutions or action plans. Gravett and Geyser (2004:201) believe that case studies compel students to prepare, organise, analyse and then apply their problem-solving skills within a well-structured written format.

3.4.4.2.6 Presentations

Gravett and Geyser (2004:203) view presentations as a very successful form of assessment; reason being, that there is no doubt whose performance is being assessed. With presentations, the planning, research and the presentation itself are assessed, meaning that it is process and product oriented. Because it is a public performance, students will normally ensure that their planning, research and presentation are addressed well and are of high quality. Consequently, the credit they earn can be duly given to them with confidence. Race (1995:11-12) express the opinion that presentations normally elicits deep learning. Adversely, it can be stated that presentations take too much time in large classes, and some students find presentations traumatic.

3.4.4.2.7 Projects

Projects focus on processes and products (Du Plessis *et al.,* 2007:86). Nieman (2008:92) associates projects with research, while Warnich (2010:101) maintains that projects can include any practical exercise or investigation that needs to be completed over a certain time period. In projects, students can work individually or in groups. A few advantages of projects are identified by Gravett and Geyser (2004:203):

- Projects are relevant to the real world.
- Projects can promote initiative and creativity.
- Projects develop teamwork skills if it is required to work in groups.

3.4.4.2.8 Role-plays

SAQA (2001:35) identifies role plays as an assessment form where students are presented with a situation to which they have to respond by simulating a certain role. Role-plays may be unprepared, or students may be directed in the roles to be played. Du Plessis *et al.* (2007:86) and Nieman (2008:90) belief that role-plays provide a wide range of opportunities to assess practical skills, behavioural skills, interpersonal skills and even attitudes.

3.4.4.2.9 Oral assessment or interviews

"Oral assessments are used to systematically question and probe learners about their knowledge of a content area or their performance in a specific task" (Nieman, 2008:94). Oral assessment or interviews are usually employed under the following circumstances (Nieman, 2008:94):

- to assess students' knowledge and their ability to convey this knowledge in a logical manner,
- when students are expected to think on their feet,
- when students find it difficult to deal with written assessment,
- to assess attitudes before, during or after learning experiences,
- when students are expected to elaborate on their answers,
- when students need to explain while they are doing an activity, and
- when follow-up questions are necessary to ascertain comprehension.

3.4.4.2.10 Electronic forms of assessment

Information and communications technology (ICT) can add flexibility, and interactivity to assessment, and therefore the researcher believes that electronic forms of assessment that encapsulate e-assessment warrant attention. Electronic forms of assessment can be computer mediated, computer-based, or online using the Internet (Crisp, 2007:40). Possible e-assessment forms could include basic e-assessment items such as selected responses (e.g. multiple-choice) or constructed responses (e.g. short-answer) (Jordan & Mitchell, 2009:371), to more "advanced" assessment forms such as e-portfolios, Web-based and online assessment. All these forms of e-assessment would provide students with the opportunity to assemble assessment responses that reflect authentic assessment (Crisp, 2007:48).

3.4.4.3 Methods of assessment

Warnich (2010:103) believes that while developing assessment, academic staff should also consider assessment methods or agents that will be instrumental to interpret the learning results. This may include peers, students themselves, groups, lecturers or experts in the particular field (Huysamen, 2002:85).

3.4.4.3.1 Peer assessment

When applied in group work or cooperative learning, peer assessment assesses how individual students function amongst others in teams (Luckett & Sutherland, 2000:112). Peer assessment could also be applied to other forms of assessment such as oral presentations or written tasks. In peer assessment students assess each other's work or contribution by using predetermined lists of criteria set either by academic staff or by themselves (Bushney, 2005:66). Warnich (2010:106) contends that peer assessment provides for an "external" perspective of personal learning or performance. Peer assessment is mostly done under informal or formative assessment conditions where marks need not be recorded. However, Nieman (2008:86) cautions that if peer results are never recorded, student may get the impression that their judgements are not valued.

3.4.4.3.2 Self-assessment

Boud (1989:21) views self-assessment as the key to establishing a process of lifelong learning. In a study by Peckham and Sutherland (2000:78) it is indicated that if students are given the correct guidance, training and support, they can make clear and reliable judgements regarding their own learning. Bitzer (2004:64) claims that self-assessment creates an acute awareness among individual students regarding their involvement in learning activities and how these activities could promote their own learning. As in the case of peer assessment, self-assessment is normally not applied under formal or summative assessment conditions. This is underscored by Nieman (2008:85) who state: "self-assessment is formative in nature" since it helps students to gain insight into their own learning. Understood in this way, self-assessment could stimulate metacognition and self-regulation on which assessment ***as*** learning is founded (*cf.* 3.4.1.3)

3.4.4.3.3 Group assessment

Group assessment actually refers to a combination of peer and self-assessment within a group context. It usually involves the assessment of processes and products of learning. Nieman (2008:87) clarifies group assessment by indicating: "The only ones who really know what each group member contributed to the success or failure of the

final product, are the group members themselves. Learners should therefore be allowed to assess their own and other group members' contributions to the final product".

3.4.4.3.4 Lecturer assessment

According to Hogan (2007:8) academic staff are traditionally the primary assessors of formal and informal assessment. Therefore, academic staff should clearly state to students what is expected of them regarding any specific task. By doing this, academic staff and students are continuously in communication with each other. Warnich (2010:104) indicates that academic staff also need to provide students of meaningful feedback that complies with the assessment criteria as set out in the learning outcomes.

3.4.4.3.5 Expert assessment

A subject-matter expert is a person who is a specialist in a particular area or topic. Experts can be asked to comment on students' work and progress. At university level, experts can be categorised to represent external moderators and industry experts. External moderators are instrumental in interpreting the assessment results by their involvement with the moderation or the quality assurance/control of examination papers and answer sheets. Industry experts are also involved in the assessment of students by observing students or checking their portfolios while doing internships.

3.4.4.4 Deduction

In addition to the principles for ensuring quality assessment (*cf.* 3.4.3), the researcher is of the opinion that the development of high quality assessment (*cf*. 3.3.2) necessitates knowledge, understanding and the ability to apply a range of possible forms and methods of assessment. Moreover, academic staff should also be able to score, interpret and administer assessment results to reflect students' learning success.

3.4.5 The notion of feedback and instruments to facilitate feedback

3.4.5.1 Preface

It is essential for academic staff to score, interpret and administer students' performances in order to determine and reflect whether the learning outcomes have been achieved. In addition, these processes are also necessary to track students' progression and to provide them with effective feedback. Since the mentioned processes are imperative for enabling academic staff to eventually use assessment results to benefit students, this section will first look at the notion of feedback. Thereafter, attention will be given to the scoring and interpretation of assessment results by looking at different assessment instruments to facilitate feedback. The section will be concluded by recording and reporting for administering students' performance.

3.4.5.2 The notion of feedback

Feedback and learning success are interwoven, while feedback is central to assessment (Brown & Glover, 2006:82; Kim *et al.,* 2008:4). Assessment always requires feedback in order for students to be informed about their performances and to remedy possible deficiencies in their performances. Although feedback is usually associated with formative assessment or assessment ***for*** learning, it is also important to facilitate improvement in summative assessment or assessment ***of*** learning. Brown *et al*. (1997:4) postulate that feedback should be specific, accurate, timely, clear, focused on the learning outcomes and expressed in a way which will encourage thinking and how to alter one's work. Geyser (2004:109) mentions that effective feedback should be positive, detailed, participative, honest and fair, descriptive, understandable and specific. In an attempt to classify possible feedback comments, Brown and Glover (2006:83) put forward five categories. The first four of these categories have the potential to help students to improve their learning while the fifth will probably hinder further learning and damage students' self-esteem. The categories are:

- Comments about the content of students' responses.
- Comments that will encourage the development of appropriate skills.
- Comments that will actively encourage further learning.

- Comments of a motivational nature.
- Comments of a de-motivational nature.

According to Merckel and Van der Merwe (2010:114-117), feedback should include comments on what was done well, what should be improved and suggestions of how to improve. Corroborating the aforementioned Ende (1983:777-781) and Warnich (2010:118) suggest eight general principles for effective assessment feedback:

- Feedback should be viewed as a normal everyday component of the lecturer-student relationship, so that both sides can expect it and manage its effects.
- Feedback should ensure that students are clear about the standards against which their performance will be assessed. If students do not share some understanding of the lecturer's notion of what a good performance looks like, feedback information may not make sense and it will be difficult for students to evaluate the gap between actual and desired performance.
- Feedback should be given on specific behaviours rather than on general performance.
- Feedback should be based on what was directly observed and should be expressed in non-judgmental language.
- For maximum effect, feedback should be offered at the time of an event or shortly afterwards.
- Feedback should be limited to one or two items only.
- Lecturer-led feedback should be balanced by intentionally seeking students' own perceptions of their performance and their ideas for improvement. Encouraging students to regularly assess and correct their own performances helps them to develop the skills of lifelong learning, which are vital for self-directed practice.
- Feedback should lead to changes in students' thinking, behaviour, and performance. For this to follow, students need to understand the feedback and know how to apply the feedback in practice.

Derived from this brief discussion, it is evident that feedback has the potential to impact positively on students' performance. Academic staff should therefore be encouraged to review and refine their feedback practices.

3.4.5.3 Instruments to facilitate feedback

Assessment can be judged (scored and interpreted), by using different assessment instruments. The same instruments are thus intended to provide feedback to students regarding their assessment performance. For the purpose of this study the following assessment instruments will be briefly discussed: rating scales, rubrics, memorandums and checklists.

3.4.5.3.1 Rating scales

Nieman (2008:96) describe a rating scale as a scale in which marks or symbols are used to define the level of competence. Rating scales differ from checklists in the sense that performance criteria are judged according to a continuum which stipulates levels of competence (Warnich, 2010:113). Three types of rating scales are known: numerical rating scales where numbers on a continuum represents performance levels; graphic rating scales on which performance levels are marked on a scale similar to a Likert scale, and descriptive rating scales where different descriptions indicate different performance levels (Warnich, 2010:113-114).

3.4.5.3.2 Rubrics

McMillan (2007:252) describes a rubric as "a scoring guide that uses criteria to differentiate between levels of student proficiency". Oosterhof (2009:168) alludes to the fact that a rubric is "like a rating scales … though (it) addresses several qualities simultaneously within the same scale". According to Brookhart (2013:4) a rubric can be defined as "a coherent set of criteria for assessing students' work that includes descriptions of levels of performance quality on the criteria". Rubrics reduce time spent on scoring and interpreting students' work as it considers multiple aspects of a specific task (Merckel & Van der Merwe, 2010:117). A major advantage of a rubric is that it provides students with guidelines as to what is expected prior to the submission of the task. However, the preparation and development of a rubric can take considerable time. Two major types of rubrics can be distinguished: holistic and analytic rubrics.

In Table 3.4 below, a synopsis is provided to differentiate between these two types of rubrics.

Table 3.4: A differentiation between two types of rubrics (Brookhart, 2013:7)

	Analytic	Holistic
Definition	• Each criterion is separately evaluated	• All criteria are evaluated simultaneously
Advantages	• Gives diagnostic information to academic staff • Gives formative feedback to students • Good for formative assessment	• Scoring is faster • Good for summative assessment
Disadvantages	• Takes more time to develop and score	• Single overall score does not communicate information about what to do to improve • Not good for formative assessment

3.4.5.3.3 *Memorandums*

A marking memorandum is a document that needs to serve as a guideline for marking assessment tasks. It contains the expected responses and a clear indication of the mark allocation for each response. In some cases, such as interpretive of evaluative questions, a set memorandum cannot be prepared since students' answers may vary significantly. In these cases the memorandum should provide well-defined directives to ensure reliable scoring. Memorandums are generally used to score written assessment tasks for summative purposes.

3.4.5.3.4 *Checklists*

Killen (2007:351) regards checklists as one of the least complicated assessment instruments. Checklists are lists of descriptions related to the achievement of the learning outcomes which are simply "checked-off". It can be used in a variety of settings to establish the presence or absence of conditions and it could help to structure more complex observations (Oosterhof, 2009:165). However, Killen (2007:352) warns that checklists are not very reliable to judge the quality of students' performance.

3.4.5.4 Recording and reporting

Recording is described as the process to capture the data collected during assessment, (Warnich, 2010:109). Killen (2007:357) suggest that although quantitative or qualitative records could be kept, recording should be accurate to enable the following:

- keeping track of individual students' performances to allow for reliable reporting,
- keeping track of group performances to evaluate teaching, and
- keeping track of different cohorts of students to evaluate the curriculum.

Reporting follows recording and implies that recorded information is retrieved and structured in such a way that it can be shared with particular stakeholders, including students. Thus, reporting can be described as the disclosing of learner performance "in terms of realising the desired learning outcomes" (Warnich, 2010:118).

3.4.5.5 Deduction

Assessment literate academic staff should not only be able to choose (*cf*. 3.3.2) and develop (*cf.* 3.3.2) assessment in a competent manner, but should also be able to score, interpret and administer assessment results. In addition, they should be aware of the possible uses of assessment results.

3.4.6 Using assessment results for making decisions

The reporting of assessment results should not be seen as the final phase of assessment. In fact, academic staff should be aware that assessment results could be used for making various decisions on various levels. Among others, the following are suggested by the researcher:

- assessment results could inform decisions about curricular issues, such as the appropriateness of the learning material,
- assessment results could inform decisions on the planning, development and implementation of future assessment,
- assessment results could inform decisions about personal teaching approaches and methods, and

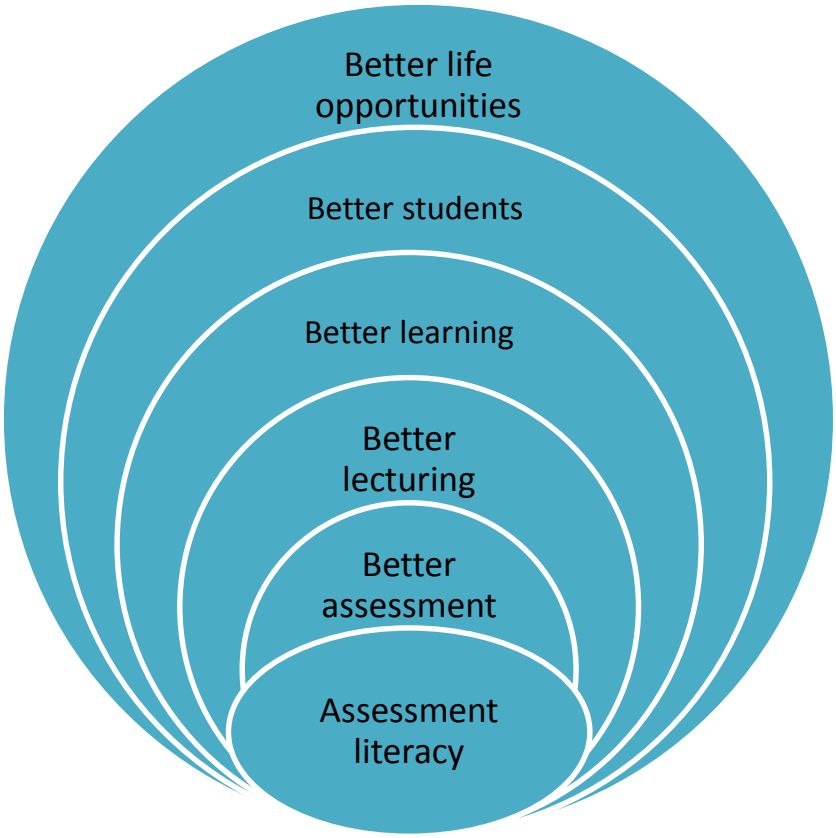
- assessment results could inform decisions about trends in through put and success rates in specific modules, programmes or institutions.

It is thus imperative for academic staff to realise that the assessment results of the modules they are offering have a far greater impact than only reflecting student performance.

3.5 CONCLUSION

In the final analysis, it can be concluded that the potential impact of assessment literacy, as depicted in Figure 3.3, should not be underestimated.

Figure 3.3: The potential impact of assessment literacy (Adapted from White, 2006:27)



In order to substantiate the illustrated reality, this chapter dealt with theoretical matters underpinning assessment and assessment literacy. The chapter focused on defining assessment and how assessment is related to measurement and evaluation. Assessment literacy was explored by how it is defined and by identifying useful criteria that could be employed for determining assessment literacy levels. The relation

between assessment and assessment literacy was uncovered by showing how the theoretical underpinnings of assessment theory coincide with suggested assessment literacy criteria.

The next chapter will lay the foundation for the empirical research by indicating how the research was planned, designed and administered.

CHAPTER FOUR
OVERVIEW OF THE EMPIRICAL STUDY

4.1 INTRODUCTION

The purpose of this study centred on the examination of existing assessment induction programmes and assessment literacy to inform the development of an assessment induction programme for MGI (*cf.* 1.2). In order to address the stated purpose, the researcher formulated several secondary research questions (*cf.* 1.3.1) of which the following have reference to the empirical study:

- What is the nature and scope of existing assessment induction programmes at selected South African HEIs?
- What is the quality of the assessment literacy of academic staff at MGI?
- How can the results of an evaluation of existing assessment induction programmes at selected South African HEIs be operationalized for developing an assessment induction programme for academic staff at MGI?
- How does the assessment literacy of academic staff at MGI inform the development of an assessment induction programme for academic staff at MGI?

The literature study in the previous two chapters was conducted to form the framework for understanding induction as well as assessment and assessment literacy. Since the above stated secondary research questions required an investigation of empirical nature, this chapter will provide an overview of the empirical study to indicate the procedures and processes which were followed to gather information relevant to the purpose of the study. Matters that will be discussed include the research paradigm, the research design, strategy of inquiry and the population and sampling. In addition, the data collection methods, the principles considered for constructing the data collection instruments, quality criteria, the pilot study, the role of the researcher and ethical considerations will also be attended to. The chapter will be concluded by explaining the data collection process.

4.2 THE RESEARCH PARADIGM

Weaver and Olson's (2006:460) definition of a paradigm reveals how research could be affected and guided by the researcher's adoption of a certain view of reality. These authors state: "paradigms are patterns of beliefs and practices that regulate inquiry within a discipline by providing lenses, frames and processes through which investigation is accomplished" (Weaver & Olson, 2006:460). Willis (2007:8) explains that a paradigm "is a comprehensive belief system, world view, or framework that guides research and practice in a field". In addition, Taylor *et al.* (2007:5), state that a paradigm is "a broad view or perspective of something".

Terre Blanche and Durrheim (1999:36) indicate that the principle of coherence in research can be obtained by making sure that the primary research question and research methods fit within the preferred paradigm. This implies that knowledge generated by investigating the research problem can either be viewed as unshakeable and objective (Positivist view) or as multi-faceted and subjective (Anti-Positivist view) (Maree & Van der Westhuizen, 2007:31-32). An anti-positivist view can also be referred to as interpretivism according to Burton and Bartlett (2005:22) and Bryman (2012:28). Blumberg *et al.* (2008:20-21) provide a useful differentiation between the positivist and interpretivist views which can be summarised as shown in Table 4.1 below.

Table 4.1: Differences between positivism and interpretivism

Positivism	Interpretivism
• Gathering information about social facts • Interested in discovering and confirming causal laws • Researcher is objective and detached • Systematic and standard procedures are followed • Emphasis is on observable facts and stable external reality • Researcher makes use of quantitative indices • Methodologies followed: experimental, hypothesis testing, ex post facto • The world is external and objective	• Gathering information about people's subjective experiences of the external world • Emphasise the importance of people's viewpoints to understanding social realities • Researcher adopts an intersubjective approach and participates in the research. • Subjective in nature • Researcher makes use of qualitative indices • Methodologies: descriptive, interviewing, respondent observation • The world is socially constructed from a subjective viewpoint

A combination of the abovementioned two paradigms results into Pragmatism according to Ivankova *et al*. (2007:263). Pragmatists believe that the truth lies in "what works best" to address the research question and "justifies the combination of different methods within one study" (Ivankova *et al*., 2007:263).

The researcher argues that this study is founded on Pragmatism (*cf.* 1.5.1), which uses "a pluralistic approach to derive knowledge about the problem" (Creswell, 2009:10). Hence, combined qualitative and quantitative research designs will be applied to collect and analyse both text and numerical data to address the primary research question from different angles.

4.3 RESEARCH DESIGN

According to Kumar (1999:72) a research design has two main functions:

1. The identification and/or development of a plan or procedures that will be needed to do the research.
2. To ensure that quality procedures, e.g. validity, objectivity and accuracy are accounted for when conducting the research.

Cooper and Schindler (2006:159) define a research design as "the strategy for a study and the plan by which the strategy is to be carried out. It specifies the methods and procedures for the collection, measurement, and analysis of data". De Langen (2009:51) affirms this by explaining a research design as the blue print for conducting a study with maximum control over factors which may interfere with the validity of the findings and a plan that describes how, when and where data is to be collected and analysed. Three common research designs can be differentiated: qualitative, quantitative and mixed-methods designs.

Cooper and Schindler (2006:196) define *qualitative research* as "an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world". Qualitative research is designed to tell the researcher how and why things happen as they do (process and meaning). It is usually a holistic investigation that is executed in a natural setup. Qualitative research is, according to Struwig and Stead (2004:12), interested in the understanding of issues being researched from the perspectives of research participants. The qualitative

research design can therefore be conceptualised as a focus on words and feelings (the quality of an event or experience). The more people-orientated the research is, the more qualitative the approach will be. In qualitative research the emphasis is on people's perceptions about the world and events. The aim of qualitative research is therefore to study humans within unique and meaningful situations or interactions. The researcher is the primary data-collection instrument and interpreter of the research results. This suggests that qualitative researchers reconstruct reality, using their personal frame of reference. Therefore, differences of values and prejudices should be taken into account. Struwig and Stead (2004:13) further contend that qualitative researchers usually start their research in a relatively open and unstructured way. This implies that the design of the research emerges as the research develops. Therefore, qualitative research is not based on fixed and rigid procedures. In qualitative research the scope is less defined and the procedures followed are not as formal and explicated as in quantitative research. As far as sampling is concerned, research participants are selected in a purposeful, rather than a random manner.

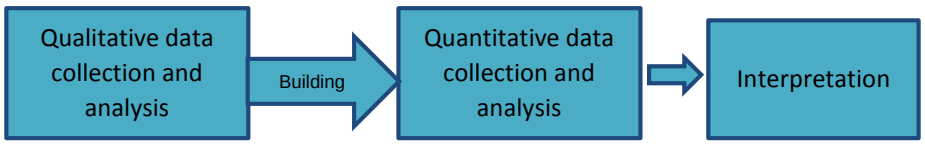
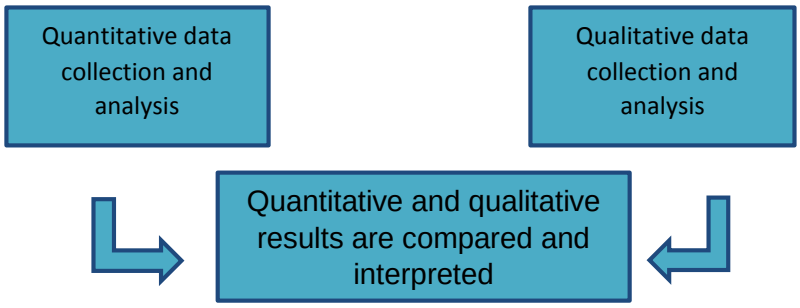
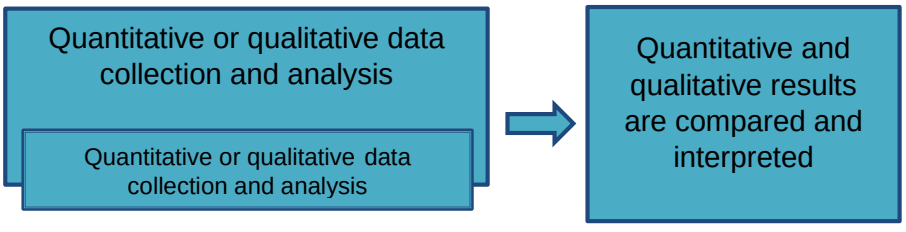
The *quantitative research design* represents the traditional scientific approach to research. Struwig and Stead (2004:4) define quantitative research as "a form of conclusive research involving large representative samples and fairly structured data collection procedures". It is mainly used to explain the relationship between variables and as a result, drawing conclusions about cause and effect relationships. Quantitative research requires that the data collected can be expressed in numbers. Dawson (2006:15) states that "quantitative research generates statistics through the use of large-scale survey research, using methods such as questionnaires or structured interviews". This type of research usually includes more research participants than qualitative research, but allows for a lesser degree of interaction with the participants.

A *mixed methods design* or a combination of qualitative and quantitative research designs, add greater strength to the research findings (Ivankova *et al*., 2006:9; Maree & Van der Westhuizen, 2007:34). This is a procedure for collecting, analysing and "mixing" both qualitative and quantitative data at some stage of the research process

within a single study. A mixed methods design enables the researcher to understand a research problem more completely.

Delport and Fouche (2013:440-443) provide an overview of the four major types of mixed methods research designs. Table 4.2 depicts these types and also provide an explanation of each type.

Table 4.2: Types of mixed methods research designs (Delport & Fouche, 2013:440-443)

Exploratory mixed method Design	
Explanatory mixed method design	
Triangulation mixed method design	
Embedded mixed method design	

In addition, Creswell and Plano Clark (2011:100) mention the multiphase design, also known as the "sandwich design". Given the problem that initiated this study, the qualitative and quantitative designs were sequentially aligned to build on each other (Creswell & Plano Clark, 2011:100) to address this central problem. For this reason the empirical study was divided into two phases to build on each other to address the central purpose of the study (*cf.* 1.3). It can thus be argued that this research is

embedded in a multiphase design (*cf.* 1.6.1). The phases of the research were sequentially ordered. During the first phase of the research, data were collected by means of a qualitative approach, while the data collection in the second phase comprised of a combination of quantitative and qualitative approaches. The rationale behind the combined approach in the second phase was to make provision for triangulation.

4.4 STRATEGY OF INQUIRY

Although Creswell (2009:12) argues that the multiphase design represents a strategy of inquiry within mixed methods research, he also argues that types of qualitative, quantitative and mixed methods designs are considered to be strategies of inquiry (Creswell, 2009:11). Considering the latter argument, the type or strategy of inquiry which this research employs is a case study (*cf*. 1.6.2). Leedy and Ormrod (2005:135) assert that a case study serves to "promote understanding" and to "inform practice". McMillan and Schumacher (2010:24) and Morgan and Sklar (2012:75) characterise a case study as a study that explores a phenomenon in a bounded system; it creates a rich description of a phenomenon and uses various sources of information. Making the aforementioned applicable to this study, *understanding* of existing assessment induction programmes and the assessment literacy of MGI lecturers are used to *inform* the development of an assessment induction programme for MGI. Said differently, an in depth study (rich description) of various sources (existing assessment induction programmes and assessment literacy) are explored to inform the development of an assessment induction programme specifically for MGI (bounded system).

For the purpose of this study, the selected type of case study can be specified as an *instrumental case study*. To motivate this choice, the researcher hinged on McMillan and Schumacher's (2010:345) statement that an instrumental case study "provides insight into a specific theme or issue". In this particular instance, the instrumental case study centres on the investigation of determining factors which impact on the development of an assessment induction programme for MGI.

4.5 POPULATION AND SAMPLING

A research population is generally considered all potential research participants forming the main focus of the study. In the case of this study, the population of the research comprises of public and private HEI's and all academic staff attached to MGI. Since the population is often too large and logistically unmanageable to study directly, obtaining information from a selected sample is more practical, easier and accurate. Kumar (1999:148) describes a sample as a sub-group of the population that the researcher is interested in.

Plano Clark and Creswell (2010:183) maintain that sampling is performed by applying sampling strategies and differentiate between probability and non-probability sampling. Probability sampling is based on the notion of random selection which entails a controlled procedure that assures that each population element is given an equal chance of being selected. Probability sampling offers the opportunity to generalise the findings to the population of interest (Cooper & Schindler, 2006:406). Maree and Pietersen (2012:172) suggest the following probability sampling methods: simple random sampling, systematic sampling, stratified sampling and cluster sampling. Struwig and Stead (2004:111) describe non-probability sampling as a process where the chances of being selected as research participant are unknown. In other words each member of the population does not have the same chance of being included in the study. Non-probability sampling is thus arbitrary and subjective. In the case of non-probability sampling a researcher is guided by personal judgement. The advantage of non-probability sampling is that it is less complicated and more economical (in terms of time and financial expenses) than probability sampling. The following non-probability sampling methods are distinguished: convenience sampling, quota sampling, snowball sampling and purposive sampling (Maree & Pietersen, 2012:177/178).

Non-probability sampling, in the forms of purposive and convenience sampling methods, was applied throughout this study. According to McMillan and Schumacher (2006:319) and Maree and Pietersen (2012:178), purposive sampling is done with a specific purpose in mind and is appropriate when the researcher wants to understand something in-depth by including information-rich research participants. With reference to the first phase of the study (*cf.* 1.6.2), South African HEIs, representing public HEIs

were earmarked for inclusion in the study. Care was taken for the inclusion of traditional universities and Universities of Technology. Saturation of information (Greeff, 2005:294), was used as criterion to determine the sample size. Based on this, six HEIs eventually participated in the research. The researcher did not consider the inclusion of private HEIs since she holds the opinion that public HEIs are the forerunners in making provision for induction programmes for their academic staff. For the second phase of the study (*cf.* 1.6.2), two parts are distinguished: a quantitative part and a qualitative part. The 2013 MGI academic staff complement consisted of 101 academic staff members of whom 39 were full time, 11 fixed term and 51 part-time staff members. These staff members represent different academic levels, ranging from Deans, Heads of Programmes and lecturers, since all these academic staff levels were involved in lecturing. With reference to the part-time staff, it needs to be mentioned that at the time of the research, the average retention period of such staff was three years. The researcher argued that three years represents a reasonable time period to be expected to report legitimately on assessment related matters. With regard to the quantitative part of this phase of the study, all academic staff (n=101) were included by means of purposive sampling. It was argued that all staff members could be regarded as information-rich research participants. For the second part (qualitative part) of the second phase of the study, the researcher made use of convenience sampling for selecting research participants. Fulltime academic staff who were available and willing to continue their participation in the research were included in this part of the study. Eventually, 13 lecturers, who represented all seven faculties and coming from various ranks, continued their participation in the study.

4.6 DATA COLLECTION METHODS

Data collection methods can be interactive or non-interactive. Interactive data collection methods include those methods where the researcher has personal contact with the research participants while non-interactive data collection methods have no required personal contact (Cooper & Schindler, 2006:199). In this study, both interactive (questionnaire and interviews) and non-interactive (document analysis) strategies were used to collect data.

4.6.1 Qualitative data collection method: Document analysis (Phase one)

To uncover the nature and scope of existing assessment induction programmes at South African HEIs, a non-interactive, qualitative research design (McMillan *&* Schumacher, 2006:26) was applied (*cf*. 1.6.4.1). According to McMillan and Schumacher (2006:27), non-interactive designs are akin to analytical research and are mostly used to investigate concepts or events through an analysis of documents. Following the suggestion by Henning *et al*. (2004:99) that documents are "valuable sources of information" a document analysis of appropriate documents pertaining to assessment induction programmes at public South African HEIs was done. Based on the views of Ritchie and Lewis (2003), Strydom and Delport (2013:377) describe a document analysis as the study of existing documents to understand its content or to illuminate deeper meanings within the documents. Four types of documents are distinguished by Strydom and Delport (2013:378-379): personal documents (e.g. personal letters, diaries), non-personal or official documents (e.g. minutes of meetings, policies), mass media documents (e.g. newspapers, websites) and archival documents (e.g. preserved material intended for research purposes). For the purpose of this study, a mix of non-personal or official documents and mass media documents were used. Non-personal or official documents comprised of teaching, learning and assessment policies, workshop training guides on assessment, resource guides for academic staff development and academic staff induction programmes. Mass media documents included accessible official websites of the institutions aimed at academic staff induction and development. By means of detailed content and textual analyses (Strydom & Delport, 2013:380/38), guided by a set of predetermined questions, the mentioned documents were studied to determine the nature and scope of existing assessment induction programmes at the purposively selected South African HEIs. Based on the criterion of saturation of information, the documents of six public HEIs were analysed (*cf.* 1.6.3 and 4.5).

4.6.2 Quantitative data collection method: Questionnaire (Phase two, part one)

Questionnaires consist of statements or questions, relevant to a specific issue, to which research participants respond in written form (McMilllan & Schumacher, 2006:194). Blaxter *et al.* (2010:201) postulate that questionnaires "are probably the most widely used research techniques" and that they are used "to obtain facts and opinions about a phenomenon from people who are informed on the particular issue". According to Delport and Roestenburg (2013:186) the basic objective of a questionnaire is "to obtain facts and opinions about a phenomenon from people who are informed on the particular issue".

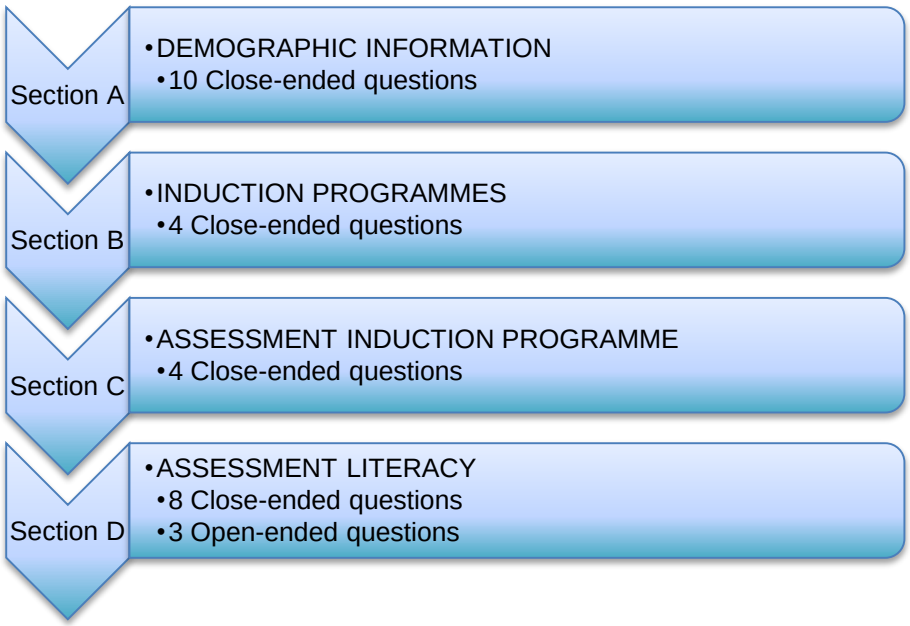
To conduct the quantitative part of the first part of the second phase of the study, namely to determine the quality of assessment literacy amongst MGI academic staff, the researcher developed a self-generated questionnaire based on the literature study (*cf*. 1.6.4.2). The questionnaire included closed-ended as well as open-ended questions. Closed-ended questions use a more structured approach and could include a variation of questions (Maree & Pietersen, 2007:161-165), ranging from listing questions (e.g. dichotomous, multiple choice, filter and follow-up questions), to category, quantity and grid questions. In closed-ended questions, research participants are given a fixed response option since possible answers from which respondents must select, and that best describes the respondent's answer, are pre-determined (Kumar, 1999:116). In contrast, open-ended questions enable the respondents to express their ideas, feelings and impressions freely and spontaneously. Possible, pre-determined responses are not provided and respondents can answer, using their own words. Although open-ended questions allow for freedom of expression, Fraenkel and Wallen (2008:396) draw attention to the fact that these questions are difficult to code and analyse.

During the respective meetings of MGI's seven faculties at the beginning of the 2013 academic year, all academic staff present were requested to complete the questionnaire. This was done in the presence of the researcher after giving their voluntary consent to participate in the research. At each of the seven meetings, approximately 15 to 25 academic staff members were present to complete the questionnaire (n=101; *cf.* 1.6.3 and 4.5). According to Delport and Roestenburg

(2013:189), this approach is known as a *group-administered questionnaire*. Fraenkel and Wallen (2008:393) consider this approach as reasonably effective since it not only ensures a high response rate, but also allows the researcher to clarify uncertainties experienced by the respondents. Yet, Maree and Pietersen (2007:157) state that one disadvantage of a *group-administered questionnaire* is that the presence of the researcher can have an influence on respondents' responses.

The questionnaire was constructed to allow for approximately 20 to 30 minutes for completion. It comprised of four sections as depicted in Figure 4.1 (*cf.* **Appendix D**)

Figure 4.1: Questionnaire sections



4.6.3 Qualitative data collection method: Interviews (Phase two, part two)

Interviews are regarded as the primary data collection method for gathering data in qualitative research (Seabi, 2012:89). Kumar (1999:109) states that any person-to-person interaction between two or more individuals with a specific purpose in mind can be called an interview. Greeff (2013:342) contends that interviews are social relationships, designed to exchange information. Interviews are usually classified according to their degree of flexibility, which leads to the differentiation between structured or open-ended interviews, semi-structured interviews, and unstructured interviews (Nieuwenhuis, 2012:87). Whereas open-ended interviews are often

conversational in nature, semi-structured interviews consist of a set of pre-determined questions to "define the line of inquiry" (Nieuwenhuis, 2012:87). Structured interviews comprise of detailed questions, developed in advance, to ensure consistency. In addition to the aforementioned differentiation, Greeff (2005:292,299) also makes a distinction between one-to-one or individual interviews and focus group or group interviews.

In the case of this study, semi-structured, individual interviews were used as data collection instruments (*cf.* 1.6.4.3 and **Appendix E**). The purpose of these interviews was to elaborate on the quantitative data obtained in part one of the same phase of the study and to generate qualitative data on more refined, detailed views and opinions regarding the quality of assessment literacy of academic staff with the aim to develop an induction programme. Guided by the literature study and the questionnaire items the researcher prepared the interview questions beforehand. By using an interview guide similar to a questionnaire, the researcher was able to maintain the questioning order and consistent phrasing of the questions. All interviews were conducted by prior appointment during staff members' consultation hours and provision was made for a 20 to 30 minutes time frame for each interview. By applying convenience sampling, 13 interviews were conducted with, what were considered, information-rich participants (*cf.* 1.6.3). The interviews were audio-recorded to ensure the accuracy of the collected data and to enable the researcher to transcribe the data later (Blaxter *et al.,* 2010:172). The recorded interview data were supplemented by field notes that were made during the interview sessions (Fraenkel & Wallen, 2008:506).

4.7 PRINCIPLES CONSIDERED FOR CONSTRUCTING AND ADMINISTERING THE DATA COLLECTION INSTRUMENTS

4.7.1 Document analysis

By considering the secondary research question: *What is the nature and scope of existing assessment induction programmes at selected South African HEIs?* relevant documents were requested or accessed and evaluated to determine their usefulness to illuminate this question. To help the researcher to decide on the appropriateness of the documents, the following four criteria, proposed by Strydom and Delport (2013:380) and Flick (2014:355) proved to be valuable: authenticity, credibility,

representativeness and meaning. In terms of *authenticity*, the researcher ensured that the documents were indeed the products of the particular institution. *Credibility* of the documents was confirmed by scrutinising the content of each document to establish its relevancy in terms of the development of assessment competence or assessment induction. A variety of documents from a range of public HEIs were requested or accessed to make sure that the criterion of *representativeness* is addressed, while the intended *meaning* of the documents (e.g. to provide information, to serve as policy, to give guidelines), was also considered.

Guided by the practical steps suggested by Leedy and Ormrod (2005:141) and Strydom and Delport (2013:381,382), the researcher adopted the following procedures for conducting the document analysis:

- Documents were requested from institutions or accessed through their websites to enable the researcher to generate an archive of material.
- Eight questions were formulated to guide the critical reading, coding and analysis of documents. These eight questions also served as categories within which the results of the documents analysis are reported.
- By means of the constant comparative method, the researcher moved back and forth between the analysed data and the collection of new emerging evidence from the documents. By applying this method, the reliability of the document analysis was also enhanced.
- In conclusion, the researcher reflected on the analysed material, recorded her final findings and interpreted the results.

4.7.2 Questionnaire

For the construction of the questionnaire, guidelines provided by Struwig and Stead (2004), Leedy and Ormrod (2005) and Cooper and Schindler (2006), were observed. Struwig and Stead (2004:89) insist that a questionnaire should adhere to the following:

- It should contain precise and clear instructions on how to answer questions.
- It should be logically structured in sections.
- It should start with questions that are easy to answer.
- It should proceed from general to specific questions.

- Tedious technical jargon should be avoided.
- The number of questions should be minimised to avoid respondent fatigue.

Leedy and Ormrod (2005:190-192) suggest that a successful questionnaire displays the following features:

- Questions are brief and to the point.
- Simple, clear and unambiguous language is used.
- Unwarranted assumptions in questions are eliminated.
- Clues about preferred or desirable responses are not provided.
- Provision is made for consistency to 'countercheck' responses.
- The questionnaire is simple.
- Clear instructions are provided.
- Care is taken that each question is relevant to the research goal.

In conclusion, Cooper and Schindler, (2006:363) assert that the construction of a successful questionnaire can be accomplished by:

- encouraging respondents to provide an adequate amount of information;
- discouraging respondents from refusing to answer specific questions;
- discouraging respondents to discontinue their participation, and
- leaving respondents with a positive attitude about their participation.

The self-developed questionnaire was personally managed by the researcher as a *group-administered questionnaire (cf.* 4.6.2*)* during the seven different Faculty meetings. The Dean of each Faculty scheduled time at the end of the meeting to make provision for the administration of the questionnaire. During the available time, the researcher briefly clarified the purpose of the questionnaire and thereafter informed consent forms were handed to, and completed by the prospective respondents. Provision was made for the completion of the questionnaire within a time frame of between 20 to 30 minutes *(cf*. 1.6.4.2). Throughout this period of time, the researcher was available to clarify any possible queries. After completion, the consent form and questionnaires were placed in two separate sealed boxes, to ensure that participant responses are treated anonymously and confidentially.

4.7.3 Interviews

For the purpose of this study, the researcher made use of individual, semi-structured interviews. By following the recommendations of Bryman (2012:473), the researcher ensured that the interview questions:

- were associated with the purpose of the research;
- were phrased in a comprehensible manner, and that
- leading questions were avoided.

During the administering of the interviews, the researcher took care of the following:

- the place and times of interviews were arranged and confirmed with interviewees to ensure that the interviews could continue without any interferences;
- the purpose of the interview was explained to interviewees and they were made aware that the interviews would be audio-recorded, supplemented by note-taking by the researcher, and
- the interview guide was made available to the interviewees just before the interviews comments to familiarise themselves with the nature and order of the questions, and to keep track of the questions.

Thirteen lecturers across the seven Faculties, who completed the questionnaire and who were available and willing to continue their participation in the research, formed part of the group of interviewees. The interviews took place during each academic staff member's consultation hours. Individual interviews of between 20 to 30 minutes were personally conducted by the researcher (*cf*. 1.6.4.3). For the sake of consistency, the researcher used a detailed, pre-formulated interview guide, similar to a questionnaire, to guide the questioning order and the specific way in which the questions were asked. The interview guide consisted of nine questions which related to the literature study and the questions of the questionnaire.

4.8 QUALITY CRITERIA

Terre Blanche and Durrheim (1999:61) postulate that scientific research should produce findings that are, amongst others, valid, reliable and conclusive. In the case of this study, the researcher relied on triangulation (*cf.* 1.6.8). According to Perone and

Tucker (2003:2) triangulation involves the use of more than one research method or data collection technique in order to reach a more complete, holistic and contextual understanding of the researched phenomenon. Cooper and Schindler, (2006:219) define triangulation as "the combining of qualitative with quantitative methods" while Blaxter *et al.* (2010:205) characterise triangulation as the use of two of more methods "to verify the validity of the information being collected." By consciously combining both qualitative and quantitative approaches (De Vos, 2005a:361), methodological triangulation (De Vos, 2005a:362) was applied in this study. In addition, data triangulation (De Vos, 2005a:362) was also applied since questionnaires as well as interviews were used to collect data. The researcher anticipated that triangulation would eventually contribute towards the transferability (De Vos, 2005b:346) of the research results. Since the study envisaged yielding conclusive results, methodological triangulation can be further refined by considering specific quality criteria applicable to the respective methodologies.

4.8.1 Quality criteria applicable to the qualitative methodology

In addition to transferability (*cf.* 4.8), Schurink *et al.* (2013:419-421) propose the following three alternative concepts that reflect the trustworthiness of qualitative methodology, namely credibility, dependability and conformability.

4.8.1.1 Credibility

Credibility is concerned with establishing that the results of the research are believable. Credibility depends on the richness of the gathered information, rather than the amount or volume of the gathered data (Terre Blanche & Durrheim, 1999:61). By conducting the study within the context of MGI, the credibility of the research was affirmed. Furthermore, by gathering data by means of questionnaires and interviews and by tape recording and verifying the research participants' interview responses, the researcher assured credibility.

4.8.1.2 Dependability

Dependability ensures that the research findings are consistent and that it could be repeated. Dependability concerns the standards by which the research is conducted, analysed and presented. All processes in this study are reported in detail to enable

an external researcher to repeat the inquiry and most probably achieve similar results. Dependability also refers to the degree to which the reader can be convinced that the findings did indeed occur as were reported by the researcher (Schurink *et al.* (2013:420). For this reason, the interview notes and interpretations were checked for accuracy.

4.8.1.3 Conformability

Conformability provides evidence of objectivity (De Vos, 2005b:347). The researcher's neutrality and unbiasedness towards the emerging research results are imperative and findings are only supported by the collected data. To enhance the conformability of this study, a knowledgeable colleague verified the interview transcripts and codes to ensure that the interpretations are indisputable.

4.8.2 Quality criteria applicable to the quantitative methodology

According to Delport and Roestenburg (2013:172) researchers must ensure that the procedures and measurements that will be followed during quantitative research have acceptable levels of validity and reliability.

4.8.2.1 Validity

Struwig and Stead (2004:138) and Cooper and Schindler (2006:318) define validity as "the extent to which the instrument measures what it is intended to measure". Salkind (2003:113) mentions truthfulness, accuracy, authenticity and soundness as synonyms for validity. Internal validity, or the extent to which the research design and data allow the researcher to draw accurate conclusions (Leedy & Ormrod, 2005:97), was ensured by applying face and content validity (Delport & Roestenburg, 2013:173). In a practical sense, this means that the questionnaire and interview items were verified in terms of the research purpose. To safeguard external validity or the extent to which research results can be generalised (Leedy & Ormrod, 2005:99), the researcher used multiple data sources (document analysis, questionnaires and interviews), conducted the research in a real-life setting (MGI) and included a representative sample (all academic staff at MGI).

4.8.2.2 Reliability

Struwig and Stead (2004:130) explain reliability as the extent to which research results are accurate, consistent or stable. Cooper and Schindler (2006:321) define reliability as the degree to which consistent results are supplied. According to Swart *et al.* (2006:88), the achievement of reliability "involves ascertaining whether the results are consistent with the data and that the same results be obtained should the study be replicated". Reliability is thus primarily concerned with how well something is measured (Delport & Roestenburg, 2013:178). For the purpose of this study the questionnaire and interview items were checked for their quality (Maree & Pietersen, 2007:160), especially with regard to consistency of meaning.

By conducting a pilot study (*cf.* 4.9), the data collection instruments were audited for validity and reliability.

4.9 PILOT STUDY

Blaxter *et al.* (2010:138) define piloting as the process whereby the data collection methods which the researcher has in mind, are "tried out" to determine how well it works in practice and if necessary, be modified accordingly. Jankowicz (2007:250) concludes that the pilot study is the final opportunity to adequately resolve the following issues:

- That the research design is appropriate to address the research questions.
- That the data collection methods are suitable.
- That the wording of the data collection methods' questions and instructions are clear and that the arrangements for recording responses will work.
- That the data analyses are likely to give the kind of information needed.
- That the findings will be informative of the research.

With regard to Phase two of the research, a pilot study with two willing academic staff members at a neighbouring PHEI was conducted. These academic staff members fitted the profile of the potential research participants. Both lecturers completed the questionnaire after which they were individually interviewed. By conducting the pilot study, the research methods were audited for reliability and validity to enhance the success and effectiveness of the investigation (*cf.* 1.6.8). After being exposed to the

research instruments, the academic staff members were invited to comment on the questionnaire items and interview questions. In neither of the two cases any changes to the instruments were proposed. However, the time allowed for the completion of the questionnaire was reconsidered.

4.10 ROLE OF THE RESEARCHER

According to Poggenpoel and Myburgh (2003:418), the researcher is the "key person" in obtaining data from research participants. McMillan and Schumacher (2006:344) describe the role of the researcher as "a relationship acquired by and ascribed to the researcher in interactive data collection". Creswell (2009:177) makes one aware that a researcher must be considerate about "a range of strategic, ethical and personal issues".

For the non-interactive, qualitative phase (Phase one) of the study, the researcher determined the focus of the document analysis, where after documents pertaining to existing assessment induction programmes at South African HEIs were personally requested or accessed, analysed and interpreted. Based on the literature review, questionnaires and interview questions applicable to Phase two of the empirical study, were also formulated by the researcher after which these data collection instruments were personally administered. Data collected through these instruments were then analysed and interpreted by the researcher. During the interactive data collection periods, the researcher set the research participants at ease in order to create an atmosphere of trust. Since the researcher was alert that her position as Dean of the Faculty of Commerce at MGI may impact on the research results, she was especially mindful with regard to the administration of the data collection instrument as colleagues may feel intimidated during data collection sessions. Furthermore, the researcher observed the protection of the rights of MGI, other HEIs who participated in the research, as well as the welfare of the individual research participants. These matters were dealt with in an ethically responsible manner. Throughout the entire study the researcher was specifically sensitive about her ethical responsibilities.

In order for the researcher to arrive at reliable conclusions and recommendations, self-confidence was one of the fundamental aspects (Strydom, 2007:249). Therefore the researcher ensured that she was competent and adequately skilled to undertake the

proposed research, by studying publications related to the selection of appropriate research methods and the application thereof.

4.11 ETHICAL CONSIDERATIONS

Cooper and Schindler (2001:112) explain ethics as norms or standards of behaviour that guide the moral choices about behaviour between researcher and research participants. In addition, it is stated that the goal of ethics is to ensure that no one is "harmed" by the research activities (Cooper & Schindler, 2006:116). Strydom (2007:69) defines ethics as "a set of widely accepted moral principles or codes that offer rules for and behavioural expectations of the most correct conduct towards experimental subjects and respondents, employers, sponsors, other researchers, assistants and students". Jankowicz (2007:62) points out that ethical codes represent "values that have been deliberately adopted, as the right way of doing things, not merely the best way". Shaughnessy *et al.* (2009:59) conclude that ethics is the maintaining of integrity by shared responsibilities of the researcher and the community. In practice ethics were considered in the following ways:

- The researcher applied for and obtained ethical clearance from the Ethics Committee of the North-West University, Vaal Triangle Campus (*cf.* **Appendix A**).
- Permission to conduct the research at MGI was requested and obtained from the Research Committee of MGI (*cf.* **Appendix B**).
- Informed consent was obtained from all the academic staff of MGI to participate in the research. An informed consent form was designed (*cf.* **Appendix C**) handed and explained to all potential research participants to assure them of the adherence of this study to ethical behaviour. The purpose of the research, the identity of the researcher and her contact details were disclosed on this form, together with the ethical principles that were observed. With regard to the latter, the following need to be noted:
  - Participants were made aware of the nature of their involvement in the study, that their participation was voluntary and that they could stop their participation at any time they wished to do so. In addition, permission was sought from research participants to audio record the interview sessions and

they were informed that the reason for the audio recording was to ensure the accuracy of responses.

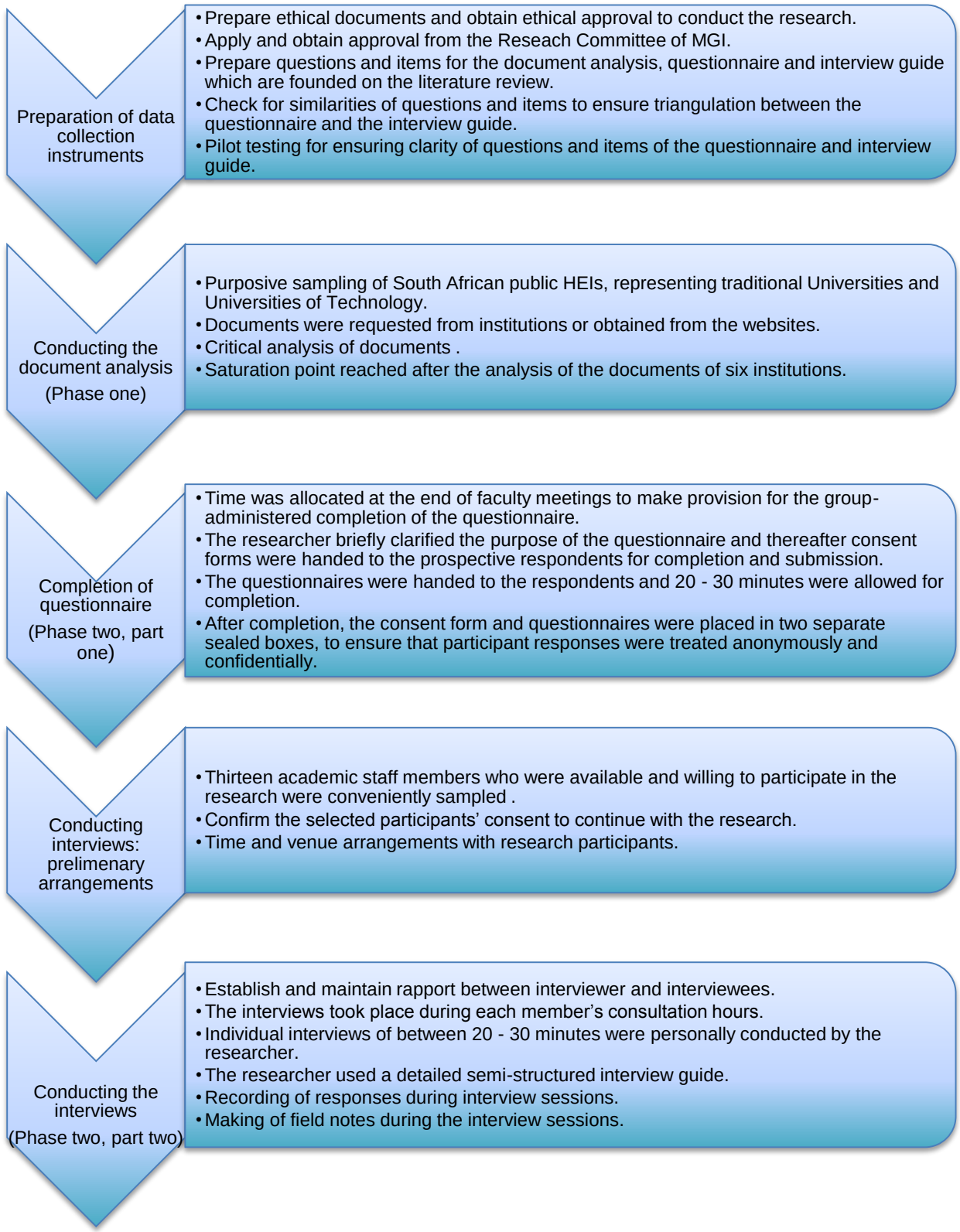
- Research participants were assured of their physical and emotional security and that their well-being will not in any way be compromised during the data-collection process. Participants were reminded, that should they wish to, they could at any time during the data collection process, suspend their involvement if they feel any physical or emotional strain as a result of their involvement in this study.
- Participants were assured of the observance of confidentiality and anonymity. The researcher pledged to keep in the strictest of confidence any confidential information that is divulged by them. The researcher also indicated that the anonymity of all participants will be maintained and that the identity of no research participant will be divulged. All direct references to any participant's contribution will be presented in an anonymous manner in order to protect the identity of the participants.
- In addition to the fact that participants were informed that the research results will primarily be used for research purposes to obtain a PhD qualification, they were also informed the results of the study will be made available to them, the management team, the Senate and Research Committee of MGI.

- The proposed research is based on sound data and findings, obtained from the actual empirical study and the researcher avoided the falsifying or invention of findings, as this is regarded as scientific misconduct (Creswell, 2009:92).

4.12 THE DATA COLLECTION PROCESS

The data collection process is represented in Figure 4.2 below. The study, being a multiphase, mixed methods design, included the following stages of data collection:

Figure 4.2: Data collection process



4.13 CONCLUSION

In this chapter, an overview of the empirical study was provided. The research paradigm, research design, strategy of inquiry, population and sampling and data collection methods were discussed. In addition, attention was also given to the construction and administration of the data collection instruments, quality criteria, the pilot study, the role of the researcher and the ethical considerations. The chapter concluded with a visual overview of the data collection process.

In chapter five, the data that were obtained through document analysis, questionnaires and interviews will be analysed and interpreted.

CHAPTER FIVE
DATA ANALYSIS AND INTERPRETATION

5.1 INTRODUCTION

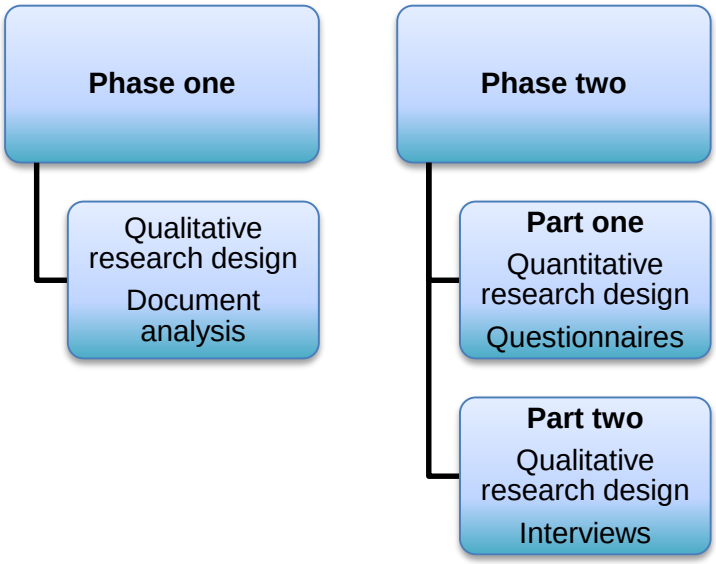
While the previous chapter provided an overview of the empirical study to indicate the processes and procedures which were followed to gather information relevant to the purpose of the study, this chapter will focus on the analysis and interpretation of the data obtained through the two phases (*cf*. 1.6.1 and 4.3) of data collection. The chapter will enlighten the primary research question (*cf*. 1.2):

What is the nature and scope of existing assessment induction programmes at selected South African HEIs and the quality of assessment literacy of academic staff at MGI in order to inform the development of an assessment induction programme for MGI?

Embedded in this question, the secondary research questions referred to in section 4.1 in Chapter 4 will also be considered.

As shown in Figure 5.1, the data analyses and interpretations will be sequenced in the same order as the data collection process (*cf.* 4.12).

Figure 5.1: Data collection process



5.2 QUALITATIVE DATA ANALYSIS AND INTERPRETATION (PHASE ONE)

5.2.1 Background information

In this section the research data were obtained by means of a non-interactive, qualitative research design (*cf*. 1.6.4.1 and 4.6.1). A mix of non-personal or official documents and mass media documents from South Africa HEI's was used. A set of questions were formulated to assist with the reading, coding and analysis of the documents. The questions also served as a guide to analyse and interpret the results obtained from the documents. The document analysis was primarily geared to identify patterns in the data. By following a constant comparative method, the researcher moved back and forth between the analysed data and new emerging evidence. The analysis and interpretation of the data obtained through the respective documents are presented in the following section.

5.2.2 Analysis of documents

For the purpose of the analysis of the documents, the eight questions that were used to guide the critical reading, coding and analysis of data are indicated in Table 5.1.

Table 5.1: Formulated questions

1. Does the institution have an induction programme for all newly appointed academic staff?
2. Does the institution have an assessment induction programme for academic staff?
3. When is the assessment induction programme offered?
4. What is the duration of the assessment induction programme?
5. Who should attend the assessment induction programme?
6. Is provision made for follow-up sessions of the initial assessment induction programme?
7. What is the content of the assessment induction programme?
8. Who facilitates the assessment induction programme?

Following the information obtained from the institutions, the document analysis reveals the following evidence as presented in Table 5.2 below.

Table 5.2a: Summary of document analysis

	Institution A	Institution B	Institution C
1. Does the institution have an induction programme for all newly appointed academic staff?	Yes, not compulsory for academic staff to attend.	Yes, in the form of short courses.	Yes, compulsory for all newly appointed academic staff.
2. Does the institution have an assessment induction programme for academic staff?	Not currently, but in development. There was a need identified by the faculties.	Yes, this is included as a module in one of the short courses.	Yes, included in follow-up workshops offered to staff.
3. When is the assessment induction programme offered?	When staff is available, normally during examination periods.	In July, before the beginning of the second semester.	Once a semester
4. What is the duration of the assessment induction programme?	2 Days	4 Days, as a module in a short course.	3 Hours
5. Who should attend the assessment induction programme?	All academic staff are invited.	New and experienced academic staff.	All academic staff are invited.
6. Is provision made for follow-up sessions of the initial assessment induction programme?	No not formal, only offered by faculties.	No, but academic staff may also attend another short course offered by external facilitator.	More workshops are also offered on request.
7. What is the content of the assessment induction programme?	• Theory and principles of good assessment. • Assessment design. • Conducting and managing assessment.	• Planning of module. • Module outcomes. • Assessment. • Use of technology in the classroom.	• Assessment for learning. • Feedback on assessment. • Developing assessment rubrics. • Developing multiple choice questions.
8. Who facilitates the assessment induction programme?	External facilitator.	Senior advisors in the Centre for Teaching and Learning	Representative of the Centre for Professional Academic staff Development.

Table 5.2b: Summary of document analysis (Continue)

	Institution D	Institution E	Institution F
1. Does the institution have an induction programme for all newly appointed academic staff?	Yes (No specifications)	Yes (No specifications)	Yes (No specifications)
2. Does the institution have an assessment induction programme for academic staff?	Yes (No specifications)	Yes, this is offered by the Education Development Unit per faculty.	Yes, only as a small part of the Licence to Teach programme.
3. When is the assessment induction programme offered?	Three times per year: at the beginning, middle and end of the academic year.	During July – August	September
4. What is the duration of the assessment induction programme?	3 Days	4 Weeks	Half a day (12:30-15:00)
5. Who should attend the assessment induction programme?	All academic staff with teaching responsibilities.	All academic staff with teaching responsibilities.	All newly appointed academic staff.
6. Is provision made for follow-up sessions of the initial assessment induction programme?	Yes, in workshops other assessment aspects will be covered.	No	No
7. What is the content of the assessment induction programme?	• Principles of assessment • Planning for accountable assessment. • Variety of specific assessment methods. (Written exams, orals, practical exams and portfolios).	• Purposes of assessment. • Formative assessment. • Methods of assessment. • Evaluation of assessment.	• Principles of sound assessment. • Setting written tests and exams. • Compiling rubrics and memorandums. • Assessment options.
8. Who facilitates the assessment induction programme?	Representative of the Department for Educational Innovation.	Member of the Education Development Unit.	Member of Curriculum Development and Support Unit.

5.2.3 Interpretation of document analysis

Derived from the data in Table 5.2, the researcher's interpretations related to each question are set out below.

1. **Does the institution have an induction programme for all newly appointed academic staff?**

All six institutions provided evidence that an induction programme is offered for all newly appointed academic staff. While the form of induction programmes may differ from institution to institution (Institution B), it is also evident that induction programmes are not compulsory in some cases (Institution A).

2. **Does the institution have an assessment induction programme for academic staff?**

Institution A does not have an assessment induction programme, however an assessment induction programme is currently in development after a need was identified by faculties. Institutions B and C do not have a separate assessment induction programme although assessment is covered as part of another programme or as a short course. At Institutions D, E and F a separate assessment induction programme is offered.

3. **When is the assessment induction programme offered?**

Only Institution A offers the assessment induction programme when "staff are available" during the university examination periods. Both Institutions B and E offer their assessment induction programme in the middle of the year, between semesters one and two during the university break. Institution C offers the assessment induction programme once a semester, while at Institution D an assessment induction programme is offered at three occasions during the year, namely at the beginning, middle and at the end of the year. Institution F offers the assessment induction programme in September during the university's academic break.

4. **What is the duration of the assessment induction programme?**

A noteworthy difference between the institutions is the duration of the assessment induction programmes. Institutions A, B and D allow two to four days, and Institutions

C and F only allow for between two and a half and three hours of training, whereas Institution E allows four weeks for their assessment induction programme.

5. Who should attend the assessment induction programme?

All institutions are in favour of academic staff attending the assessment induction programme. While Institutions A, C, D and E invite all academic staff who are in need of such training to attend the programme, Institutions B and F offer the assessment induction programme especially to the newly appointed academic staff.

6. Is provision made for follow-up sessions of the initial assessment induction programme?

Derived from the data analysis four of the six institutions do not offer formal follow-up programmes. However, two of the four institutions indicated that academic staff could attend workshops offered by faculties (Institution A) or other short courses (Institution B). Over and above the assessment induction programme offered by Institution D, this institution also offers follow-up workshops on assessment aspects that were not covered in the original assessment induction programme.

7. What is the content of the assessment induction programme?

Although each of the six institutions' assessment induction programmes is unique, they all share similar and common content that include:

- Theory of assessment.
- Principles of good and sound assessment.
- Assessment design and methods of assessment.
- Conducting and managing assessment.
- Evaluation and feedback on assessment.
- Developing assessment rubrics and memorandums.

8. Who facilitates the assessment induction programme?

Institution A makes use of an external facilitator to present the assessment induction programme. The other five institutions have a specific "unit" that is responsible for academic staff induction. For each institution the "unit" is named differently, although they apparently share the same function. These "units" include a Centre for Teaching and Learning, a Centre for Professional Academic Staff Development, a Department

for Educational Innovation, and Education Development Unit and a Curriculum Development and Support Unit. Although representatives of these “units” conduct the assessment induction programme, no indication of the competence of these representatives in terms of assessment is noted.

5.2.4 Preliminary conclusions

Derived from Phase one of the empirical research, the researcher arrived at the following preliminary conclusions:

- All institutions included in the document analysis have an induction programme for academic staff.
- The majority of the institutions also have an assessment induction programme for academic staff.
- The assessment induction programmes are offered at set times when academic staff are available.
- The duration of assessment induction programmes differs significantly from institution to institution. This may be due to the detail and scope of the content covered in the respective programmes.
- Although only one institution indicated new academic staff should attend the assessment induction programme, it is assumed that in most instances new and experienced academic staff should attend the assessment induction programmes.
- Each of the assessment induction programmes of the institutions are unique, but share common content.
- While most institutions have a unit-specific representative who facilitates the assessment induction programme, the qualifications and competence of such representatives remains uncertain.

5.3 QUANTATIVE DATA ANALYSIS AND INTERPRETATION (PHASE TWO, PART ONE)

5.3.1 Background information

In this section the quantitative data as obtained by means of the self-developed, group-administered questionnaire (*cf.4.6.2*), will be analysed and interpreted. To start with, questionnaire items will be analysed separately and independently. Thereafter, selected items that could yield valuable information regarding the primary research question, will be analysed and interpreted by means of a comparative approach. A total of 101 respondents, selected by means of non-probability, purposive sampling (*cf.* 4.5), completed the questionnaire. The analysis and interpretation of the data obtained in the Phase two, part one of the empirical research are presented according to the sections of the questionnaire (see **Appendix A**). The data obtained by means of the questionnaire are analysed according to frequencies, percentages and graphical techniques, after which the data are interpreted.

5.3.2 Analysis and interpretation of questionnaires

5.3.2.1 Section A: Demographic information

5.3.2.1.1 Gender (A1)

In Table 5.3 the gender composition of the research respondents is reflected. Noteworthy is the fact that the majority of the respondents (70%) were females and only 30% males. These figures probably confirm the common assumption that more females than males are employed in the South African education sector.

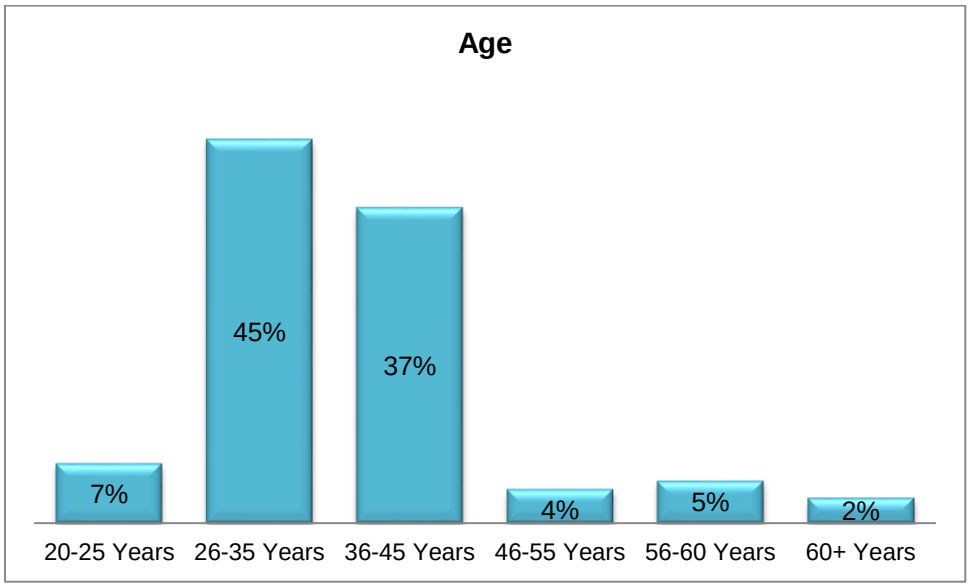
Table 5.3: Gender composition

Gender	Frequency	Percentage
Male	30	30%
Female	71	70%
	101	**100%**

5.3.2.1.2 *Age (A2)*

Figure 5.2 represents the age of the research respondents. The majority of the respondents are between 26 and 45 years of age (82%), with the considerable number of MGI academic staff (45%) being between 26 and 35 years of age. In the context of this study the relatively young age of the majority of the respondents may impact negatively on their assessment literacy due to reasons such as a lack of experience in the field of education (*cf.* A5) or their current position at MGI (*cf.* A6).

Figure 5.2: Respondents' age



5.3.2.1.3 *Highest higher education qualification (A3)*

According to the data recorded in Table 5.4, 43% of the respondents have an Honours degree while 41% have a Master's degree. Due to the fact that MGI only offers undergraduate and Honours qualifications, it appears as if the majority of the respondents satisfy the CHE requirement that lecturers should have a qualification of at least one level higher than the level of the degree their students are studying towards (CHE, 2004b:10). The researcher assumes that the respondents who possess either a Certificate (1%) or a Three year degree (8%), only lecture at the Pre-degree/Foundation level or are employed as tutors at MGI on a part-time basis.

Table 5.4: Highest higher education qualification

Qualification	Frequency	Percentage
Certificate	1	1%
Diploma	0	0%
3 Year degree	8	8%
4 Year degree	5	5%
Honours degree	43	43%
Master's degree	41	41%
PhD	3	2%
Other	0	0%
	101	**100%**

5.3.2.1.4 Professional, work-related experience within the specific subject field (A4)

The data in Figure 5.3 reflect that 44% of the respondents have five years or less professional or work-related experience within the specific field they are lecturing. This could be attributed to a number of possibilities, including: the respondents could have joined a Higher Educational Institution as academic staff immediately after completion of their studies, or, while lecturing at MGI, the respondents could be furthering their studies and then join professional industries. A fairly high percentage (48%) of the respondents indicated that they have between five and 20 years professional, work-related experience. This could point to MGI's preference to appoint academic staff with a sound practical experience in their field of lecturing.

Figure 5.3: Professional, work-related experience within a specific subject field

5.3.2.1.5 *Lecturing experience at a higher education institution (A5)*

From the variation in number of years' experience in lecturing at a higher education institution, it is clear from Table 5.5 that 54% of the research respondents have less than five years of lecturing experience. This correlates with the data above (*cf.* A2) which indicate that the majority of research respondents are between the ages of 26 to 35 years. 43% of the respondents have between five and 20 years' lecturing experience at a higher education institution which suggests that such respondents could be expected to be relatively conversant with assessment.

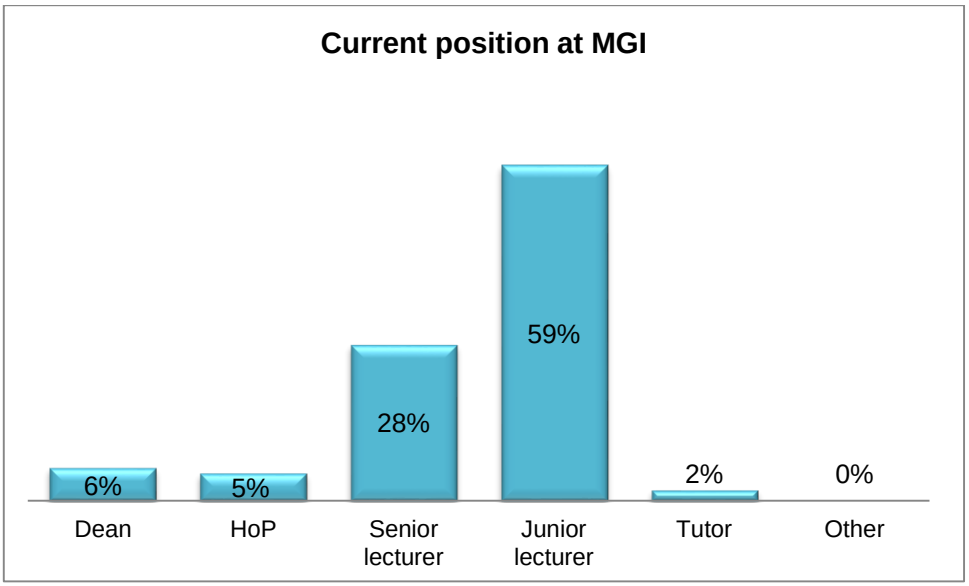
Table 5.5: Lecturing experience at a higher education institution

Lecturing experience	Frequency	Percentage
Less than 5 years	55	54%
5-10 Years	30	30%
11-20 Years	13	13%
21-30 Years	3	3%
31+ Years	0	0%
	101	**100%**

5.3.2.1.6 *Current position at MGI (A6)*

In Figure 5.4 it is evident that the majority of the respondents (87%) are lecturing at Junior or Senior lecturer level. This means that the majority of the respondents are directly involved in teaching, learning and assessment at MGI. 11% of the respondents are Head of Programmes and Deans of faculties. These two positions are not directly involved with teaching, learning and assessment, but are supposed to evaluate and monitor the teaching, learning and assessment practises of academic staff.

Figure 5.4: Current position at MGI



5.3.2.1.7 *Basis of appointment at MGI (A7)*

From the responses reflected in Table 5.6, 50% of the research respondents are employed on a part time basis. The other 50% of the respondents are either full time or fixed term contract academic staff at MGI. It is thus evident that there is an equal distribution of full time and part time staff.

Table 5.6: Basis of appointment at MGI

Basis of employment at MGI	Frequency	Percentage
Full time	39	39%
Fixed term contract	11	11%
Part time contract	51	50%
	101	**100%**

5.3.2.1.8 *Lecturing period at MGI (A8)*

From the responses in Table 5.7 it is clear that the vast majority of the respondents (74%) have less than five years lecturing experience at MGI. Comparing the responses to this item with the responses to A5, where 54% of the respondents

indicated that they have less than five years lecturing experience at a HEI, makes the researcher to conclude that overall 54% of the respondents have less than five years lecturing experience in any higher education environment. Therefore, it can be assumed that due to the relatively few years of experience of more than half of MGI's academic staff, their assessment literacy may be affected negatively.

Table 5.7: Lecturing period at MGI

Lecturing period at MGI	Frequency	Percentage
Less than 5 years	75	74%
5-10 Years	22	22%
11-20 Years	4	4%
21-30 Years	0	0%
31+ Years	0	0%
	101	**100%**

5.3.2.1.9 *Highest level of lecturing at MGI (A9)*

From the response in Table 5.8, it is evident that almost 27% of the research respondents at MGI lecture at Third year level, which, according to the researcher, requires a reasonable level of assessment literacy. The largest student population of MGI is founded on the undergraduate levels (First to Third year) and nearly 60% of the respondents are lecturing on these levels. This implies that most assessment at MGI happens on the undergraduate level, which necessitates assessment competence.

Table 5.8: Highest level of lecturing at MGI

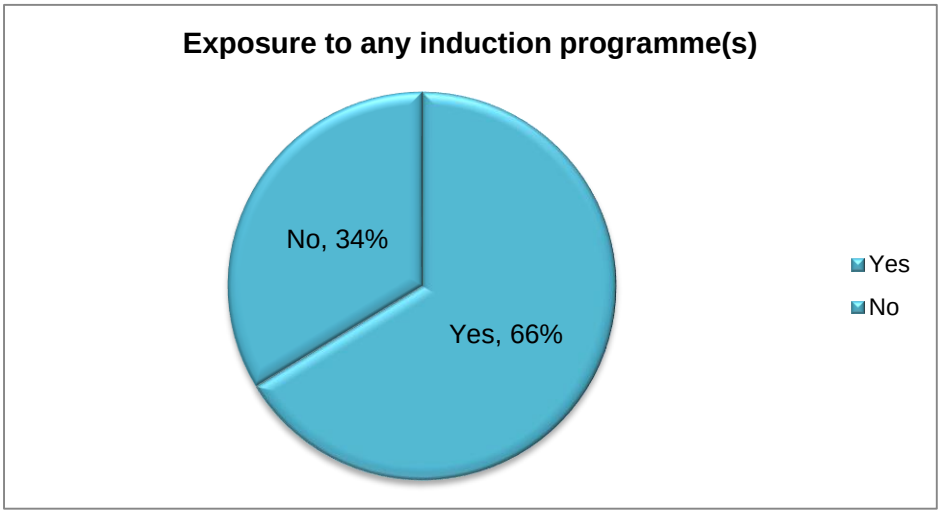
Highest level of lecturing at MGI	Frequency	Percentage
Pre-degree/foundation programme	24	23.8%
First years	16	15.8%
Second years	15	14.9%
Third years	27	26.7%
Fourth years	3	3%
Honours	10	9.9%
Masters/MBA	6	5.9%
	101	**100%**

5.3.2.2 Section B: Induction programmes

5.3.2.2.1 Exposure to any induction programme(s) (B1)

Figure 5.5 depicts that 66% (67) of the research respondents indicated that they were previously exposed to an induction programme. The fact that 34% of the respondents indicated that they were not exposed to any kind of induction programme before, raises some concern, especially in light of the fact that this can lead to workplace anxiety (*cf.* 2.6) affecting people's work performance and retention (*cf.* 2.5) at the institution.

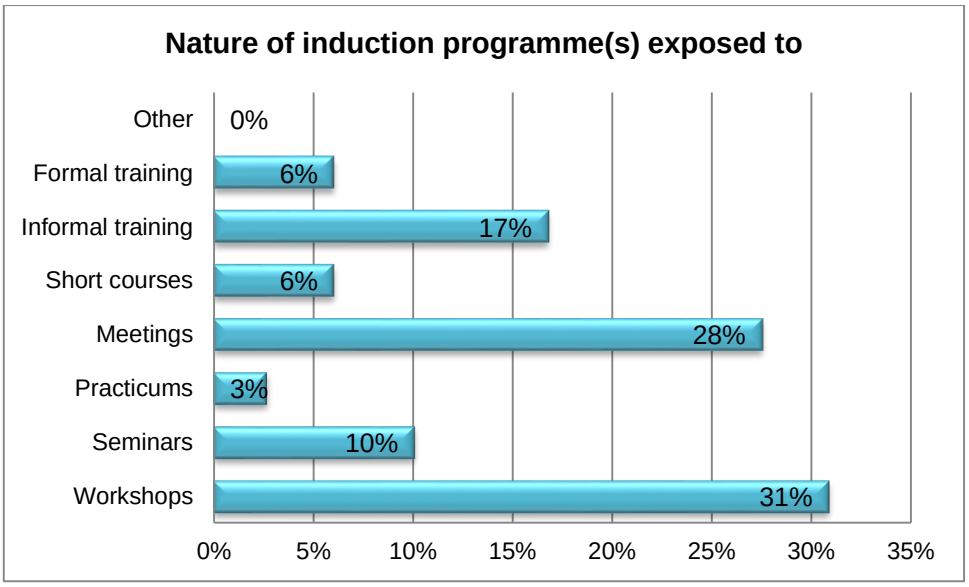
Figure 5.5: Exposure to any induction programme(s)



5.3.2.2.2 Nature of induction programme(s) exposed to (B2)

The graph in Figure 5.6 depicts the respondents' responses with regard to the possible nature of induction programmes to which they were exposed. Since the respondents were not limited in their choices, more than one source was selected in some cases. A fair percentage of the respondents (31%) attended workshops, while 28% received induction through attending meetings. With regard to meetings as a means of induction, the researcher is sceptical about the detail and quality that could be offered during a relatively short period of time. Noteworthy, is that only 6% of the respondents attended a formal induction programme which formed part of a qualification, while 17% were exposed to an induction programme of informal nature.

Figure 5.6: Nature of Induction programme(s) exposed to



5.3.2.2.3 *Induction programme as essential component for academic staff at HEIs (B3)*

Table 5.9 indicates that 99% of the research respondents believe an induction programme is important, while only 1% do not share the same feeling. It is noted in terms of B1 that while 66% of the respondents attended an induction programme, 33% who did not attend such a programme, now consider such a programme as being important. The researcher trusts that this last response reveals the respondents' sincere beliefs and not to impress the researcher.

Table 5.9: Induction programme as essential component for academic staff at HEIs

Induction programme as essential component for academic staff at HEIs	Frequency	Percentage
Yes	100	99%
No	1	1%
	101	**100%**

5.3.2.2.4 *Elements to be included in induction programmes for academic staff (B4)*

Respondents were not limited in their choices to this question and more than one element could have been selected. If the items are clustered as portrayed in Table 5.10, the responses imply that the respondents perceive the elements that directly link to academic matters as being more important for inclusion in an induction programme. Academic elements (48%) are followed by institutional elements (33%), while research (7%) and technology (12%) are rated as being less important for inclusion in an induction programme. This is a clear indication that there is an expressed need for induction aimed at academic elements such as assessment.

Table 5.10: Elements to be included in induction programmes for academic staff

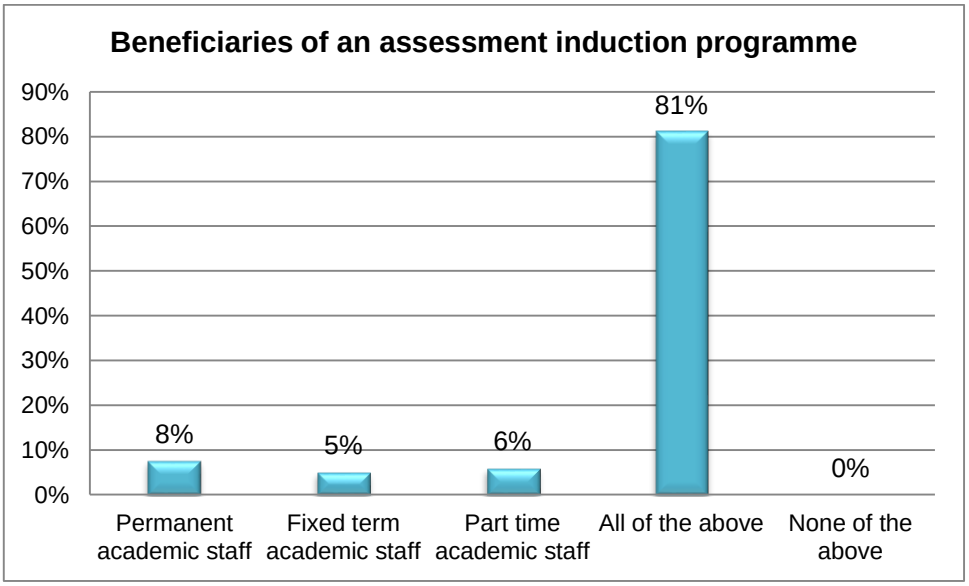
	Elements to be included in induction programmes for academic staff	Frequency	Percentage	Element %
Institutional elements	**Institutional vision and mission**	64	8%	33%
	Institutional policies	65	9%	
	Institutional procedures	69	9%	
	Workplace orientation	52	7%	
Academic elements	**Lecturing responsibilities**	88	12%	48%
	Classroom management	70	9%	
	Faculty administration	55	7%	
	Assessment	88	12%	
	Resources in the classroom	59	8%	
Research	**Research**	54	7%	7%
Technology	**Computer skills**	33	4%	12%
	Orientation of on-line sources	59	8%	
		756	**100%**	**100%**

5.3.2.3 Section C: Assessment induction programme

5.3.2.3.1 Beneficiaries of an assessment induction programme (C1)

The responses to this question, as illustrated in Figure 5.7, reveal that 81% of the respondents believe that all academic staff at MGI will benefit from an assessment induction programme. This includes all permanent, fixed term contract as well as part time academic staff. The researcher finds it promising that the respondents included the part time academic staff. Although these staff members are not permanently employed by MGI, they are included in all academic activities of faculties, including setting of assessments. Thus, it is important that the part time academic staff should undergo an assessment induction programme (*cf.* 4.5).

Figure 5.7: Beneficiaries of an assessment induction programme



5.3.2.3.2 Facilitation methods of an assessment induction programme (C2)

Table 5.11 reflects the responses with regard to respondents' preferred methods to facilitate an assessment induction programme. Twenty six percent of the respondents indicated their preference of interactive workshops offered by an expert internal facilitator. This could imply an institutional or faculty expert. Thirteen percent favours "faculty discussions initiated by faculty members" and 12% chose "faculty discussions initiated by faculty management". Interesting is the fact that respondents also revealed a preference for personal facilitation methods (84%) rather than methods which are

technologically oriented (16%). Another fascinating revelation is the fact that respondents do not necessarily like to be formally qualified as assessors (16%) but that they merely desire basic information related to the successful implementation of assessment. It is thus clear that academic staff at MGI prefer to attend an assessment induction programme of interactive nature, which is offered within the institution or faculty.

Table 5.11: Facilitation methods of an assessment induction programme

Facilitation methods of an assessment induction programme	Frequency	Percentage
E-Portal (Manuals available on-line)	28	13%
Electro meet (Video and web conferencing)	7	3%
Faculty discussions initiated by faculty members	29	13%
Faculty discussions initiated by faculty management	27	12%
Formal, face-to-face training session which leads to a certificate	36	16%
Interactive workshops offered by an expert internal facilitator	57	26%
Interactive workshops offered by an expert external facilitator	39	17%
	223	**100%**

5.3.2.3.3 *Facilitators of an assessment induction programme (C3)*

Table 5.12 indicates that some research respondents believe faculty management (19%) or a faculty specialist (21%) should facilitate an assessment induction programme. This data correlates with the responses indicated in Table 5.11, where respondents expressed their preference to attend faculty discussions on assessment. In contrast to the responses in C2, 25% of the respondents indicated that they prefer a formal assessment training provider to facilitate an assessment induction programme.

Table 5.12: Facilitators of an assessment induction programme

Who must facilitate of an assessment induction programme?	Frequency	Percentage
Institutional management	14	7%
Faculty management	38	19%
Faculty specialists	43	21%
Specialists from public higher educational institutions	29	14%
Specialists from other private higher educational institutions	30	15%
Formal assessment training providers	50	25%
Other	0	0%
	204	**100%**

5.3.2.3.4 *The structure of an assessment induction programme (C4)*

From the responses in Table 5.13, it is evident that an introduction to assessment at the beginning of the year, followed by an all-inclusive assessment focused induction programme later in the year is preferred by slightly more than 40% of the respondents. Almost 33% of the respondents opted for an induction programme which is divided into short, thematically focused assessment topics throughout the year, whereas almost 24% favoured an once off induction programme with an all-inclusive assessment focus at the beginning of the year. From the data the researcher infers that many respondents sense the need for an assessment induction programme of a more continuous nature throughout the year. Remarkable is the fact that no respondent suggested any other alternatives than those listed.

Table 5.13: The structure of an assessment induction programme

How should an assessment induction programme be structured?	Frequency	Percentage
An once off induction programme with an all-inclusive assessment focus at the beginning of an academic year	24	23.8%
An once off induction programme with an all-inclusive assessment focus at the end of business of an academic year	3	3%
An introduction to assessment at the beginning of an academic year, followed by an all-inclusive assessment focused induction programme later in the academic year	41	40.6%
A division of an induction programme into short, thematically focused assessment topics throughout an academic year	33	32.7%
Any other suggestion (please specify)	0	0%
	101	**100%**

5.3.2.4 Section D: Assessment literacy

5.3.2.4.1 Respondents' degree of confidence regarding assessment (D1)

For this question, a four-point Likert scale, ranging from "strongly disagree" to "strongly agree" was used to determine respondents' degree of confidence regarding assessment (see Table 5.14).

The researcher draws the following inferences from the collected data. Forty one percent of the respondents agreed and 28% strongly agreed that formal assessment, such as scheduled tests or examinations, is the most valid form of assessment for determining students' learning (D1, 1). This probably indicates respondents' inclination to use summative assessment (*cf.* 3.4.2.3.5) more often, or respondents' lack of understanding about the role of formative assessment (*cf.* 3.4.2.3.4). It is also noted that another 28% disagreed with the statement. This could point to some hesitance about the exact meaning of formal assessment (*cf.* 3.4.2.3.1). It is noted in D1, 2 that some respondents are not sure if formal assessment stimulates superficial learning, due to the fact that 33% disagreed and 47% agreed to this statement. The

same uncertainty is detected in D1, 3 where 39% disagreed and 38% agreed that marks or percentages, shown on students' reports, provide sufficient feedback in terms of students' learning success. Despite this tendency, 59% of the respondents disagreed or strongly disagreed with statement D1, 4, implying that they are positive that students value feedback (*cf.* 3.4.5). Forty eight percent of the respondents agreed and 13% strongly agreed (D1, 5) that if students' performances are compared to that of other students, it increases their motivation. This shows that respondents' assessment orientation is more inclined towards norm-referenced (*cf.* 3.4.2.3.8) assessment as opposed to criterion-referenced assessment (*cf.* 3.4.2.3.9). However, in D1, 6 a total of 94% of the respondents indicated that they agree or strongly agree that where students' performances are compared with their own previous performances, it increases their motivation. The responses to D1, 5 and D1, 6 are thus contradicting each other which could point to the respondents' ignorance regarding assessment in terms of student motivation. With regard to D1, 7; D1, 8 and D1, 9 evidence is provided that respondents are aware that informal assessment engage students in the learning process, helps to improve students' final assessment results and increases lecturer awareness of students' learning success. Fifty eight percent of the respondents agreed and strongly agreed, in contrast to 42% who disagreed and strongly disagreed, that students' self-assessment does not yield trustworthy assessment results (D1, 10). The majority of 75% of the respondents agreed and strongly agreed that peer assessment promotes students' confidence and motivation in their own learning (D1, 11). With regard to self-and peer assessment, the researcher doubts some respondents' comprehension of the appropriate application of these assessments, since results obtained through self- and peer assessment are not supposed to be formally recorded (*cf.* 3.4.4). Noteworthy are the overwhelming positive responses in D1, 12 (97%), which imply that academic staff are convinced that informal and formal assessment are equally important to ensure learning success. This refers to respondents' sensitivity towards continuous assessment (*cf.* 3.4.2.3.7).

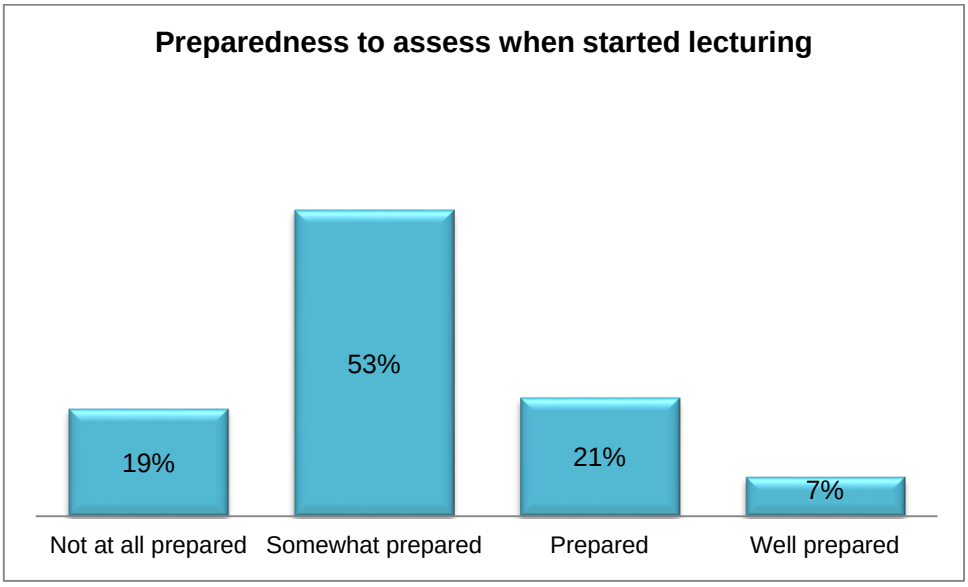
Table 5.14: Respondents' degree of confidence regarding assessment

D1	I believe …	Strongly disagree		Disagree		Agree		Strongly agree	
		n	%	n	%	n	%	n	%
1	that formal assessment, like scheduled tests or examinations, is the most valid form of assessment for determining students' learning	3	3%	28	28%	42	41%	28	28%
2	that formal assessment, like scheduled tests or examinations, stimulates superficial learning	4	4%	33	33%	48	47%	16	16%
3	marks/grades or percentages, shown on their reports, provide sufficient feedback to students in terms of their learning success	12	12%	40	39%	38	38%	11	11%
4	that students do not see value in any type of feedback other than marks or grades	16	16%	44	43%	27	27%	14	14%
5	that assessment where students' performances are compared to that of other students, increases their motivation	10	10%	29	29%	49	48%	13	13%
6	that assessment where students' performances are compared with their own previous performances, increases their motivation	1	1%	5	5%	54	53%	41	41%
7	that informal assessment, such as verbal questioning or short tests, engage students in the learning process	0	0%	4	4%	54	53%	43	43%
8	That informal assessment, such as verbal questioning or short tests, improve students' final assessment results	0	0%	7	6%	47	47%	47	47%
9	that informal assessment, such as verbal questioning or short tests, increase the lecturer's awareness of students' learning success	0	0%	2	2%	50	50%	49	48%
10	that students' self-assessment does not yield trustworthy assessment results	5	5%	38	37%	46	46%	12	12%
11	that peer assessment promotes students' confidence and motivation in their own learning	2	2%	23	23%	62	61%	14	14%
12	that informal and formal assessment are equally important to ensure learning success	0	0%	3	3%	41	41%	57	56%

5.3.2.4.2 *Preparedness to assess when started lecturing (D2)*

Figure 5.8 shows the responses regarding respondents' preparedness to assess when they started lecturing. Fifty three percent of the respondents indicated that they felt somewhat prepared. When these responses are compared with the age of lecturers (A2) and years of lecturing experience at HEI (A5), the researcher reasons that academic staff may feel "somewhat prepared" when they draw on their experiences of assessment when they were still students themselves. Still, the majority of the respondents (19% and 53%) felt not at all or somewhat prepared. Only 28% felt prepared to well-prepared to assess when they started lecturing. There is thus a strong indication that academic staff at MGI were not confident in their preparedness to assess when they started to lecture.

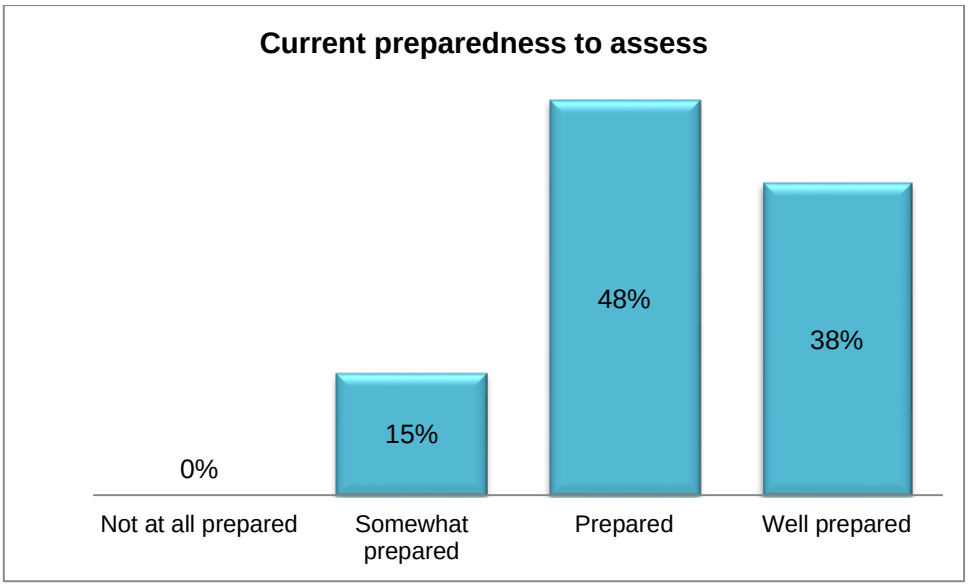
Figure 5.8: Preparedness to assess when started lecturing



5.3.2.4.3 *Current preparedness to assess (D3)*

There is a significant shift in the respondents' believe in being prepared to assess after some experience in higher education. Figure 5.9 reflects that a total of 86% of the respondents felt prepared to well-prepared to assess, while only 15% felt somewhat prepared. Although the researcher cannot, at this stage, substantiate the lecturers' impression of their preparedness to assess, the subsequent responses could help to clarify this perception.

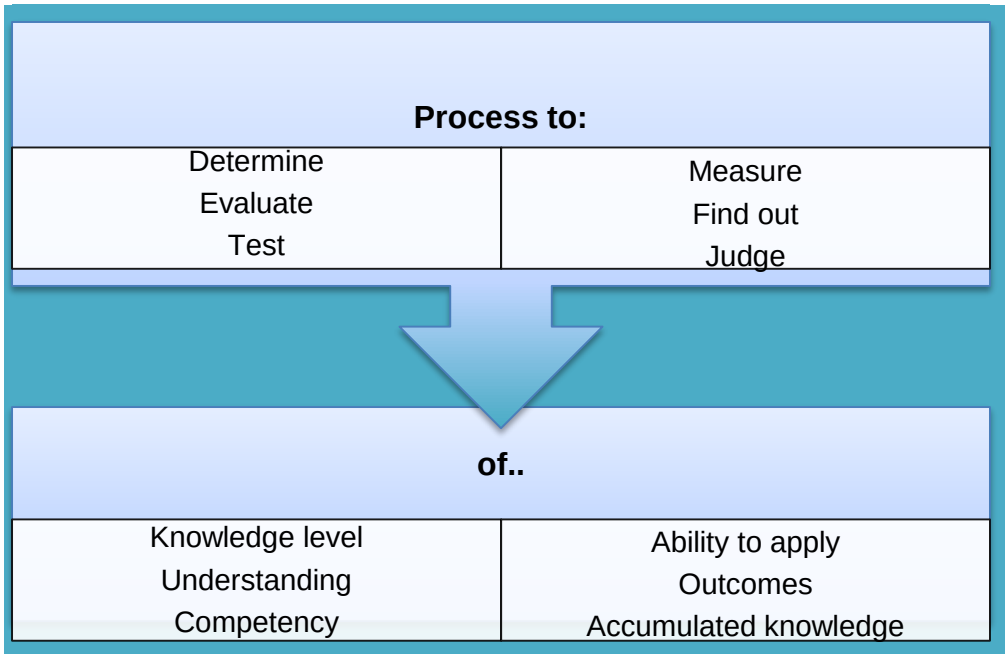
Figure 5.9: Current preparedness to assess



5.3.2.4.4 Respondents' definition of assessment (D4)

This question yielded open-ended responses and focused on the respondents' own definitions of assessment. Figure 5.10 reflects a condensation of the most commonly used verbs and nouns by the respondents to define their understanding of assessment.

Figure 5.10: Condensed view of defining assessment



From the condensation indicated above, it appears as if academic staff at MGI have a very narrow understanding of assessment in that they perceive assessment as a process of gathering information about the students' knowledge. However, according to section 3.2 assessment is more than just gathering information but also to score, interpret and record assessment results. These self-generated explanations of assessment, discloses the need for assessment induction at MGI.

5.3.2.4.5 *Respondents outline of a typical sequential assessment process (D5)*

This open-ended question focused on the respondents' interpretation of a typical sequential assessment process. **Appendix F** indicates some examples of the processes provided by the respondents in visual format.

Table 5.15 below reflects a summarised version of outlines of a typical assessment process as indicated by the respondents. To structure the analysis of the processes provided by the respondents, the researcher used descriptive tags. In this case, the elements of the definition of assessment (*cf.* 3.2), namely *collecting, analysing, interpreting, recording, reporting* and *using* assessment served as descriptive tags. All processes were scored by allocating a mark to each of the respective phases mentioned by the respondents that resonated with the identified six elements or descriptive tags. The researcher's analysis was guided by common keywords or phrases that could easily be associated with the respective elements or descriptive tags, to allocate a mark out of six to the mentioned processes.

Table 5.15: Typical sequential assessment process

Assessment elements/descriptive tags	Keywords/ phrases	Responses
Collecting	• Setting of assessment • Purposes of assessment e.g. formative, summative, formal, and informal • Students writing an assessment • Different forms of assessments e.g. tests, presentations and examinations • Types of questions e.g. Multiple choice questions, essay questions and short questions	73

Assessment elements/descriptive tags	Keywords/ phrases	Responses
Analysing	• Marking of assessments • Using instruments of assessment e.g. memo and rubrics	29
Interpreting	• Fail and pass • Compare results with previous marks and peers	8
Recording	• Marks recorded	4
Reporting	• Feedback to students, and other stakeholders	37
Using	• Use assessment results for student development or to improve student performance • Change method of lecturing • Change method of assessing students • Change question types and levels of questions	12

From the information in the above Table, 73 of the 101 respondents indicated that an assessment process involves the *collection of information*, while only 29 considered the *analysis* or *marking* of assessment as part of an assessment process. For respectively eight and four respondents, the *interpretation* and *recording* of assessment results formed part of an assessment process. 37 of the 101 respondents indicated that *reporting* results in one or other way, form part of an assessment process and 12 revealed that the *use* of assessment results could be considered a phase in an assessment process. From the responses it can be deduced that while tags such as *collecting, analysing* and *reporting* were included by many respondents, assessment is primarily thought of as summative. Disappointing was the fact that 25 of the respondents did not attempt this question, while one respondent wrote: “no idea”. This could suggest that some of the respondents were uncertain about what exactly an assessment process entails.

5.3.2.4.6 *Important features of an assessment literate lecturer (D6)*

For this question, a four-point Likert scale, ranging from “Not important” to “Very important” was used to determine the respondents’ views on the importance of each of the listed features of an assessment literate lecturer. According to the information captured in Table 5.16, the vast majority of respondents saw the listed features in

terms of an assessment literate lecturer as either important or very important, bar one (D6, 6). This positive tendency could be attributed to the possibility that the respondents are aware that the listed features are prerequisites for assessment literacy. In question D6, 6, 41% of the respondents indicated that it is moderate important to have knowledge about students' previous record of academic performance, while only 34% regarded knowledge about students' previous performance as important. This might suggest that lecturers want to refrain from "labelling" students based on their previous performance and want to give students a fair chance to proof themselves.

Table 5.16: Important features of an assessment literate lecturer

D6		Not important		Moderately important		Important		Very important	
		n	%	**n**	%	**n**	%	**n**	%
1	Knowledge of expected learning outcomes of the module(s) offered	1	1%	0	0%	16	16%	84	83%
2	Knowledge of assessment criteria of the module(s) offered	1	1%	1	1%	19	19%	80	79%
3	Knowledge of and skills on how to align outcomes, content, activities and assessment	0	0%	2	2%	18	18%	81	80%
4	Subject expertise which includes content knowledge and knowledge of available subject-related sources	0	0%	2	2%	28	28%	71	70%
5	Knowledge about how students learn	1	1%	2	2%	44	44%	54	53%
6	Knowledge about students' previous record of academic performance	13	13%	41	41%	35	34%	12	12%
7	Knowledge about students' subject-related pre-knowledge in a specific module	4	4%	25	25%	46	45%	26	26%
8	Knowledge about students' accessibility to subject-related sources and resources	0	0%	12	12%	56	55%	33	33%
9	Knowledge of and skills on how to apply a variety of assessment forms (e.g. tests, orals, assignments)	0	0%	4	4%	30	30%	67	66%

D6		Not important		Moderately important		Important		Very important	
		n	%	**n**	%	**n**	%	**n**	%
10	Knowledge of and skills on how to formulate effective questions according to the levels of Bloom's Taxonomy	3	3%	7	7%	40	40%	51	50%
11	Knowledge of and skills on how to apply a variety of assessment instruments (e.g. memorandums, rubrics, checklists)	0	0%	5	5%	39	39%	57	56%
12	The ability to clarify assessment criteria to students	0	0%	2	2%	35	35%	64	63%
13	The ability to identify students' needs and to adjust teaching accordingly	0	0%	4	4%	30	30%	67	66%
14	The ability to make sound judgements in terms of students' performance	0	0%	2	2%	35	35%	64	63%
15	The ability to give targeted and descriptive feedback to students	0	0%	1	1%	21	21%	79	78%
16	The ability to encourage students to improve their learning	0	0%	1	1%	24	24%	76	75%
17	The ability to record student performance in an ethical appropriate manner	0	0%	1	1%	20	20%	80	79%
18	The ability to report on student performance in an ethical appropriate manner	0	0%	1	1%	20	20%	80	79%
19	The ability to reflect on, identify gaps and improve existing learning material	0	0%	1	1%	23	23%	77	76%
20	The ability to reflect on, identify gaps and improve existing assessment practices	0	0%	1	1%	21	21%	79	78%

5.3.2.4.7 *Bloom's Taxonomy (D7)*

The correct order, as illustrated in Figure 5.11, was used to score the responses to this question.

Figure 5.11: Bloom's Taxonomy

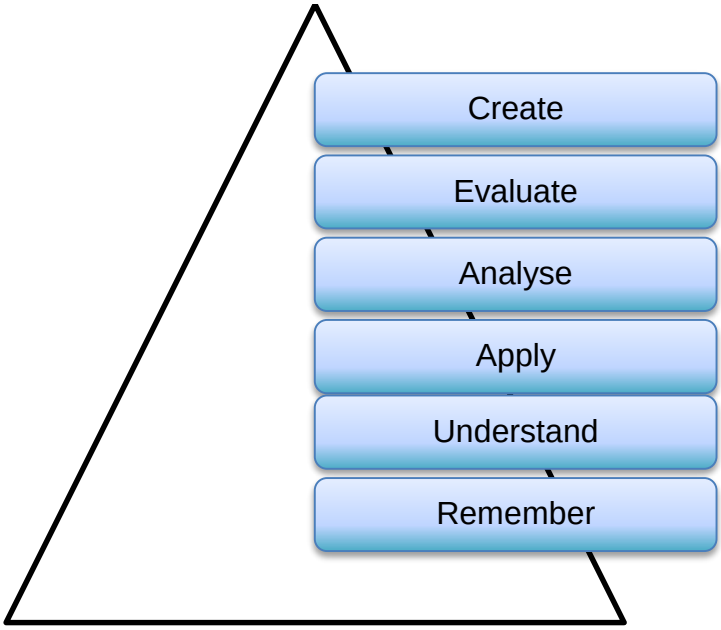
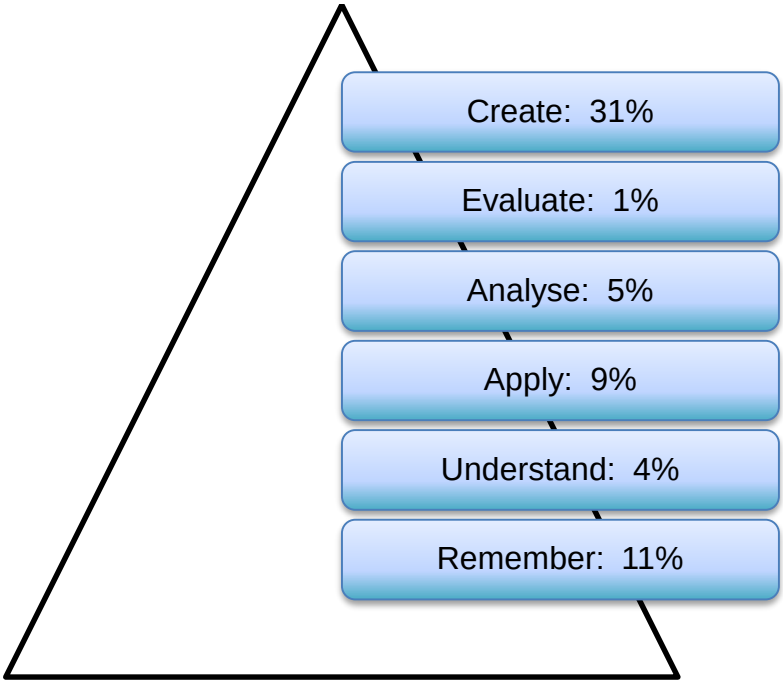


Figure 5.12 is a reflection of the respondents' scores on arranging Bloom's Taxonomy in the order of progression from lower order thinking to higher order thinking. By analysing the data it is clear that only 11% of the respondents placed "remember" as the lowest level of the progression, while only 4% placed "understand" as the second level. "Apply" was placed by 9% of the respondents at the correct level, and 5% placed "analyse" at level 4. One percent of the respondents had "evaluate" correct at level 5, and 31% indicated "create" at level 6. All the responses were marked, and overall, the average mark obtained by the 101 respondents was 2/6 = 33%. This does not correlate with the data obtained in D6, 10 (*cf.* 5.3.2.4.6) where 90% of the respondents viewed Bloom's taxonomy as *important* to *very important* to an assessment literate lecturer. The researcher is of the opinion that while academic staff believe it is necessary to know Bloom's taxonomy to be able to set assessment tasks which accommodate various cognitive levels, the scoring of this particular questionnaire item, indicates a poor understanding of the progression of these levels. The researcher regards this as a major shortcoming in the respondents' assessment

literacy and reckons that it must definitely be addressed in an assessment induction programme.

Figure 5.12: Respondents' score on arranging Bloom's Taxonomy in the correct order of progression



5.3.2.4.8 *Other taxonomies listed by respondents (D8)*

This question required the respondents to list any other taxonomy that they are familiar with. Most of the respondents did not complete this question, by either writing "I don't know" or "-", which indicated to the researcher that they do not know any other taxonomy. Some respondents mentioned concepts such as *adoptive thinking*, *communicate*, *list*, and *compare* which have no bearing whatsoever on what the question required. Only one respondent indicated *Barrett's Taxonomy of Cognitive Difficulty of Questions*. This reflects the respondents' ignorance about the function of the use of taxonomies in assessment.

5.3.2.4.9 *Contributions towards positive student assessment performance (D9)*

For this question, a four-point Likert scale, ranging from "Very little" to "Nearly always" was used to indicate to what extent the statements contribute towards positive student assessment performance. The respondents indicated that almost all the statements

will *often* or *nearly always* contribute toward positive student assessment performance, bar two (D9, 9 & 10) (*cf.* Table 5.17). From the responses to these two items, it is evident that the respondents do not value peer assessment in terms of enhancing performance. However, the opposite seems to be true for self-assessment, even if such assessment is used for formal purposes. (D9, 7). The fact that most of the statements received a positive response, can be interpreted as a recognition of the importance of the sharing of expected learning outcomes, questioning, self-assessment and feedback towards student performance.

Table 5.17: Contributions towards positive student assessment performance

D9		Very little		Some what		Often		Nearly always	
		n	%	**n**	%	**n**	%	**n**	**%**
1	Sharing expected learning outcomes with students at the start of each lecture	2	2%	21	21%	43	42%	35	35%
2	Reminding students constantly about the expected learning outcomes during a lecture	9	9%	19	19%	46	45%	27	27%
3	Summarizing learning outcomes after each lecture	4	4%	20	20%	43	42%	34	34%
4	Questioning during a lecture to **guide** students' thinking about the content	1	1%	1	1%	33	33%	66	65%
5	Questioning during a lecture to **inform the lecturer** about students' thinking	0	0%	9	9%	39	39%	53	52%
6	Questioning during a lecture **to inform students** about their own thinking	2	2%	7	7%	42	41%	50	50%
7	Students assessing their own personal performances when results are to be used for recording and reporting purposes	9	8%	29	29%	43	43%	20	20%
8	Students assessing their own personal performances when results are to be used to inform them about their own learning	6	6%	20	20%	52	51%	23	23%

D9		Very little		Some what		Often		Nearly always	
		n	%	**n**	%	**n**	%	**n**	**%**
9	Students assessing the performances of their peers when results are to be used for recording and reporting purposes	**17**	16%	48	48%	26	26%	10	10%
10	Students assessing the performances of their peers when results are to be used to inform peers about their own learning	11	10%	42	42%	33	33%	15	15%
11	Providing feedback on students' assessment performances by means of marks, percentages or symbols	3	3%	9	9%	43	43%	46	45%
12	Providing feedback on students' assessment performances by means of descriptive comments	2	2%	8	8%	**39**	**39%**	**52**	**51%**

5.3.2.4.10 Matching assessment concepts with appropriate descriptions (D10)

Questions 10 and 11 of the questionnaire required the respondents to match certain assessment concepts with appropriate descriptions. These matching questions were separated since it was argued that 18 consecutive items could confuse respondents. The required matching results for Question 10 are reflected in Table 5.18.

Table 5.18: Required matching results: D10

Column A	Column B	Matching results	
[1] Formative assessment	**a)** assessment where student performance is judged against a set of clearly defined criteria	**1**	**C**
[2] Summative assessment	**b)** assessment to determine and identify a student's problem areas in a subject/module/course in order to intervene and provide remedial help	**2**	**E**
[3] Criterion-referenced assessment	**c)** assessment that monitors student attainment at regular intervals and provides information about students' progress	**3**	**A**
[4] Norm-referenced assessment	**d)** assessment which emphasises doing by focusing on the process as well as the product of a learning experience	**4**	**F**
[5] Portfolio assessment	**e)** assessment which is carried out at the end of a unit, term or year to determine how well a student has progressed towards achieving selected learning outcomes	**5**	**H**
[6] Diagnostic assessment	**f)** assessment where student performance is compared to those of other students	**6**	**B**
[7] Baseline assessment	**g) a**ssessment which is meaningful as it represents applications to everyday life	**7**	**I**
[8] Authentic assessment	**h)** assessing a purposeful collection of a student's efforts, progress and achievement in a subject/module/course	**8**	**G**
[9] Performance-based assessment	**i)** assessment conducted at the beginning of a new learning experience to determine a student's pre-knowledge or entry level	**9**	**D**

The question was marked out of 9. Three of the respondents could not match any of the items correctly. 29 respondents matched one to three items correctly, while 42 managed to match four to six items correctly. Seven to nine items were matched correctly by 27 respondents. This implies that the respondents obtained an average mark of 5/9 or 55.6%. A summary of the respondents' scores is captured in Table 5.19.

Table 5.19: Summary of respondents' scores on D10

Number of correct answers	Number of respondents
0	3
1	5
2	14
3	10
4	19
5	10
6	13
7	15
8	1
9	11
	101

5.3.2.4.11 Matching assessment concepts with appropriate descriptions (D11)

Question 11 furthermore required the respondents to match the assessment concepts with the appropriate descriptions as reflected in Table 5.20.

Table 5.20: Required matching results: D11

Column A	Column B	Matching results	
[1] Objective tests	**a)** assessment indicating how much students have learned and whether outcomes have been achieved	**1**	**E**
[2] Subjective tests	**b)** assessment that is justifiable in terms of the extent that it measures what it is supposed to be measuring	**2**	**F**
[3] Rubric	**c)** assessment which accommodates a variety of assessment items	**3**	**H**
[4] Assessment of learning	**d)** assessment indicating students' involvement in the learning process in order to achieve outcomes	**4**	**A**

Column A	Column B	Matching results	
[5] Assessment for learning	**e)** assessment which usually requires straight forward answers which are fairly easy to mark	**5**	**D**
[6] Fair assessment	**f)** assessment which usually requires more complex answers which are open for interpretation	**6**	**G**
[7] Balanced assessment	**g)** assessment that is reasonable and which responds equitably to student differences	**7**	**C**
[8] Valid assessment	**h)** an analytical tool which describes a continuum of performance qualities and which can be used for feedback purposes	**8**	**B**
[9] Reliable assessment	**i)** assessment of which the results remain consistent if done by the same students under the same conditions	**9**	**I**

Again, one mark for each correct match was allocated. Nine of the respondents could not match any of the items correctly. Items one to three were matched correctly by 37 respondents, while 35 respondents matched items four to six correctly. Seven to nine items were matched correctly by 20 respondents. The average score for these items was 4/9 or 44%. A summary of the respondents' scores is depicted in Table 5.21.

In context of this study, it is clear that academic staff at MGI have some idea of the meanings of assessment concepts. However, as reflected in the results of Questions 10 and 11, it is worrying that almost half of the respondents are not acquainted with the language of assessment. Based on the premise that the language of assessment translates to the practice of assessment, the results of these two questions signal suspicion about the respondents' assessment literacy.

Table 5.21: Summary of respondents' scores on D11

Number of correct answers	Number of respondents
0	9
1	10
2	17
3	10
4	14
5	12
6	9
7	10
8	1
9	9
	101

5.3.2.5 Comparative analysis of data

In the analysis and interpretation of the quantitative data thus far, individual questions and their results were considered. As the researcher wished to examine the quantitative data more in-depth, a comparison between the results obtained in selected questions was also done.

5.3.2.5.1 Current position at MGI (A6) vs elements to be included in an induction programme (B4)

By analysing the data reflected in Table 5.22, it is clear that lecturing responsibilities, classroom management and assessment are elements that most academic staff in all the different positions at MGI would prefer in an induction programme. Computer skills, workplace orientation, orientation of on-line sources, faculty administration and institutional policies are not featuring as very important for the respondents to be included in an induction programme. Noteworthy is the fact that most staff at Junior lecturer level prefers induction in almost all mentioned elements. This could reflect

some uncertainty about the higher education environment among these staff members. Also interesting is the fact that the inclusion of research in an induction programme is not highly rated by all post levels. This reality confirms the current focus of MGI, namely teaching and learning. It is thus clear that academic staff at MGI would prefer induction in subject specific skills, and most of all, lecturing and assessment skills.

Table 5.22: Current position at MGI vs elements to be included in an induction programme

		Current position at MGI (A6)				
		Dean 6	**HoP** 5	**Senior lecturer** 28	**Junior lecturer** 60	**Tutor** 2
Elements to be included in induction programmes for academic staff (B4)	**Institutional vision and mission**	5	5	11	41	2
	Institutional policies	6	5	15	38	1
	Institutional procedures	6	5	12	44	2
	Lecturing responsibilities	6	5	19	57	1
	Classroom Management	6	5	18	40	1
	Faculty administration	5	5	10	35	0
	Assessment	6	5	24	52	1
	Research	3	5	13	33	0
	Resources in the classroom	4	5	15	34	1
	Orientation of on-line sources	5	3	13	37	1
	Workplace orientation	4	5	9	33	1
	Computer skills	2	4	11	16	0

5.3.2.5.2 *Facilitation methods of an assessment induction programme (C2) vs lecturing period at MGI (A8)*

Table 5.23 portrays the data obtained with regards to the respondents' lecturing experience at MGI and their views on different methods to facilitate an assessment induction programme. Respondents were not limited in their choices and more than one method could have been selected. From the data it is clear that the lecturing experience at MGI does not play a significant role in choosing a facilitation method. Interactive workshops offered by an expert internal facilitator, was the preferred method of facilitation, irrespective of lecturing experience at MGI. Faculty discussions initiated by faculty members or faculty management were also highly valued as facilitation methods by the respective experience groupings. From these findings the researcher infers that irrespective of the years of lecturing experience at MGI, academic staff seem to prefer a faculty specialist to conduct an assessment induction programme.

Table 5.23: Facilitation methods of an assessment induction programme (C2) vs lecturing period at MGI (A8)

		Lecturing period (A8)		
		Less than 5 years (55)	**5-10 Years (30)**	**11-+30 Years (16)**
Facilitation methods of an assessment induction programme (C2)	**E-Portal (Manuals available on-line)**	18	5	5
	Electro meet (Video and web conferencing)	3	2	2
	Faculty discussions initiated by faculty members	16	8	5
	Faculty discussions initiated by faculty management	14	10	3
	Formal, face-to-face training session which leads to a certificate	21	11	4
	Interactive workshops offered by an expert internal facilitator	28	21	8
	Interactive workshops offered by an expert external facilitator	18	14	7

5.3.2.5.3 *Facilitators of an assessment induction programme (C3) vs lecturing period at MGI (A8)*

Table 5.24 reflects the responses of the respondents with regard to who must be responsible to facilitate an assessment induction programme. The majority of the academic staff prefer faculty management or a faculty specialist to facilitate an assessment induction programme. Therefore it can be assumed that academic staff have a certain degree of trust in their Deans or HoPs (faculty management) and in their peers within the faculty to conduct an assessment induction programme. Striking is the fact that in contrast with the results in Table 5.23, where 18 respondents with less than five years' experience at MGI preferred interactive workshops offered by an expert external facilitator, formal assessment training providers is now mentioned by a substantial number of respondents (28), in the same experience grouping to facilitate an assessment programme. Read together with the responses in Table 5.23, a sizeable number of respondents (21), with less than five years' experience at MGI strives to get tangible recognition for completing an assessment induction programme. This may explain why a relatively high number of respondents with less than five years' experience at MGI included formal assessment training providers in their responses.

Table 5.24: Facilitators of an assessment induction programme (C3) vs lecturing period at MGI (A8)

		Lecturing period (A8)		
		Less than 5 years (55)	**5-10 Years (30)**	**11-+30 Years (16)**
Who must facilitate of an assessment induction programme? (C3)	**Institutional Management**	8	4	2
	Faculty Management	20	12	6
	Faculty specialists	21	16	9
	Specialists for public higher educational institutions	16	11	2
	Specialists for other private higher educational institutions	15	10	5
	Formal Assessment training providers	28	15	4

5.3.2.5.4 Position at MGI (A6) vs assessment literacy (D7, 10 & 11)

Table 5.11 indicates that some academic staff at MGI prefer interactive workshops offered by an expert internal facilitator, while Table 5.12 suggests that a minority of respondents believes faculty management or faculty specialists should conduct an assessment induction programme. Based on the premise that phrases such as *an expert internal facilitator*, *faculty management*, and *a faculty specialist* are considered to represent the Dean of a faculty, the researcher believes it is necessary to determine the Deans' assessment literacy competence. In order to define assessment literacy for this specific comparison, the ordering of Bloom's taxonomy (*cf.* 5.3.2.4.7) and the matching of assessment concepts (*cf.* 5.3.2.4.10 and 5.3.2.4.11) were considered. With regard to the Deans' scores obtained for ordering Bloom's taxonomy in order of progression (Table 5.25), it is evident that one of the six Deans had it totally wrong, while three more Deans received a final mark of 3/6 = 50%. Only one Dean ordered the respective levels of the taxonomy 100% correctly.

From Table 5.26 it is clear that three of the six Deans obtained a final score of 100%, while the other three Deans respectively scored 5/9, 4/9 and 2/9 for matching the given assessment concepts of Question D10. The results of how the remaining assessment concepts of Question D11 were matched by the Deans are reflected in Table 5.27. According to this table only one of the six Deans obtained full marks for matching all the concepts correctly, while another Dean could match only two concepts correctly. The rest of the Deans managed to match between five and seven concepts correctly.

Table 5.25: Deans' score of ordering Bloom's Taxonomy (A6 vs D7)

	Bloom's Taxonomy						
Total mark /6	0.0	1.0	2.0	3.0	4.0	5.0	6.0
Deans	1		1	3			1

Table 5.26: Deans score of assessment concepts (A6 vs D10)

	Assessment concepts									
Total mark /9	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
Deans			1		1	1				3

Table 5.27: Deans' score of assessment concepts (A6 vs D11)

	Assessment concepts									
Total mark /9	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
Deans			1			1	2	1		1

Based on the premise that the respondents prefer Deans to conduct an assessment induction, the results of the selected responses as outlined above, do not provide convincing evidence that Deans are the most appropriate people who should present assessment induction at MGI.

5.3.2.5.5 *Previous induction programme exposure (B1) vs assessment literacy (D7, 10 & 11)*

By considering the same definition of assessment literacy as in 5.3.2.5.4 above, Tables 5.28, 5.29 and 5.30 indicate the assessment literacy of the respondents who were exposed to previous induction programmes. Of the 67 respondents who were exposed to previous induction programmes (*cf.* 5.3.2.2.1), 18 scored 0/6 for ordering Bloom's taxonomy correctly, while 41 respondents obtained between one and three marks. Only three of the 67 respondents ordered the levels of Bloom's taxonomy totally correct. With regard to the matching of assessment concepts (Table 5.29), 36 of the 67 respondents matched between zero and four concepts correctly, while 31 respondents matched between five to nine concepts appropriately. With regard to Table 5.30, 46 respondents matched between zero and four concepts appropriately, while 21 managed to match between five and nine concepts correctly.

Three possible inferences emerged from these results. Either, the previous induction programmes attended by the respondents were focused on general workplace induction, which included policies and procedures without attending to specific

academic elements such as assessment induction; or if induction focused on assessment, the subject was covered superficially or that the respondents plainly forgot the covered material. However, the results in this section, clearly point to the apparent need of an assessment induction programme by academic staff at MGI.

Table 5.28: Exposure to previous induction programmes and the ordering of Bloom's Taxonomy (B1 vs D7)

	Bloom's Taxonomy (D7)						
Total mark /6	0.0	1.0	2.0	3.0	4.0	5.0	6.0
Exposed to any induction programme n=67	18	12	15	14	5	0	3

Table 5.29: Exposure to previous induction programmes and assessment concepts (B1 vs D10)

	Assessment concepts (D10)									
Total mark /9	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
Exposed to any induction programme n=67	2	4	7	9	14	8	9	10	0	4

Table 5.30: Exposure to induction programmes and assessment concepts (B1 vs D11)

	Assessment concepts (D11)									
Total mark /9	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
Exposed to any induction programme n=67	8	6	14	9	9	8	4	5	1	3

5.3.2.5.6 *Highest level of lecturing at MGI (A9) vs assessment literacy (D7, 10 & 11)*

By analysing that data depicted in Tables 5.31 to 33, it is alarming to see that 55 of the 82 of the academic staff, lecturing on the pre-degree up to third year level (*cf.* 5.3.2.1.9 and 5.3.2.5.1), obtained two or less for ranking the levels of Bloom's

taxonomy correctly (Table 5.31). Of the 101 respondents teaching up to second year level, 33 of the 55 respondents matched between zero and four of the nine given concepts correctly (Table 5.32). Interesting, is the fact that the respondents who indicated their highest level of lecturing as third year, showed a slightly better understanding of assessment concepts related to the purposes of assessment (e.g. formative, summative assessment). With regard to Table 5.33, 51 of the 82 respondents obtained four or less for matching the assessment concepts. These results, yet again, provide proof that there is space for improving the assessment literacy of academic staff at MGI.

Table 5.31: Highest level of lecturing at MGI and the ordering of Bloom's Taxonomy (A9 vs D7)

		Bloom's Taxonomy (D7)						
	Total mark /6	0.0	1.0	2.0	3.0	4.0	5.0	6.0
Highest level of lecturing at MGI (A9)	Pre-degree/foundation programme (n=24)	6	5	9	4	0	0	0
	First years (n=16)	3	2	7	2	2	0	0
	Second years (n=15)	4	1	3	4	2	0	1
	Third years (n=27)	9	4	2	6	4	0	2
	Fourth years (n=3)	0	0	0	2	1	0	0
	Honours (n=10)	3	1	0	3	3	0	0
	Masters/MBA (n=6)	1	2	0	0	1	0	2

Table 5.32: Highest level of lecturing at MGI and scores of assessment concepts (A9 vs D10)

		Assessment concepts (D10)									
	Total mark /9	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
Highest level of lecturing at MGI (A9)	Pre-degree/foundation programme (n=24)	1	1	4	3	5	1	3	3	1	2
	First years (n=16)	0	1	4	3	2	1	2	2	0	1
	Second years (n=15)	1	2	3	1	2	3	1	2	0	0
	Third years (n=27)	1	1	1	0	8	4	4	3	0	5
	Fourth years (n=3)	0	0	0	1	0	0	0	0	0	2
	Honours (n=10)	0	0	2	0	2	0	2	4	0	0
	Masters/MBA (n=6)	0	0	0	2	0	1	1	1	0	1

Table 5.33: Highest level of lecturing at MGI and scores of assessment concepts (A9 vs D11)

		Assessment concepts (D11)									
	Total mark /9	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0	9.0
Highest level of lecturing at MGI (A9)	Pre-degree/foundation programme (n=24)	3	3	4	2	2	6	2	2	0	0
	First years (n=16)	1	2	0	2	6	1	1	1	0	2
	Second years (n=15)	2	3	2	2	0	0	1	1	0	2
	Third years (n=27)	3	1	7	3	3	2	1	4	1	2
	Fourth years (n=3)	0	0	1	0	0	0	0	1	0	1
	Honours (n=10)	0	1	2	0	2	2	4	1	0	0
	Masters/MBA (n=6)	0	0	1	1	1	1	0	0	0	2

5.3.3 Preliminary conclusions

Derived from the quantitative part of the empirical research, the researcher arrived at the following preliminary conclusions:

i. The majority of the respondents are females, while the age range of the respondents is between 26 to 45 years. The highest academic qualification of the respondents is either a Honours or Master's degree qualification. 54% of the respondents have less than five years lecturing experience and they are mostly junior lecturers.

ii. The basis of appointment of MGI academic staff is equally spilt between full-time and fixed term contract on the one hand and part time contract on the other. The majority of lecturers lecture up to third year level.

iii. A large percentage of the respondents were previously exposed to an induction programme by means of workshops or meetings.

iv. The respondents believe that an induction programme is important and should focus on academic elements such as lecturing responsibilities, classroom management, faculty administration, assessment and resources in the classroom. Of these academic elements, lecturing responsibilities, classroom management and assessment appear to be most important.

v. Irrespective of lecturing experience, respondents indicated that all academic staff should attend an interactive assessment induction workshop that must be facilitated by the faculties' management or a specialist within the faculty. However, based on comparative evidence, Deans should probably not be designated to facilitate assessment induction.

vi. An introduction to assessment at the beginning of an academic year followed by an all-inclusive assessment focused programme later in the academic year appears to be preferred by most of the respondents.

vii. The respondents' opinions regarding their current preparedness to assess do not align with their knowledge of the assessment process, ordering of the levels of Bloom's taxonomy, and the matching of assessment concepts. Moreover, the respondents' assessment literacy is not compatible with the levels on which they lecture.

viii. Previous induction appears not to provide any guarantee of the respondents' current level of assessment literacy.

5.4 QUALITATIVE DATA ANALYSIS AND INTERPRETATION (PHASE TWO, PART TWO)

5.4.1 Background information

This section deals with the analysis and interpretation of the qualitative data obtained during part two of the second phase of this study. For this part of the study interviews were used to collect data (*cf.* 1.6.4.3 and 4.6.3). Thirteen academic staff of seven Faculties who completed the questionnaire were selected by means of convenient sampling (*cf.* 1.6.3 and 4.5) to be interviewed. The interviews took place during each academic staff member's consultation hours. Individual interviews of between 20 to 30 minutes were personally conducted by the researcher. The semi-structured interview consisted of a pre-determined set of questions to determine the line of inquiry. The analysis and interpretation of the data obtained through the interviews are presented in the following sections.

5.4.2 Analysis and interpretation of data obtained through interviews

The data obtained through the 13 individual interviews were transcribed by the researcher after which codes were assigned to the transcribed raw data. With the coding process the data were organised, structured and condensed, after which it was verified by a knowledgeable colleague (*cf.* 4.8.1.3). The codes were then clustered into *a-priori* categories (*cf.* 1.6.7). Through constant comparison, data were checked for distinctive elements or to establish generalities within categories. This process was continued until the researcher was satisfied that no new issues were raised (Dawson, 2006:117). Supplementary field notes assisted in the coding of data.

5.4.2.1 Presentation of coded interview data

Following the responses of the interview sample, the coded forms of the raw transcribed data are presented in Table 5.34 to Table 5.49. The researcher used the same order in which the questions appeared in the interview guide (**Appendix E**) to indicate the main elements or codes derived from the respective participants' responses.

Table 5.34: Question 1: Induction programme topics

Question 1: Induction programme topics						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Quality overall • Assessment Protocol • Skills in all fields • Assessment training and content	• Facilitation skills Assessment • Public speaking • HR • Remote sites • Deadlines	• Assessment • Basic ethics in class • Facilitation • e-portal • Marking	• On the module • Level of students • Attitude of staff • How faculty works • Culture of MGI	• What is expect from me • What level are students • Lecturing style • Assessment	• Set of papers • MCQ how to set NQF level • Type of questions • Admin	• Discipline in class • Assessments • Mark ethics • How to teach • What to expect
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Culture of MGI and in the classroom • Who does what • Communication channels • Templates • Assessment	• Class control Assessments Admin • Need to know about students	• How to set papers • Workshops • Introduce to dept. • Who is HR	• Systems • Who is who • What I need • Assessment • Marking	• To sit in other staff classes • Get material beforehand • How much detail must be given to students • Finding way on campus • Mark systems	• Control a class • Knowledge of field • Share knowledge with other staff • Admin • Who to speak to • How to work with the projector	

Table 5.35: Question 2: Facilitator of assessment induction programme

Question 2: Facilitator of assessment induction programme						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Professional trainer • Not MGI staff	• Professional • Not from here	• Expert in assessment • Faculty needs differ • Rather the Dean	• Dean • They know what is needed	• Dean	• Dean	• Professional person • MGI, somebody who know assessment
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Must know assessment • Not theory • Somebody that is working with assessment	• Deans or lecturers doing it for a while	• MGI staff who knows what to do	• Dean or expert in assessment	• HoP • Dean	• HoP • Dean • Not outside person, they do not know us	

Table 5.36: Question 3: Structuring of an assessment induction programme

Question 3: Structuring of an assessment induction programme						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Start with lecturing • Before the semester • Reminded/review.	• January • Update not the same content	• 3rd week of the year • Can use new info in the class • Refresher	• Each beginning of semester • Things change • Teaching styles	• Week before class.	• Beginning of the semester • January • Also a refresher	• January • Then a refresher
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• End or beginning of the year • Refresher • New ways to make it easier	• End or beginning of year • Lots of info • Follow up sessions with new topics	• Beginning or end every semester • Refresher • Templates change	• Beginning of year • Apply what was thought • Then refresher with new things	• Beginning or end every year new technology reminder of principles	• Before semester • Things might slip • Refresher • Not the same new detail and new methods	

Table 5.37: Question 4: Topics to be included in an assessment induction programme

Question 4: Topics to be included in an assessment induction programme						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Intro to the styles of assessment • Link outcomes to assessments • How must memo look for application questions?	• Right level, • NQF	• Rubrics • MCQ applications New ways to ask questions	• Expectation • Different material to be used • Tools to use • Case studies • Construct these activities	• NQF levels • Kinds of assessment • Extra things • Basic requirements	• MCQ • % weight • NQF level • Setting Deadlines	• How to set a paper that is student friendly
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• How to put paper together • How to make MCQ difficult • Case studies more methods for assignments.	• Working of questions • How often to assess • Levels of Questions for different levels	• To follow template • Different levels of questions	• MCQ • Critical questions How to test	• Level of questions • Do not always apply • Time management • Variety of questions	• Methods to test students • Problem solving questions • Different levels of questions	

Table 5.38: Question 5: Purposes of assessment

Question 5: Purposes of assessment						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• To make a call • Evaluate performance	• Students to see what they understand • Me = insight • Memory apply	• Outcomes = assessment link	• Ensure that the outcomes are met • Understand role • Fulfil blueprint	• Test if students did get knowledge and skills	• Test lecturer is going through concepts and • if students understand	• Not how much they recall, rather what they understand • Applications
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• To test knowledge and applications	• Test students and lecturer • Am I lecturing at the correct level or must I change • Review lecturing style	• Test knowledge How much students know	• Test the understanding of students what we present • Lecturer self, are we experts in the field • Different levels did I do that?	• Inform knowledge students gained before and after test to see how they grew	• How much they have learned • Is it valid, what they need to know	

Table 5.39: Question 6: Planning and designing assessment

Question 6: Planning and designing assessment						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Template • Link outcomes to content • Marks • Re-evaluate test • Make changes	• Topics • Questions around this • Application and balanced theory Feedback • Discuss	• Objectives • Volume of work • Outcomes • Apply problem solving • Marking • Feedback not self-assessment	• Case studies Understand and apply • Mark • Memo to students They must mark again • Explain why they are wrong	• What students must achieve • Skills they have Design questions Factual • Balance right Feedback	• Just do it • Test 1 before exams • Give directions • Test main concepts per chapter	• Questions during class • Questions that will push students to think • Applications • Marking • Memo • Feedback
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• What are the outcomes to cover • Write outcomes • Test is based on outcomes • Assignment, more practical • Mark • Feedback in class	• From beginning of textbook Important in class must test that • 1st year = def. Review • Redo chapters	• Work through all chapters • Decide before hand • Short and long questions • Memo • Mark • Feedback • If I missed something	• Objectives • Assignments • Do not repeat same question in exam	• What content must be covered MCQ and long questions, definitions, easy – difficult • Marking	• Check content • Definitions, detail questions • Mark • Tell why they did something wrong	

Table 5.40: Question 7: Most frequently used assessment forms

Question 7: Most frequently used assessment forms						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• MCQ • Complete the sentence • Case studies • MCQ • Video's tutorials	• Test • Tablets • Semester test • Flashcards • Group work	• Tests • Assignments • Group work • Posters • Flowcharts	• Tutorial tests • Informal block • Assignment • Review Articles	• Asking questions • Own words • MCQ • Tests • Assignments	• Group work • Discussions • Assignments in groups	• Tests • Exams • Group work
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Test • Exams • Assignments • Presentations	• Practical • Tests	• Tests • Exams • Assignments • Not group work, not working for my module	• MCQ • Essay • Practical's • Discussions	• Tests • Assignment • Games	• Tests • Exams	

Table 5.41: Question 8: Other taxonomies

Question 8: Other taxonomies						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Bloom	• That person • I am not an educator	• Bloom • Don't know levels	• No idea • I just go!	• Bloom	• Bloom • Do not know what he said	• No idea
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Bloom	• Don’t know	• No idea	• Forgot	• Bloom	• Don’t know	

Table 5.42: Question 9 (i): Description of formative assessment

Question 9 (i): Description of formative assessment						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• During learning and teaching • How they progress and understanding No marks	• Formal • Count marks	• In class • Group work Students test themselves • No marks	• Test counting marks	• Progress • Not counting marks	• Formative • Periodically • Test bulk • Count marks	• Class test Homework • Not counting marks
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• During class • No marks	• Test • Formal assignment • Count marks	• Written exams • Count marks	• Formal to do must be done • Counting marks.	• End of year exam • Counting marks	• Not an educator does not know this • Counting marks	

Table 5.43: Question 9 (ii): Description of norm-referenced assessment

Question 9 (ii): Description of norm-referenced assessment						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Reference to something • This is the norm to meet	• Don't know	• Don’t know	• Don’t know	• Average	• Don’t know	• Standard of module
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Don't know	• No idea	• No idea	• What is expected	• Don’t know	• Not sure	

Table 5.44: Question 9 (iii): Description of authentic assessment

Question 9 (iii): Description of authentic assessment						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• True answer • Right or wrong	• Don't know	• Not sure • All the time measuring the students • New set of problems	• Don't know	• No idea	• Bring out real world what they know	• Must apply to subject field
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• How to test what you want to assess	• No idea	• Is research correct?	• Original test	• Valid, justified	• Peer assessment • More holistic	

Table 5.45: Question 9 (iv): Description of performance-based assessment

Question 9 (iv): Description of performance-based assessment						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Portfolio • Assignments • Get a mark	• High school • Outcomes • Group work	• Rate them based on outcomes	• Project	• Assignment • How they must perform	• Judge how and what they do	• Understand the students
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Complete a task to show practical on doing • Count marks	• Marks from assessment formative	• Person's performance is measured • Gives incentives	• Expected to do something and then evaluated	• Performance of students how they perform	• See how they react, what they come up with	

Table 5.46: Question 9 (v): Description of objective tests

Question 9 (v): Description of objective tests						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Facts	• Don't know	• Independent • No terms • Test specific objective outcomes	• Test assess what I think students should know	• Based on right and wrong • MCQ and not essay.	• Aim at specific topic • For specific reason • How much they understand	• Set with specific goal if students understand the work
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Students, content now and content later tested again same results	• No idea	• Test something specific	• MCQ, test general knowledge	• Test for certain purpose	• Give topic get to answer	

Table 5.47: Question 9 (vi): Description of valid assessment

Question 9 (vi): Description of valid assessment						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Results can be used	• Being valid, not invalid	• Test what aim to test	• Test understanding of the work	• Measure what students must know	• Test overall understanding	• Not to know by hard
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Want to test	• Counts marks	• No idea	• Follow the same processes	• Must count marks	• Not sure	

Table 5.48: Question 9 (vii): Description of balanced assessment

Question 9 (vii): Description of balanced assessment						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Outcomes are balanced	• Easy to hard • Theory to application	• What students must be able to do	• Cover the work • All content	• Easy to difficult	• Level of difficulty • Easy to difficult	• Insight • Learning ability
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Cover all content	• Cover everything; all content	• All content is covered	• Test all the concepts • Test holistic	• Easy to difficult.	• What?	

Table 5.49: Question 9 (viii): Description of reliable assessment

Question 9 (viii): Description of reliable assessment						
Participant 1 (P1)	**Participant 2 (P2)**	**Participant 3 (P3)**	**Participant 4 (P4)**	**Participant 5 (P5)**	**Participant 6 (P6)**	**Participant 7 (P7)**
• Measures meet the outcomes	• What you want to get out of it	• Test • End result has to reflect what tested • Measurable	• To show that students understand the work or not	• Give to students	• Confident display total assessments	• Test standard of the tests
Participant 8 (P8)	**Participant 9 (P9)**	**Participant 10 (P10)**	**Participant 11 (P11)**	**Participant 12 (P12)**	**Participant 13 (P13)**	
• Same test with same results	• Send to moderator	• Work must be correct	• Depend on	• Not bias in any way	• Again I don't know	

5.4.2.2 Interpretation of interview data according to a priori categories

As stated in 1.6.7 *a priori* categories guided the construction of the interview guide. The nine interview questions were associated with and clustered according to the categories as shown in Table 5.50.

Table 5.50: *A priori* categories according to interview questions

	Interview questions	Categories
1	Which topics, do you think, should be addressed in an induction programme for academic staff at a higher education institution?	Topics of an induction programme
2	In case of an assessment induction programme, who would you prefer to facilitate such a programme?	Facilitator of assessment induction programme
3	How would you prefer the structuring of an assessment induction programme in terms of a time schedule?	Structuring of an assessment induction programme
4	If you can draw up a wish list, which topics would you like to be seen included in an assessment induction programme?	Topics in an assessment induction programme
5	What, do you think, are the purposes of assessment?	Assessment purposes
6	Describe how you plan and design assessment	Planning and designing of assessment
7	Which assessment forms do you use most frequently with your students?	Assessment forms
8	Mention any taxonomy that you are aware of, that can be used for assessment purposes.	Taxonomies
9	i. Formative assessment ii. Norm-referenced assessment iii. Authentic assessment iv. Performance-based assessment v. Objective tests vi. Valid assessment vii. Balanced assessment viii. Reliable assessment	Descriptions of assessment concepts

Corresponding with the *a priori* categories as set out in Table 5.50, the coded interview data is interpreted as set out below.

5.4.2.2.1 Topics of an induction programme (Question 1) Table 5.34

Research participants used words and phrases such as “creating quality overall assessment and the setting of assessment”, “training in basic facilitation skills”, “basic lecturing styles to use in the class”, “little bit on how to handle discipline in the class”, “assisting me on how to control my class” and “to give me a standard on how marking must be done”. Derived from these responses, topics related to *classroom management* and *assessment* appear to be preferred topics to be included in an induction programme. Some participants (P2, P4, P5, P6, P8, P9, P10 and P12) also indicated that the inclusion of topics related to the culture of the institution should be considered for inclusion on an induction programme. However, the relation between topics related to *classroom management* and *assessment* and 5.3.2.2.4 is observable.

5.4.2.2.2 Facilitator of assessment induction programme (Question 2) Table 5.35

Although some research participants (P1, P2) explicitly indicated that they would prefer an external facilitator to facilitate assessment induction, a reasonable number of participants indicated that they prefer their Deans or an internal facilitator to facilitate assessment induction. These responses correlate with those in 5.3.2.3.3.

5.4.2.2.3 Structuring of an assessment induction programme (Question 3) Table 5.36

The research participants are all in agreement that an assessment induction programme should be offered at the beginning of the academic year, or at the beginning of a semester. The majority of the participants gave a strong indication that assessment induction should not be a ‘once-off’ incidence but that it should be followed by “a refresher for staff who are not new on campus” (P3, P6, P7, P8, P10, P11, P13), “a follow-up to see what you have missed or new topics which was not covered previously” (P9), “an update with some new topics on assessment” (P2) or “we need to be reminded because assessment strategies change all the time” (P1, P12) sessions. The responses to 5.3.2.3.4 relate to responses expressed to this interview question.

5.4.2.2.4 Topics in an assessment induction programme (Question 4) Table 5.37

The research participants eluded to a number of topics to be included in an assessment induction programme, including: setting assessment papers at the correct NQF levels (P2, P5, P6), levels of questions (P9, P10, P12, P13), setting of multiple choice questions (MCQ) (P3, P6, P8, P11), how to link assessment to course outcomes (P1) and assessment instruments (P1, P3). Although not established explicitly elsewhere in the empirical research, these topics help to uncover the needs of the research participants in terms of enhancing their assessment literacy.

5.4.2.2.5 Assessment purposes (Question 5) Table 5.38

It is noteworthy that generally, the research participants consider the purposes of assessment "is to evaluate your teaching style and learning styles of the students" (P1) or "to test the students on what they have achieved during the semester" (P5, P8, P9, P10, P11). Some of the participants hinted to the informative purpose of assessment by indicating that assessment serves to provide "insight" (P2) into the lecturer's work, or "to test students on what they have leaned" (P6, P9, P11). "By ensuring that the outcomes are met", was also mentioned as an assessment purpose (P3, P4). These responses relate to the general purposes of assessment (*cf.* 3.4.2.2 and 5.3.2.4.4)

5.4.2.2.6 Planning and designing of assessment (Question 6) Table 5.39

The participants' views on how they plan and design assessment can be divided into four general perspectives. The one perspective holds that it is important to plan and design assessment in accordance with the course outcomes (P1, P3, P8, P11), whilst the other perspective is based on planning and designing assessment according to question types (e.g. MCQs, essay questions, case studies and application questions) (P2, P3, P4, P7, P10, P12, P13). A third perspective maintains that marking determines how assessment should be planned and designed (P1, P3, P4, P7, P8, P10, P12 and P13). The fourth perspective is founded on the argument that the planning and designing of assessment should be guided by the provision of feedback (P2, P3, P4, P5, P7, P8, P10 and P13). These responses correlate with those in 5.3.2.4.5 where types of questions, marking and feedback also featured prominently. The undercurrent of summative assessment is thus recognisable.

5.4.2.2.7 Assessment forms (Question 7) Table 5.40

The researcher observed that all thirteen research participants have a clear idea about possible assessment forms. It was also observed that the respective participants could only mention between three to five forms. The researcher aggregated the research respondents' contributions as follows:

- Multiple choice questions
- Essay questions
- Case studies
- Games
- Tests
- Group work
- Assignments
- Examinations
- Practical tasks

From the responses the researcher gathers that the participants' assessment forms are confined to common forms which are predominantly directed to summative assessment. These responses confirm the results reflected in Question 6 above.

5.4.2.2.8 Taxonomies (Question 8) Table 5.41

Positive is the fact that at least some of the participants mentioned Bloom's taxonomy (P1, P3, P5, P6, P8, P12). This could possibly be ascribed to the fact that Bloom was referred to in the questionnaire (D7). However, almost half of the participants admitted that they are not able to mention any taxonomy. This is in stark contrast with the results of D6, 10 where the respondents rated "knowledge of and skills on how to formulate effective questions according to the levels of Bloom's taxonomy" as important to very important.

5.4.2.2.9 Descriptions of assessment concepts (Question 9)

Eight different assessment concepts were put to the participants to be defined. The coded results are presented in Tables 5.42 to 5.49.

i. Formative assessment (Table 5.42)

Many of the participants (P2, P4, P6, P9, P10, P11, P12) used terms such as "it is a formal type of assessment", "it should count marks", "formal assignment", "it is a written exams at the end of the year" and "end of year exam" to describe formative assessment. One participant (P13) admitted bluntly that she does not know how to define formative assessment, since she is not an educator. Although the descriptions by some participants (P1, P3, P5, P7, P8), resonate with the explanation of the primarily informal nature of formative assessment in section 3.4.2.3.4, the participants' emphasis on formal, formative assessment is palpable. This could imply the participants' inability to clearly differentiate between formative and summative assessment.

ii. Norm-referenced assessment (Table 5.43)

With phrases such as "don't know", "I have no idea" and "not sure", the majority of the participants were not capable to define or describe norm-referenced assessment. Only a few participants (P1, P5, P7 and P11) used terms that could be vaguely associated with norm-referenced assessment (e.g. "you will reference it to something", "the norm to meet", "to achieve the average", "to test the specific standard of the module" and "we test what is expected"). Evidently, the research participants are not clear of what norm-referenced assessment entails.

iii. Authentic assessment (Table 5.44)

Only one participant (P6) indicated that authentic assessment refers to real-world assessment. The rest of the participants were either not sure what authentic assessment is (P2, P3, P4, P5 and P9) or gave obscured responses (P1, P3, P7, P8, P10, P11, P12 and P13). Hence, it can be inferred that participants do not know what authentic assessment exactly means.

iv. Performance-based assessment (Table 5.45)

Three participants (P1, P4 and P5) associated performance-based assessment with "on how well they did in their assignments", "my view is that you will have a portfolio which is a collection of assignments" and "students

must do a project or an assignment", which hint to the execution of something. P6, P8, P10, P11, P12 and P13 related performance-based assessment with one or other way of enactment; showing that they have some idea of what performance-based assessment involves. From the responses it can be concluded that the research participants have a fair idea of what performance-based assessment is.

v. Objective tests (Table 5.46)

Whereas two participants (P2, P9) admitted that they do not know what objective tests are, three participants (P1, P5 and P11) gave clear indications that objective tests can include "MCQs" and are used to assess "facts". However, it is apparent that most of the participants do not have a clear understanding of what objective tests are.

vi. Valid assessment (Table 5.47)

From the variety of responses, only two participants (P3, P5) revealed that they understand the meaning of valid assessment. None of the other 11 responses even indicated an approximate understanding of valid assessment.

vii. Balanced assessment (Table 5.48)

Participants P2, P5, P6 and P12 used phrases such as "a combination of some easy to some hard questions" and "it is an assessment that test easy to difficult concepts" to describe balanced assessment. This implies that balanced assessment is associated with questions, ranging from easy to more complex questions. P4, P8, P9, P10 and P11 indicated that balanced assessment suggests assessment that covers all the content done by students in a particular academic year. One participant (P2) indicated that balanced assessment denotes a balance between theory and practice. From the responses it appears as if the research participants have a reasonable understanding of balanced assessment.

viii. Reliable assessment (Table 5.49)

From the responses it is evident that the term *reliable* is interpreted in many ways. Thus, the research participants were not able to describe reliable assessment in an unambiguous manner. Considering the explanation in section 3.4.3.2.1, only one participant (P8) indicated that assessment is considered to be reliable when the same assessment is repeated under the same conditions and yields the same results.

From the above interpretations, the parallels between the research participants' descriptions of the eight assessment concepts and the matching of assessment concepts with appropriate descriptions (*cf.* 5.3.2.4.10 and 5.3.2.4.11) are apparent. The researcher noted, however, that the participants' interview responses were more elusive, which could be attributed to the fact that participants felt uncomfortable during the individual interview sessions. Although this confirms the researcher's anticipation that her position may impact on the research results (*cf.* 4.10), these parallels override this concern.

5.4.3 Preliminary conclusions

Drawn from the interview data, the following preliminary inferences are made:

i. The research participants believe that *classroom management* and *assessment* are imperative topics to be included in an induction programme.
ii. An assessment induction programme should preferably be facilitated by the Deans of Faculty or by a knowledgeable internal facilitator.
iii. An assessment induction programme should be offered at the beginning of an academic year or semester and provision should be made for follow-up sessions.
iv. An assessment induction programme should include a large variety of topics related to the planning and designing of assessment, taxonomies and assessment concepts.

5.5 CONCLUSION

In this chapter, the qualitative and quantitative data obtained through the document analysis (Phase one), questionnaires (Phase two, part one) and interviews (Phase two, part two) were presented, analysed and interpreted. After the interpretation of each of the three sets of data, the researcher alluded to preliminary conclusions. These served as summaries revealing the most prominent interpretations of each set of data. In the chapter to follow, an overview of the study will be provided, the most important findings will be highlighted and recommendations, based on the findings, will be made.

CHAPTER SIX
SUMMARY, FINDINGS AND RECOMMENDATIONS

6.1 INTRODUCTION

The purpose of this multiphase mixed methods study was to examine the nature and scope of existing assessment induction programmes at selected South African HEIs and the quality of assessment literacy of academic staff at MGI. These were regarded as co-determinants to inform the development of an assessment induction programme for MGI. In addition to the overall purpose of the study, associated secondary questions and objectives were formulated. These were operationalized by conducting a literature and empirical study.

In this chapter, an overview of the study will be provided by relating the gathered information to the respective secondary research questions, objectives and ultimate purpose of the study. Thereafter, an inventory of the most prominent findings from the literature review and empirical research will be given, after which recommendations on the findings will be provided. The presentation to EXCO members of MGI will also be included. This will be followed by acknowledging the limitations of the research and by making suggestions for further research.

6.2 AN OVERVIEW OF THE STUDY

This section presents an overview of the study against the background of the purpose and the related objectives of the study.

6.2.1 Chapter one

The intention of this chapter was to provide an orientation to the study. The study was justified by concerns expressed by academic staff at MGI about their preparedness to utilize assessment effectively, which led to the disputing of the fact that current induction at MGI is inadequate (*cf.* 1.1). This prompted the researcher's interest to investigate the nature and scope of existing assessment induction programmes at selected South African HEIs and the quality of assessment literacy of academic staff at MGI to inform the development of an assessment induction programme for MGI (*cf.* 1.2). Research questions and objectives were then formulated to guide the study (*cf.* 1.3.1). Hereafter, a number of key terms were discussed to serve as conceptual

framework on which the study could be theoretically founded (*cf.* 1.4). In section 1.5 and 1.6 of this chapter, an outline of the research methodology was given, after which the delimitations of the study (*cf.* 1.7), its significance and possible contribution (*cf.* 1.8) and possible challenges of the study (*cf*. 1.9) were considered. The chapter was concluded with a layout of the anticipated chapters (*cf.* 1.10).

6.2.2 Chapter two

By studying the literature the following two secondary research questions and their accompanying objectives which directed this chapter were realized.

Secondary research questions:

- What does the notion of induction entail?
- What are the implications of induction for the quality of teaching, learning and assessment?

Objectives:

- To determine what the notion of induction entails.
- To determine the implications of induction for the quality of teaching, learning and assessment.

Induction has become a key factor in the area of improving work processes, employee morale and satisfaction. As such, it challenges organizations to identify its merits and to comprehend the interplay between induction and work effectiveness. The impact of an effective induction programme can therefore not be overlooked. Hence, a brief background overview and various definitions of induction were given to provide a clear understanding of induction and the impact that induction may have on employees (*cf.* 2.2). This was followed by an outline of the purpose of induction (*cf.* 2.3). In section 2.4 the different types of induction programmes were researched and the value of induction programmes was reviewed (*cf*. 2.5). In section 2.6 possible weaknesses of induction programmes were considered where after managing induction programmes (*cf.* 2.7) was discussed. The planning, organising and designing of induction programmes were outlined in section 2.8. In section 2.9 the stages of induction were reviewed, followed by a reflection on current induction at MGI (*cf.* 2.10).

6.2.3 Chapter three

Similar to the previous chapter, this chapter was also based on a literature study. The two secondary research questions and their associated objectives which guided this chapter included the following:

Secondary research questions:

- What exactly does assessment literacy imply?
- How does assessment relate to assessment literacy?

Objectives:

- To determine what exactly assessment literacy implies.
- To determine the relation between assessment and assessment literacy.

In order to present a theoretical outline of assessment within the framework of assessment literacy, the chapter commenced by defining assessment and by relating it to measurement and evaluation (*cf.* 3.2). In section 3.3 assessment literacy was explored by considering its definition (*cf.* 3.3.1) and by identifying criteria which could be helpful for determining levels of assessment literacy (*cf*. 3.3.2). Assessment as multifaceted phenomenon was examined in relation to learning (*cf.* 3.4.1), by considering its purposes (*cf.* 3.4.2), the principles of quality assessment (*cf.* 3.4.3), the forms (*cf.* 3.4.4) and methods of assessment (*cf.* 3.4.4). In conclusion, the notion of feedback and instruments to facilitate feedback (*cf*. 3.4.5) and using of assessment results was discussed (*cf.* 3.4.6).

6.2.4 Chapter four

This chapter was a preparation for the empirical research to answer the last four secondary research questions, (in relation to the overall purpose of the study):

- What is the nature and scope of existing assessment induction programmes at selected South African HEIs?
- What is the quality of the assessment literacy of academic staff at MGI?
- How can the results of an evaluation of existing assessment induction programmes at selected South African HEIs be operationalized for developing an assessment induction programme for academic staff at MGI?

- How does the assessment literacy of academic staff at MGI inform the development of an assessment induction programme for academic staff at MGI?

Therefore, chapter four provided an overview of the empirical study with regard to the processes and procedures which were followed to gather information relevant to the abovementioned secondary research questions and overall purpose of the study.

It was stated that the research was embedded in the Pragmatist paradigm (*cf.* 4.2) and that it followed a mixed methods, multiphase research design (*cf.* 4.3). The strategy of inquiry for this research was identified as a case study and justified as an instrumental case study (*cf.* 4.4). The population, sampling strategies and sample were discussed (*cf.* 4.5) and the data collection methods were identified (*cf.* 4.6). The principles that were considered for the construction of the data collection instruments as well as the administration of the instruments formed the focus in section 4.7. The adherence to quality criteria (*cf.* 4.8), the pilot study (*cf.* 4.9) and the role of the researcher (*cf.* 4.10) were also discussed. This was followed by clarifying the ethical considerations that guided the study (*cf.* 4.11). The chapter was concluded by a visual representation of the data collection process (*cf.* 4.12).

6.2.5 Chapter five

Following the justification of the empirical processes and procedures outlined in chapter four, this chapter was concerned about the analysis and interpretation of the collected data in order to address the primary research question in which the last four secondary questions (see 6.2.4 above), were infused.

The data analyses and interpretations were sequenced according to the same order which was followed in the data collection process (*cf.* 4.12). By keeping this order, a detailed discussion on the qualitative data analysis and interpretation of documents obtained from South African HEIs, representing Phase one of the empirical research (*cf.* 5.2), was done. This was followed by a discussion of Phase two, part one of the empirical research which focused on the quantitative data obtained through the questionnaires (*cf.* 5.3). In section 5.4 the qualitative data obtained by means of interviews in Phase two, part two of the empirical research, were analysed and interpreted.

In all three these main sections, background information was provided, after which the data obtained through the respective data collection instruments were analysed and interpreted. Analyses were done by means of narrative explanations which were complemented by visual representations where possible. Preliminary conclusions regarding the findings that emerged from the analyses and interpretation of the three sets of data (*cf.* 5.2.4, 5.3.3 and 5.4.3) completed this chapter.

6.3 FINDINGS OF THE RESEARCH

In terms of the attainment of the overall purpose of the study, the literature as well as the empirical study played a part. In this section, the most prominent findings derived from these two sources are highlighted.

6.3.1 Findings originating from the literature study

The literature study provided the context for the empirical study. Hence, the importance of the deductions made from the literature study should not be underestimated, since it could help to illuminate the empirical findings. With regard to induction and assessment literacy the following can be regarded as the most important findings from the literature study.

- With regard to the notion of induction, it was concluded that in the context of this study, induction comprises an inclusive process for developing well-designed programmes to enhance the assessment knowledge and skills of academic staff to make a meaningful impact on students' learning (*cf.* 2.2).
- It was further noticed that induction aims to immerse new academic staff into the institution and its core business, namely teaching, learning and assessment, by providing personal and professional support with the ultimate goal of improving student performance (*cf.* 2.3).
- In an academic environment, it seems appropriate to assume that successful induction programmes should comprise of general orientation, initial performance improvement and further development opportunities (*cf.* 2.4).
- With regard to the value of induction programmes, it emerged that enabling academic staff in terms of teaching, learning and assessment is rated highly (*cf.* 2.5).

- The inclusion of assessment as part of induction programmes for academic staff does not appear to be common practice (*cf.* 2.6).
- Although there appears to be variations concerning the duration of induction programmes, it should be focused on new as well as experienced staff and should be facilitated by an internal institutional unit concerned with staff development (*cf.* 2.7).
- Successful induction programmes should comply with quality assurance and quality control measures and should be properly planned, organised and designed (*cf.* 2.7.4 and 2.8).
- Assessment is a multifaceted phenomenon which includes the collection, analysis, interpretation, recording, reporting and using of information obtained from students' learning (*cf.* 3.2).
- In the context of this study, assessment literacy is understood as the knowledge and understanding of the fundamentals of assessment, such as defining assessment, the purposes, processes and taxonomies associated with assessment, the planning and designing of assessment and assessment related terminology (*cf.* 3.3.1).
- Assessment literate academic staff should be able to successfully choose, develop, administer, score and interpret results as well as using the results for decision making purposes (*cf.* 3.3.2).

6.3.2 Findings originating from the empirical study

Entrenched in the primary research question (*cf.* 1.2), was the final four secondary research questions (*cf.* 1.3.1) which focused on determining the nature and scope of existing assessment induction programmes at selected South African HEIs and the quality of the assessment literacy of academic staff at MGI.

This study used a mixed method, multiphase research design or a combination of qualitative and quantitative research approaches to add greater strength to the findings (*cf.* 6.2.5). Hence, by means of triangulation, the empirical research revealed the main findings presented below.

Phase one:

- By means of the document analysis the researcher found that the sampled institutions have induction programmes for academic staff which include assessment.
- The assessment induction programmes are offered at set times when academic staff are available and the duration of assessment induction programmes differ considerably from institution to institution. This may be because of the quantity and depth of content covered during the respective programmes.
- It was evident that new and experienced academic staff attend the assessment induction programmes and that the assessment induction programme is facilitated at the majority of the institutions by a unit-specific representative.
- Each of the assessment induction programmes are unique, but also share similar and common content. Assessment purposes and principles are covered in the content as well as assessment forms, methods and instruments. Feedback also features prominently.

Phase two:

- The common profile of the research respondents reflected that the majority of the respondents were females, while the age range of respondents varied between 26 to 45 years. The highest qualification of the respondents is a Honours or Master's degree and 54% of the respondents have less than five years lecturing experience and are mostly junior lecturers.
- Although a larger portion of the respondents was exposed to an induction programme by means of workshops or meetings, there is at present no formal arrangement for induction of academic staff at MGI. Most respondents admitted that they believe an induction programme is important and must focus on lecturing responsibilities, classroom management and assessment. They also acknowledged that they are in need of an assessment induction programme.
- Regardless of the experience, qualifications and post levels of the respondents, all newly appointed academic staff in this study experienced a need for support in assessment during their first year of lecturing. This confirms the earlier expressed need for an assessment induction programme.

- The current preparedness of academic staff to assess does not align with their knowledge of the assessment process, the ordering of the levels of Bloom's taxonomy, and the matching of assessment concepts with appropriate descriptions.
- Respondents indicated that all academic staff should attend an interactive assessment induction workshop that must be facilitated by the faculties' management or specialists; preferably by the respective Deans of each faculty. However, the comparative analysis does not provide convincing evidence that the Deans are the most suitable for facilitating assessment induction.
- An assessment induction programme should be offered to all academic staff at the beginning of an academic year or semester so that new developments in the field of assessment could be implemented during the semester or year. Refresher assessment workshops where assessment aspects are covered in more depth should be presented.
- An assessment induction programme should make provision for the fundamentals of assessment which could include the understanding of assessment concepts, the planning and designing of assessment, useful taxonomies, the interpretation of results and feedback to students.

6.4 RECOMMENDATIONS

Arising from the literature and empirical findings of this study, several recommendations are proposed for developing an assessment induction programme for MGI. The recommendations are structured according to five questions which are usually associated with strategic planning: *When? Duration? What? For who? By whom?* Subsequently, the recommendations, congruent with the respective questions, will be discussed.

i. When?

It is suggested that the assessment induction programme should be offered twice during the academic year, at the beginning of each semester. This will give all academic staff the opportunity to attend. It is also recommended that MGI should make provision for refresher workshops during the semester to update academic staff on the latest trends and developments in assessment.

ii. Duration?

The assessment induction programme should be distributed over two to three days. The time allocation for refresher workshops will depend on the content to be covered, but for the purpose of balance it should not exceed more than four hours per workshop.

iii. What?

For introductory purposes, assessment should be defined (*cf.* 3.2) and contextualised in relation to learning (*cf.* 3.4.1). Furthermore, the assessment induction programme should cover topics related to choosing, developing, scoring, interpreting, administering and using assessment results.

- Choosing assessment relates to the general and specific purposes of assessment (*cf.* 3.4.2).
- Developing assessment should incorporate the principles of quality assessment (*cf.* 3.4.3.2) which includes the notion of constructive alignment (*cf.* 3.4.3.3). In addition, the forms and methods of assessment (*cf*. 3.4.4) should also be covered under this section.
- Scoring, interpreting and administering assessment should include the notion of feedback (*cf*. 3.4.5.2), the instruments to facilitate feedback (*cf*. 3.4.5.3) and the recording and reporting of assessment results (*cf.* 3.4.5.4).
- Using assessment results (*cf.* 3.4.6) should raise an awareness that assessment results could be used for a variety of purposes; even beyond classrooms.

iv. For who?

All academic staff at MGI, which includes newly appointed academic staff, as well as experienced staff should attend the assessment induction programme.

v. By whom?

An assessment specialist within the Staff Development and Training Unit of MGI should facilitate the assessment induction programme.

Since this study impacts on MGI as PHEI, the researcher is compelled to make the research findings available to the Executive Committee (EXCO) of MGI (*cf*. **Appendix B**). Therefore, the researcher is dedicated to present a brief overview of the study accompanied by recommendations for developing an assessment induction programme for the institution, to the EXCO members of MGI. This will be done in the form of a PowerPoint presentation included in **Appendix G**.

6.5 THE LIMITATIONS OF THE RESEARCH

The researcher acknowledges that possible shortcomings in any study could help to improve future research. The identification of deficiencies also draws attention to the fact that the results of research of any nature are only provisional. Hence, the following limitations were identified in respect of this study:

- The document analysis focused on general information with regard to induction programmes and assessment induction. A more rigorous investigation could have led to more in-depth information.
- The document analysis could have been supplemented by site visits to gain transparent, first-hand information of the respective institutions' induction programmes and how assessment induction is approached.
- Since the researcher was known to the research participants, their participation in the research or the responses they provided, could have led to reactivity or the Hawthorne effect to impress the researcher (Leedy & Ormrod, 2005:98), which could have distorted some of the findings of the research.
- The researcher realised that her interview skills may have been inadequate in terms of prompting. Interview skills such as prompting, could have helped to generate more comprehensive data which would have increased the quality of the research participants' responses, the research results and the conclusions.
- The research mainly considered the inputs of academic staff to address the research questions. For verification purposes, the perspectives of students and examples of students' assessment could have enriched the data. In addition, artefacts of assessment plans, forms, methods, instruments and evidence of how assessment is recorded and reported could have enhanced the quality of evidence proving the assessment literacy of academic staff.

- The study did not go beyond the fundamentals of assessment literacy to include other subtopics such as level descriptors or moderation.
- The attitudes and dispositions of the sampled academic staff towards assessment were only implied in their responses and were not explored. By exploring these aspects more in-depth, the research could have indicated that academic staffs' attitudes and dispositions towards assessment are powerful mechanisms in regulating their assessment practises.
- By applying a broader range of statistical analysis the comparative analysis of quantitative data could have yielded more reliable interpretations based on significant differences.

6.6 SUGGESTIONS FOR FURTHER RESEARCH

Once more, this study uncovered the nature and scope of existing assessment induction programmes as well as the quality of assessment literacy of academic staff at MGI in order to inform the development of an assessment induction programme for MGI. It would, therefore, be appropriate to consider research prospects related to the field of assessment induction. In this regard, the following possibilities are mentioned:

- In this study, the guidelines for an assessment induction programme have been formulated and topics of importance established. An in-depth study is required to report on the development, management and implementation of an all-encompassing assessment induction programme at MGI.
- A study of longitudinal nature could determine the impact of assessment induction programmes on student performance.
- In an era characterised by time constraints and staff overload, the attitudes of academic staff towards induction programmes in general, and assessment induction in particular, could be investigated.
- Due to the "massification" of higher education, the value, use and effects of e-assessment in the South African context could be investigated.
- Academic staff may want to do action research related to their personal assessment practices and the improvement thereof for improving student performance.

- The development of appropriate tools to establish the assessment literacy of academic staff in an exact manner warrants research.

6.7 FINAL CONCLUSION

In the final analysis, and based on the main findings mentioned in section 6.3, it can be concluded that the aim of this research was satisfactorily realised since the examination of the two identified co-determinants yielded valuable information to inform the development of an assessment induction programme for MGI. Although assessment induction varies across South African HEIs, helpful information was gathered through the analysis of several institutional documents. It was also established that the assessment literacy of academic staff at MGI could be rated as fair to inadequate.

By considering the pointers that were provided by the examination of the mentioned co-determinants, the researcher is confident that the study contributed towards the available literature on assessment induction and assessment literacy. Furthermore the researcher is convinced that an effective assessment induction programme can be developed for MGI to equip the academic staff with the necessary knowledge and skills to plan, develop and implement assessment successfully. It is also envisaged that such an induction programme would improve the quality of teaching and learning.

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NORTH WEST UNIVERSITY
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VAAL TRIANGLE CAMPUS

Research Development / Faculty Humanities

MINUTES

Minutes of the electronic NWU Ethics Sub-Committee meeting for Social and Behavioural Sciences (Faculty Humanities) held on 27 August 2012.

5.2.3 FH-SB-2012-0028

Candidate:	MJ Pienaar
Supervisor:	Prof BJJ Lombard
Title:	Existing assessment induction programmes and assessment literacy as co-determinants for developing an assessment induction programme for Midrand Graduate Institute
Decision:	Ethic clearance approved

MIDRAND
GRADUATE INSTITUTE

TO WHOM IT MAY CONCERN
(North West University)

17 July 2012

RE: APPROVAL TO CONDUCT RESEARCH AT MIDRAND GRADUATE INSTITUTE (MGI)
MS. MARIETJIE J. PIENAAR – UNIVERSITY NUMBER 21978239

This is to confirm that the Research Committee of the Midrand Graduate Institute (MGI), acting on behalf of the Management of MGI, is pleased to grant Ms. Pienaar approval to undertake a research project towards her PhD (Teaching and Learning) at MGI as follows:

RESEARCH TITLE:

Existing assessment induction programmes and assessment literacy as co-determinants for developing an assessment induction programme for Midrand Graduate Institute.

It is understood that appropriate protocols, with particular reference to consent by, and confidentiality for all participants, will be observed. It is further understood that the results of the research will be made available to the MGI EXCO.

The Management of MGI wishes Ms. Pienaar success in her studies.

Dr Johan B. Freysen
Vice-Principal: Academic

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INFORMED CONSENT (LECTURERS)

Dear Lecturer

I am currently busy with research for my PhD-degree and I need your assistance to provide me with information to complete the study. This document will provide you with information regarding the project and what your involvement will entail. If you feel comfortable with the contents of the explanation I will appreciate it if you could sign the section indicating your consent to take part in the study.

Kindly note the following before you give consent to participate in the project.
The aim of the research is to determine lecturers' assessment literacy. The research results will inform the development of an assessment induction programme for Midrand Graduate Institute (MGI) and could assist in the improvement of lecturers' assessment practices which, in turn, could help to enhance students' learning.

Since the research impact on the academic performance of the institution, all lectures at MGI were identified to participate in the research. However, your permission is needed to take part in the research.

Your participation is requested to obtain data about lecturers' assessment literacy by means of a questionnaire and individual interviews. You will be required to complete the questionnaire in your own time, while the interviews will be scheduled to suit individual participants. The completion of the questionnaire will take no longer than 30 minutes and interviews will also last 30 minutes. Please note that the intention of the research is NOT to evaluate your knowledge and comprehension of assessment, but to gather information-rich data which will help the researcher to understand lecturers' assessment literacy better.

Participation in the research is not compulsory and you may withdraw at any time should you feel uncomfortable. Please be assured that your inputs will be used for research purposes only and that your participation will be treated confidentially.

There are no direct benefits for taking part in the study. However, the findings of the research may in future assist lecturers and students of MGI as indicated above.

The research will personally be conducted by myself, MJ Pienaar (Student number: 21978239), who works under the supervision of Prof BJJ Lombard from the School of Educational Sciences, North-West University (Vaal Triangle Campus). If you have any questions or queries you can contact Prof Lombard at Kobus.Lombard@nwu.ac.za or at 016 910 3067. Alternatively, feel free to contact me at 072 210 9750.

CONSENT TO PARTICIPATE IN THE STUDY ENTITLED:

Existing assessment induction programmes and assessment literacy as co-determinants for developing an assessment induction programme for Midrand Graduate Institute

I..... (Full name) have read and understand the nature of my participation in the PhD project of MJ Pienaar and hereby agree to participate.

Signature:..... Date:.....

Contact details: .....

.....

.....

APPENDIX D

MIDRAND
GRADUATE INSTITUTE

Interview Number: | | | |

Dear Academic staff member

The intention of this questionnaire is to gather data on the assessment literacy of lecturers at Midrand Graduate Institute (MGI) and to operationalize such data for the development of an assessment induction programme for academic staff at MGI.

You are kindly requested to complete the questionnaire in a frank and open-minded manner by answering all the questions. Your responses should be related to the modules you are lecturing on the undergraduate level during 2013.

Your responses will be treated anonymously and confidentially and will be used for research purposes only in order to address the above-mentioned intention. Please be assured that the information obtained from the questionnaire will be held in safekeeping for access and use by the undersigned only. The research results obtained through this questionnaire will be reported on in the PhD study of the undersigned which is entitled: *Existing assessment induction programmes and assessment literacy as co-determinants for developing an assessment induction programme for Midrand Graduate Institute.* In addition, results will be made available to the MGI EXCO and tabled at the Research Indaba of MGI. Completing the questionnaire implies that you give consent that your responses may be used anonymously for the purposes as stated.

Should you have any queries regarding the questionnaire or the purpose of the study, please contact me at 011 690 1759 or e-mail: marietjiep@mgi.ac.za.

Thank you for your willingness to participate.

MJ Pienaar

Dean of Commerce

SECTION A – DEMOGRAPHIC INFORMATION

- **Indicate the response MOST relevant to you by marking the appropriate box.**

1. Gender:

Male	1
Female	2

2. Age:

20-25 years	1
26-35 years	2
36-45 years	3
46-55 years	4
56-60 years	5
Older	6

3. Highest Higher Education qualification:

Certificate	1
Diploma	2
3 year degree	3
4 year degree	4
Honours degree	5
Master's degree	6
PhD	7
Other (please specify)	8

4. Professional, work-related experience (e.g. corporate, industry) within the specific subject field you are lecturing:

Less than 5 years	1
5-10 years	2
11-20 years	3
21-30 years	4
31 years or more	5

5. Lecturing experience at a higher education institution:

Less than 5 years	1
5-10 years	2
11-20 years	3
21-30 years	4
31 years or more	5

6. Current position at MGI:

Dean	1
Head of Programme	2
Senior Lecturer	3
Junior Lecturer	4
Tutor	5
Other (please specify)	6

7. Indicate the basis of your appointment at MGI:

Full time appointment	1
Fixed term contract appointment	2
Part time / Hourly appointment	3

8. Period you have been lecturing at MGI:

Less than 5 years	1
5-10 years	2
11-20 years	3
21-30 Years	4

9. Highest academic level you are currently lecturing at MGI:

Pre-degree – foundation programme	1
First years	2
Second years	3
Third years	4
Fourth years	5
Honours	6
Masters/MBA	7

SECTION B – INDUCTION PROGRAMMES

- **Read the description below and indicate the response most relevant in your opinion, by marking the appropriate box.**

Induction is defined as the institution's efforts to assist academic staff to adjust effectively to their new work environment with minimum disruption and as quickly as possible, so that the institution's functioning can proceed as effectively as possible (Steyn & Van Niekerk, 2002:232).

1. Were you ever exposed to any induction programme(s)?

Yes	1
No	2

2. If you responded "yes" in Question 10, please indicate the nature of the induction programme(s) you were exposed to: (*You may choose as many or as few as you like)*

Workshops	1
Seminars	2
Practicums	3
Meetings	4
Short courses	5
Informal training (e.g. Moderator feedback)	6
Formal training (e.g. Part of a recognised qualification	7
Other (please specify)	8

3. Do you believe that an induction programme is an essential component for academic staff at a higher education institution?

Yes	1
No	2

4. If you responded “yes” in Question 11, please indicate from the list below which elements should be included in an induction programme for academic staff at a higher education institution (*You may choose as many or as few as you like):*

Institutional vision and mission	1
Institutional policies	2
Institutional procedures	3
Lecturing responsibilities	4
Classroom management	5
Faculty administration	6
Assessment	7
Research	8
Resources in the classroom	9
Orientation of on-line sources	10
Workplace orientation (e.g. campus tours)	11
Computer skills	12
Other (please specify)	13

SECTION C – ASSESSMENT INDUCTION PROGRAMME

- **Indicate the responses which are most relevant in your opinion, by marking the appropriate boxes.**

1. Which category (-ies) of academic staff at higher education institutions will benefit most from attending an assessment induction programme?

Academic staff appointed on a permanent basis	1
Academic staff appointed on a fixed term, contract basis	2
Academic staff appointed on a part time or hourly basis	3
All of the above	4
None of the above	5

2. How would you prefer the facilitation of an assessment induction programme? (*You may choose as many or as few as you like)*

E-Portal (Manuals available on-line)	1
Electro meet (Video and web conferencing)	2
Faculty discussions initiated by faculty members	3
Faculty discussions initiated by faculty management	4
Formal, face-to-face training session which leads to a certificate	5
Interactive workshop offered by an expert internal facilitator	6
Interactive workshop offered by an expert external facilitator	7
Other (please specify)	8

3. In the case of the presentation of an assessment induction programme, which of the parties below are the best qualified to facilitate such a programme?

Institutional Management	1
Faculty Management	2
Faculty specialists	3
Specialists from public higher educational institutions	4
Specialists from other private higher educational institutions	5
Formal Assessment training providers	6
Other (please specify)	7

4. How should an assessment induction programme be structured to benefit academic staff most?

An once off induction programme with an all-inclusive assessment focus at the beginning of an academic year	1
An once off induction programme with an all-inclusive assessment focus at the end of business of an academic year	2
An introduction to assessment at the beginning of an academic year, followed by an all-inclusive assessment focused induction programme later in the academic year	3
A division of an induction programme into short, thematically focused assessment topics throughout an academic year	4
Any other suggestion (please specify)	5

SECTION D – ASSESSMENT LITERACY

- **Indicate the responses which are most relevant in your opinion, by marking the appropriate boxes or by filling out the open spaces.**

1. Consider each statement below and indicate your degree of confidence in each:

D1	I believe …	**Strongly disagree**	**Disagree**	**Agree**	**Strongly agree**
1.	that formal assessment, like scheduled tests or examinations, is the most valid form of assessment for determining students' learning	1	2	3	4
2.	that formal assessment, like scheduled tests or examinations, stimulates superficial learning	1	2	3	4
3.	marks/grades or percentages, shown on their reports, provide sufficient feedback to students in terms of their learning success	1	2	3	4
4.	that students do not see value in any type of feedback other than marks or grades	1	2	3	4
5.	that assessment where students' performances are compared to that of other students, increases their motivation	1	2	3	4
6.	that assessment where students' performances are compared with their own previous performances, increases their motivation	1	2	3	4
7.	that informal assessment, such as verbal questioning or short tests, engage students in the learning process	1	2	3	4
8.	That informal assessment, such as verbal questioning or short tests, improve students' final assessment results	1	2	3	4
9.	that informal assessment, such as verbal questioning or short tests, increase the lecturer's awareness of students' learning success	1	2	3	4
10.	that students' self-assessment does not yield trustworthy assessment results	1	2	3	4
11.	that peer assessment promotes students' confidence and motivation in their own learning	1	2	3	4
12.	that informal and formal assessment are equally important to ensure learning success	1	2	3	4

2. Rate your preparedness to assess students' academic performance when you started your academic career as lecturer:

Not at all prepared	Somewhat prepared	Prepared	Well prepared
1	2	3	4

3. Rate your current preparedness to assess students' academic performance:

Not at all prepared	Somewhat prepared	Prepared	Well prepared
1	2	3	4

4. Define assessment in your own words:

   .....

   .....

   .....

5. Outline a typical sequential assessment process by indicating the different steps you would follow by means of a visual representation in the space below:

6. By considering the features below, rate the importance of each in terms of an assessment literate lecturer:

D6		**Not important**	**Moderately important**	**Important**	**Very important**
1	Knowledge of expected learning outcomes of the module(s) offered	1	2	3	4
2	Knowledge of assessment criteria of the module(s) offered	1	2	3	4
3	Knowledge of, and skills on, how to align outcomes, content, activities and assessment	1	2	3	4
4	Subject expertise which includes content knowledge and knowledge of available subject-related sources	1	2	3	4
5	Knowledge about how students learn	1	2	3	4
6	Knowledge about students' previous record of academic performance	1	2	3	4
7	Knowledge about students' subject-related pre-knowledge in a specific module	1	2	3	4
8	Knowledge about students' accessibility to subject-related sources and resources	1	2	3	4
9	Knowledge of, and skills on, how to apply a variety of assessment forms (e.g. tests, orals, assignments)	1	2	3	4
10	Knowledge of, and skills on, how to formulate effective questions according to the levels of Bloom's Taxonomy	1	2	3	4
11	Knowledge of, and skills on, how to apply a variety of assessment instruments (e.g. memorandums, rubrics, checklists)	1	2	3	4
12	The ability to clarify assessment criteria to students	1	2	3	4
13	The ability to identify students' needs and to adjust teaching accordingly	1	2	3	4
14	The ability to make sound judgements in terms of students' performance	1	2	3	4
15	The ability to give targeted and descriptive feedback to students	1	2	3	4

		Not important	Moderately important	Important	Very important
16	The ability to encourage students to improve their learning	1	2	3	4
17	The ability to record student performance in an ethical appropriate manner	1	2	3	4
18	The ability to report on student performance in an ethical appropriate manner	1	2	3	4
19	The ability to reflect on, identify gaps and improve existing learning material	1	2	3	4
20	The ability to reflect on, identify gaps and improve existing assessment practices	1	2	3	4

7. Consider the six cognitive levels of Bloom's Taxonomy, as revised by Anderson and Kratwohl (2001), in Column A below, and re-arrange them in the order of progression from lower order thinking to higher order thinking in Column B:

Column A	Column B
Understand	
Evaluate	
Analyse	
Remember	
Create	
Apply	

8. List any other taxonomies that you are aware of, that can be used for assessment purposes:

……

……

……

……

9. Consider each statement below and indicate to what extent it contributes towards positive student assessment performance:

D9		**Very little**	**Some what**	**Often**	**Nearly Always**
1	Sharing expected learning outcomes with students at the start of each lecture	1	2	3	4
2	Reminding students constantly about the expected learning outcomes during a lecture	1	2	3	4
3	Summarizing learning outcomes after each lecture	1	2	3	4
4	Questioning during a lecture to **guide** students' thinking about the content	1	2	3	4
5	Questioning during a lecture to **inform the lecturer** about students' thinking	1	2	3	4
6	Questioning during a lecture **to inform students** about their own thinking	1	2	3	4
7	Students assessing their own personal performances when results are to be used for recording and reporting purposes	1	2	3	4
8	Students assessing their own personal performances when results are to be used to inform them about their own learning	1	2	3	4
9	Students assessing the performances of their peers when results are to be used for recording and reporting purposes	1	2	3	4
10	Students assessing the performances of their peers when results are to be used to inform peers about their own learning	1	2	3	4
11	Providing feedback on students' assessment performances by means of marks, percentages or symbols	1	2	3	4
12	Providing feedback on students' assessment performances by means of descriptive comments	1	2	3	4

10. Consider each of the assessment concepts in Column A below and match it with the appropriate descriptions in Column B. Write only the appropriate alphabet letter obtained from Column B, next to the number in the matching results column.

Column A	Column B	Matching results	
[1] Formative assessment	**a)** assessment where student performance is judged against a set of clearly defined criteria	**1**	
[2] Summative assessment	**b)** assessment to determine and identify a student's problem areas in a subject/module/course in order to intervene and provide remedial help	**2**	
[3] Criterion-referenced assessment	**c)** assessment that monitors student attainment at regular intervals and provides information about students' progress	**3**	
[4] Norm-referenced assessment	**d)** assessment which emphasises doing by focusing on the process as well as the product of a learning experience	**4**	
[5] Portfolio assessment	**e)** assessment which is carried out at the end of a unit, term or year to determine how well a student has progressed towards achieving selected learning outcomes	**5**	
[6] Diagnostic assessment	**f)** assessment where student performance is compared to those of other students	**6**	
[7] Baseline assessment	**g)** assessment which is meaningful as it represents applications to everyday life	**7**	
[8] Authentic assessment	**h)** assessing a purposeful collection of a student's efforts, progress and achievement in a subject/module/course	**8**	
[9] Performance-based assessment	**i)** assessment conducted at the beginning of a new learning experience to determine a student's pre-knowledge or entry level	**9**	

11. Consider each of the assessment concepts in Column A below and match it with the appropriate descriptions in Column B. Write only the appropriate alphabet letter obtained from Column B, next to the number in the matching results column.

Column A	Column B	Matching results	
[1] Objective tests	**a)** assessment indicating how much students have learned and whether outcomes have been achieved	**1**	
[2] Subjective tests	**b)** assessment that is justifiable in terms of the extent that it measures what it is supposed to be measuring	**2**	
[3] Rubric	**c)** assessment which accommodates a variety of assessment items	**3**	
[4] Assessment of learning	**d)** assessment indicating students' involvement in the learning process in order to achieve outcomes	**4**	
[5] Assessment for learning	**e)** assessment which usually requires straight forward answers which are fairly easy to mark	**5**	
[6] Fair assessment	**f)** assessment which usually requires more complex answers which are open for interpretation	**6**	
[7] Balanced assessment	**g)** assessment that is reasonable and which responds equitably to student differences	**7**	
[8] Valid assessment	**h)** an analytical tool which describes a continuum of performance qualities and which can be used for feedback purposes	**8**	
[9] Reliable assessment	**i)** assessment of which the results remain consistent if done by the same students under the same conditions	**9**	

Thank you for completing the questionnaire

APPENDIX E

MIDRAND
GRADUATE INSTITUTE

Interview Number: | | | |

Dear Academic staff member

The intention of this interview is to gather data on the assessment literacy of lecturers at Midrand Graduate Institute (MGI) and to operationalize such data for the development of an assessment induction programme for academic staff at MGI.

You are kindly requested to answer all questions in a frank and open-minded manner. Your responses should be related to the modules you are lecturing on the undergraduate level during 2012.

Although the interview will be audio-recorded to assist in the analysis of the data, your responses will be treated anonymously and confidentially and will be used for research purposes only in order to address the above-mentioned intention. Please be assured that the information obtained from this interview will be held in safekeeping for access and use by the undersigned only. The research results obtained through this interview will be reported on in the PhD study of the undersigned which is entitled: *Existing assessment induction programmes and assessment literacy as co-determinants for developing an assessment induction programme for Midrand Graduate Institute.* In addition, results will be made available to the MGI Exco and tabled at the Research Indaba of MGI. Participating in the interview implies that you give consent that your responses may be used anonymously for the purposes as stated.

Should you have any queries regarding this interview or the purpose of the study, please contact me at 011 690 1759 or e-mail: marietjiep@mgi.ac.za.

Thank you for your willingness to participate.

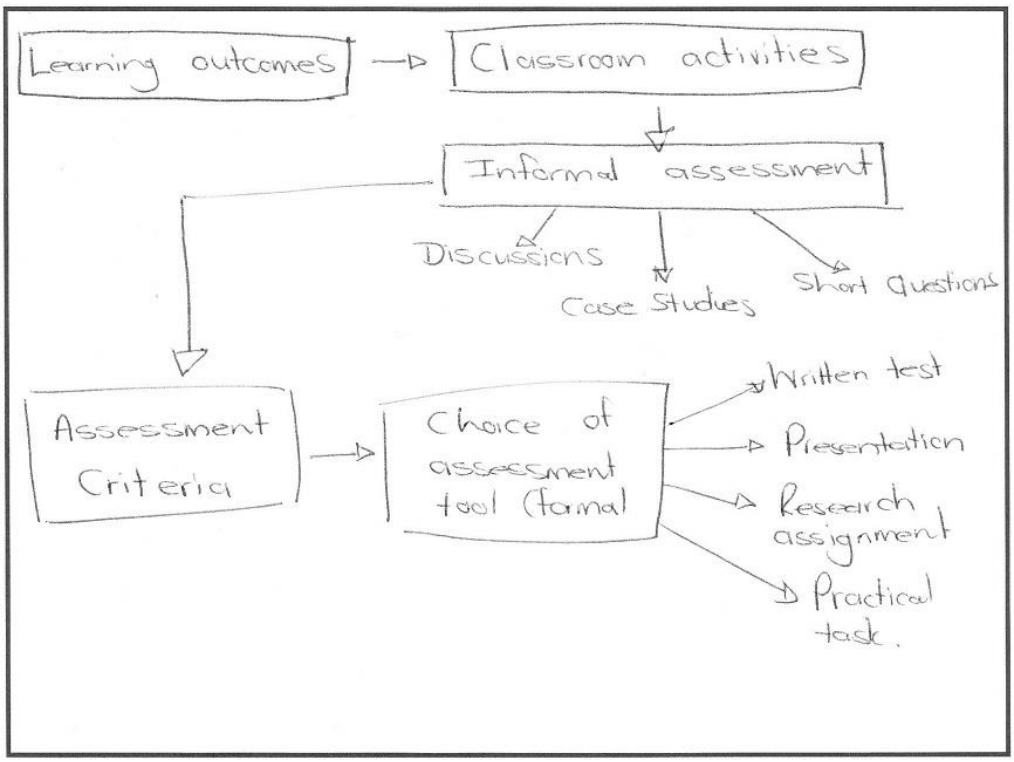
MJ Pienaar

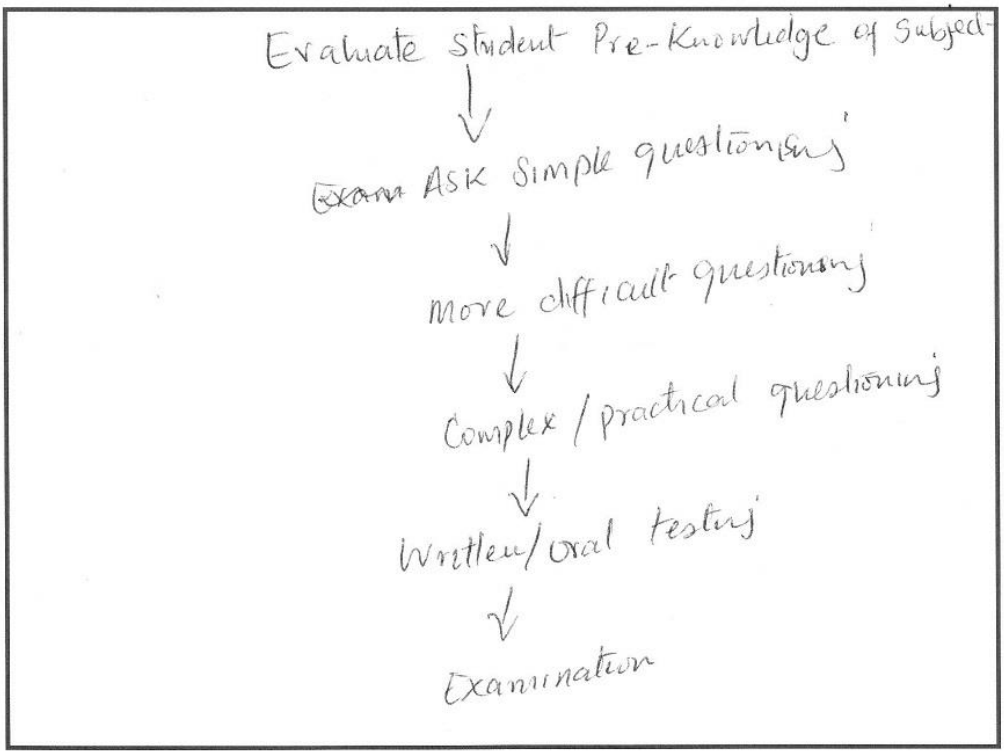
Dean of Commerce

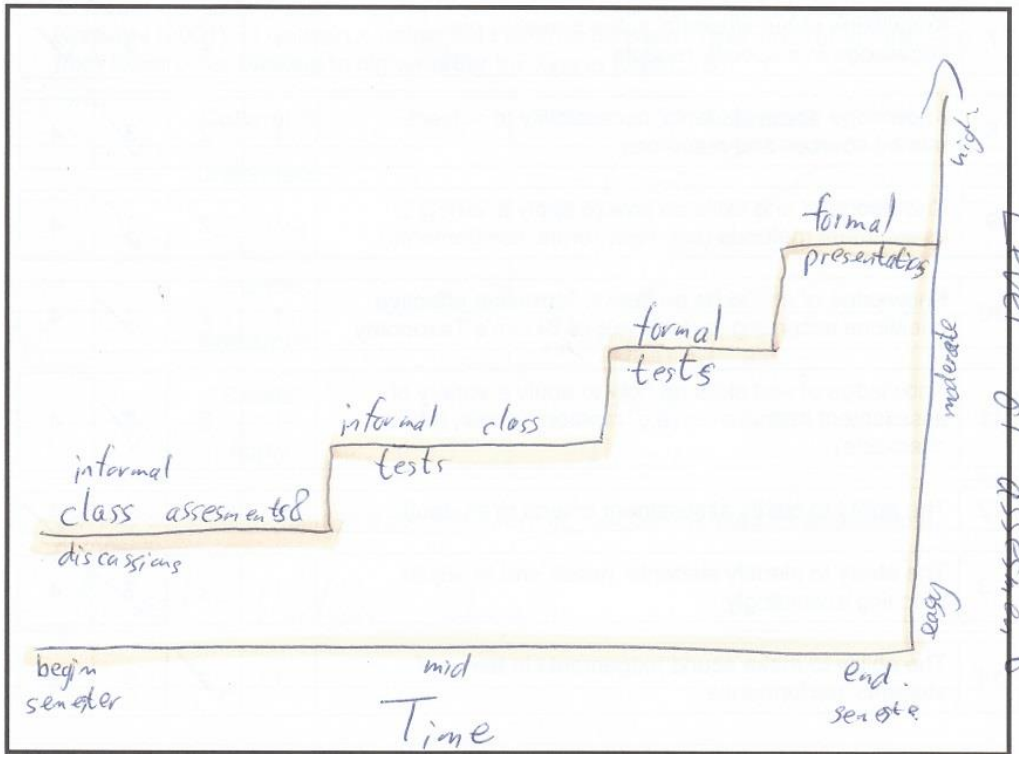
INTERVIEW QUESTIONS:

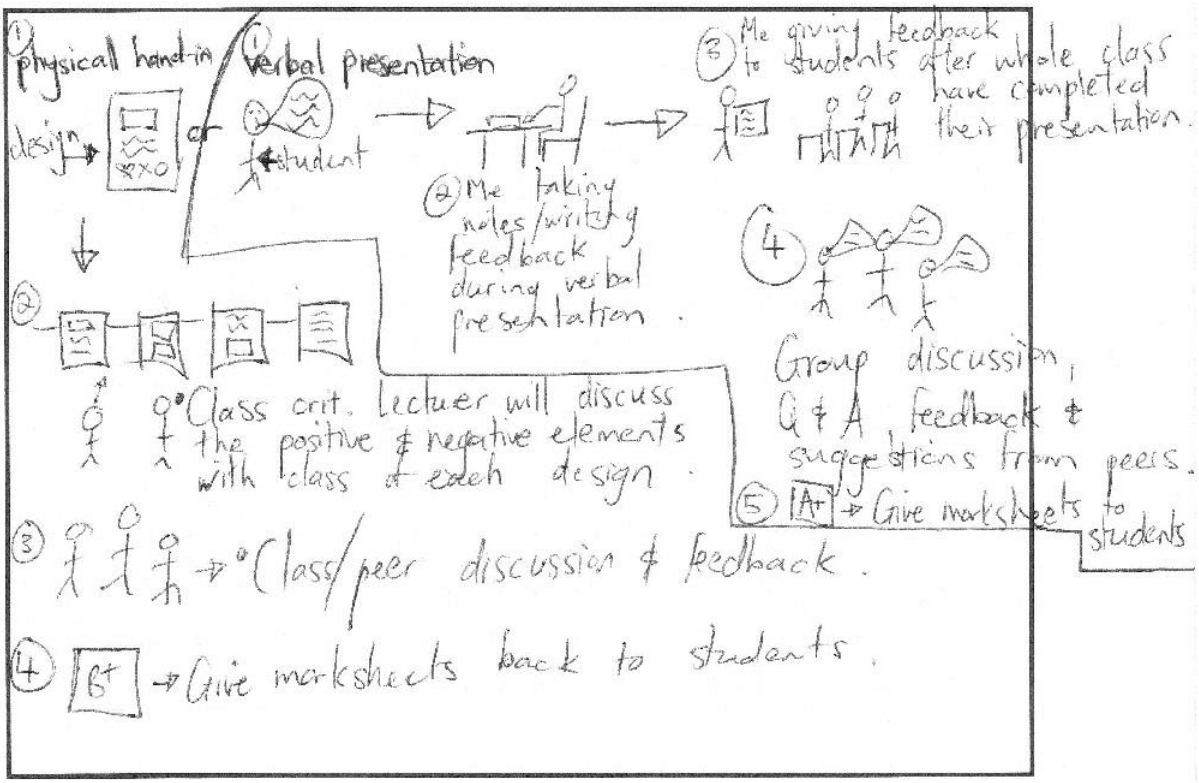
1. Which topics, do you think, should be addressed in an induction programme for academic staff at a higher education institution?
2. In case of an assessment induction programme, who would you prefer to facilitate such a programme?
3. How would you prefer the structuring of an assessment induction programme in terms of a time schedule?
4. If you can draw up a wish list, which topics would you like to be seen included in an assessment induction programme?
5. What, do you think, are the purposes of assessment?
6. Describe how you plan and design assessment.
7. Which assessment forms do you use most frequently with your students?
8. Mention any Taxonomy that you are aware of, that can be used for assessment purposes.
9. Explain the following assessment concepts:
    i. Formative assessment
    ii. Norm-referenced assessment
    iii. Authentic assessment
    iv. Performance-based assessment
    v. Objective tests
    vi. Valid assessment
    vii. Balanced assessment
    viii. Reliable assessment

APPENDIX F


Learning outcomes
Classroom activities
Informal assessment
Discussions
Case Studies
Short Questions
Assessment Criteria
Choice of assessment tool (formal
Written test
Presentation
Research assignment
Practical task.

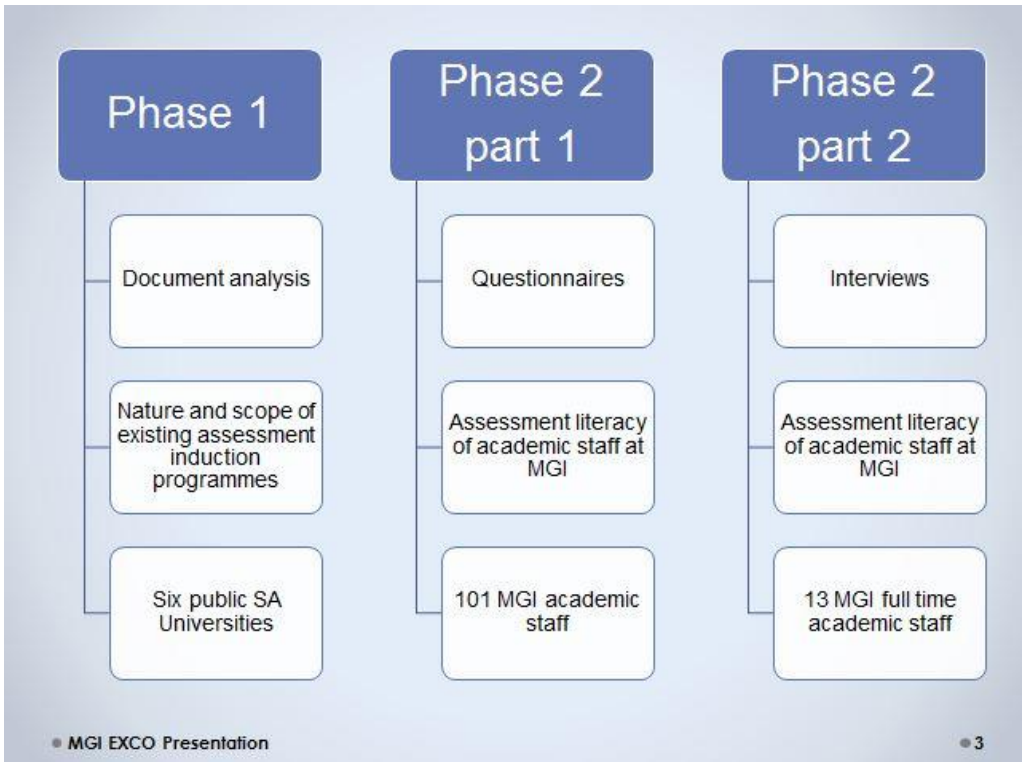

Evaluate student Pre-Knowledge of Subject
Exam Ask simple questioning
More difficult questioning
Complex / practical questioning
Written/oral testing
Examination


informal class assesments discussions
informal class tests
formal tests
formal presentations
high
moderate
easy
Level of assessment
begin semester
mid
end semester
Time


1 physicall hand-in
design
or
1 verbal presentation
student
2 Me taking notes/writing feedback during verbal presentation.
3 Me giving feedback to students after whole class have completed their presentation.
2
*Class crit. Lecturer will discuss the positive & negative elements with class of each design.
4
Group discussion, Q & A, feedback & suggestions from peers.
5 A+ → Give marksheets to students
3 *Class/peer discussion & feedback.
4 B+ → Give marksheets back to students.


Existing assessment induction programmes and assessment literacy as co-determinants for developing an assessment induction programme for Midrand Graduate Institute
MGI EXCO Presentation
1


Purpose of this study
To uncover the nature and scope of existing assessment induction programmes at selected South African HEIs
To disclose the quality of assessment literacy of academic staff at MGI
To inform the development of an assessment induction programme for MGI
MGI EXCO Presentation
2


Phase 1
Document analysis
Nature and scope of existing assessment induction programmes
Six public SA Universities
Phase 2 part 1
Questionnaires
Assessment literacy of academic staff at MGI
101 MGI academic staff
Phase 2 part 2
Interviews
Assessment literacy of academic staff at MGI
13 MGI full time academic staff
MGI EXCO Presentation
3


When?
Duration?
What?
For who?
By whom?
Assessment induction programme
MGI EXCO Presentation
4

When?

Literature	Document analysis	Questionnaires & interviews
• Initial performance improvement • Further development opportunities	• At set times according to staff availability	• Beginning of year/semester • Refresher workshops

When?

Recommendation
• Beginning of each semester • Refresher workshops during semesters

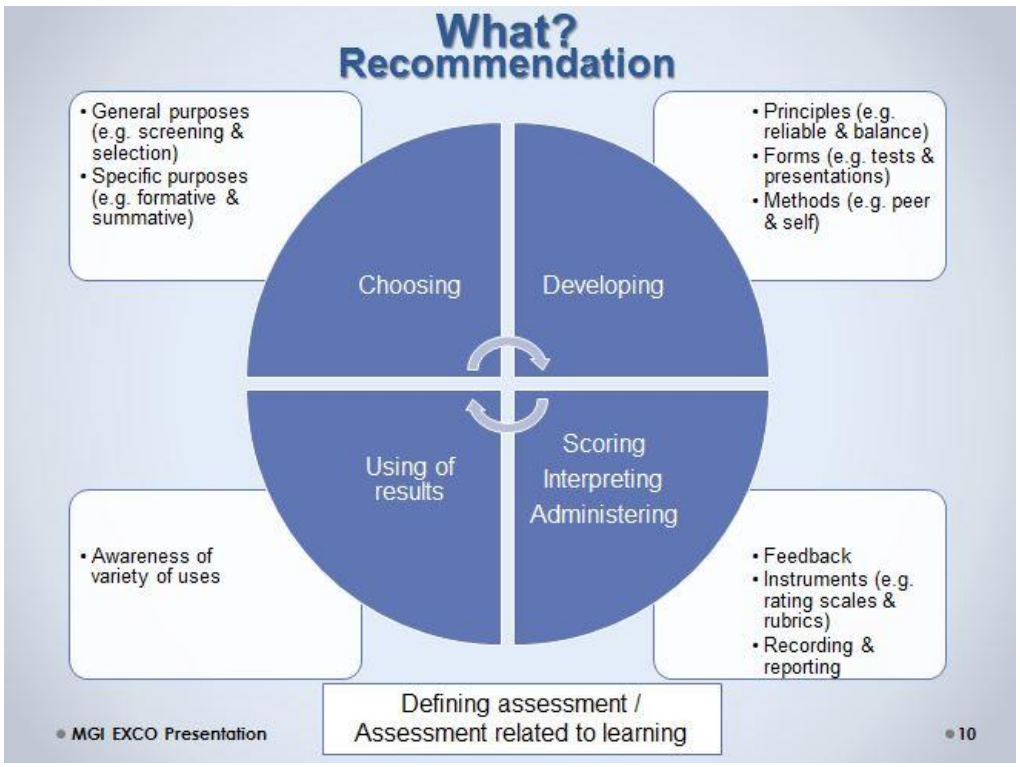
Duration?

Literature	Document analysis	Questionnaires & interviews
• Depends on type and content of induction programme	• Depends on quantity and depth of content covered	• (Not requested from respondents)

Duration?

Recommendation
• Assessment induction programmes = 2 to 3 days • Refresher workshops = depend on content and max 4 hours


What?
Assessment Induction Programme
Literature
• Collecting
• Analysing
• Interpreting
• Recording
• Reporting
• Using
Document analysis
• Purposes
• Principles
• Forms
• Methods
• Instruments
• Feedback
Questionnaires & interviews
• Fundamentals
• Concepts
• Planning
• Designing
• Taxonomies
• Interpreting
• Feedback
MGI EXCO Presentation
9


What?
Recommendation
• General purposes (e.g. screening & selection)
• Specific purposes (e.g. formative & summative)
• Principles (e.g. reliable & balance)
• Forms (e.g. tests & presentations)
• Methods (e.g. peer & self)
Choosing
Developing
Using of results
Scoring
Interpreting
Administering
• Awareness of variety of uses
• Feedback
• Instruments (e.g. rating scales & rubrics)
• Recording & reporting
Defining assessment / Assessment related to learning
MGI EXCO Presentation
10

For who?

Literature	Document analysis	Questionnaires & interviews
• New & experienced academic staff	• New & experienced academic staff	• All academic staff

For who?

Recommendation

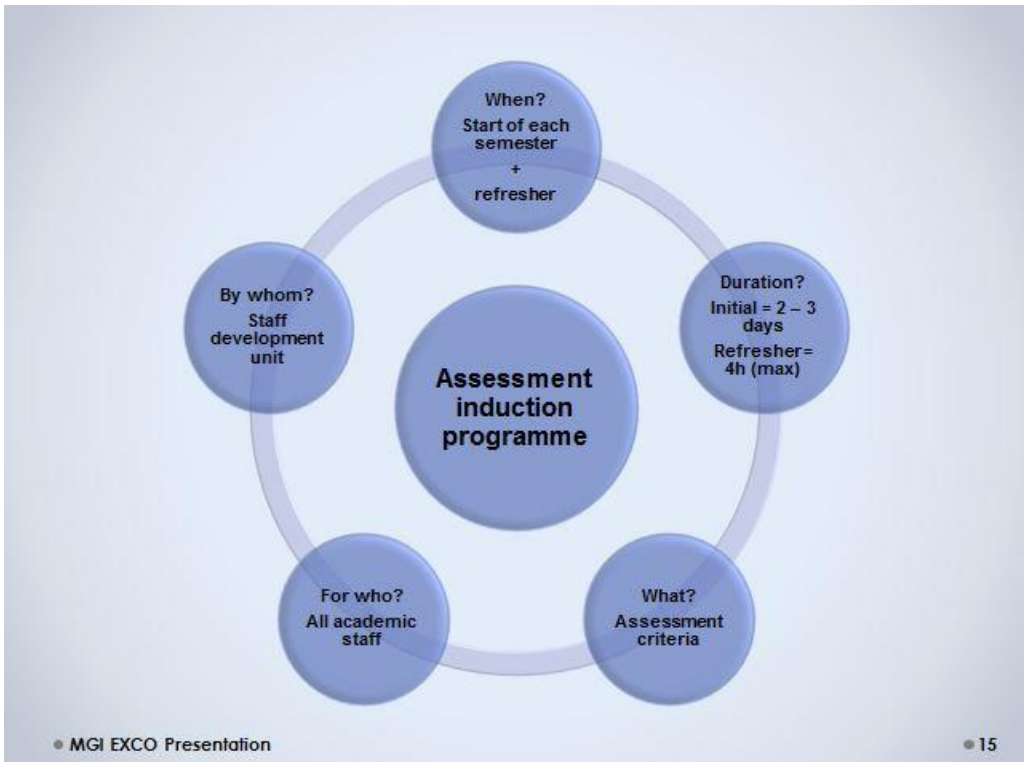
• All academic staff:
  • Newly appointed academic staff
  • Experienced academic staff

By whom?

Literature	Document analysis	Questionnaires & interviews
• Internal institutional staff development unit	• Unit specific representative	• Faculty specialist

By whom?

Recommendation
• Specialist within staff development and training unit


When?
Start of each semester
+
refresher
Duration?
Initial = 2 – 3 days
Refresher= 4h (max)
What?
Assessment criteria
For who?
All academic staff
By whom?
Staff development unit
Assessment induction programme
MGI EXCO Presentation
15