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A Study of Students' Experiences of Formative and Summative Assessment in Open and Distance Learning: Insights from Meta-Synthesis

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KEYWORDS Meta-synthesis, metadata analysis, meta-method, meta-theory, open and distance learning, assessment

ABSTRACT The objectives of this study were to explore and describe students' experiences of formative and summative assessment by analyzing and synthesizing primary qualitative studies in open and distance learning (ODL). The research question: What are students' experiences of formative and summative assessments in open and distance learning? Provided the focus for the study. The study used three distinctive data analytical phases namely, the meta-data analysis, meta-method and the meta-theory followed by the synthesis phase. Data were collected and analysed through document analysis and triangulation. The findings of the study revealed that formative and summative assessments are important because they help them to focus on the outcomes. Furthermore, the study argued that what-ever assessment does, it must support student learning.

INTRODUCTION

Although meta-syntheses have been published on research conducted by different researchers utilising different research methods, the researcher has utilised it in this study as a core design. According to Barroso and Powel-Cope (2000:340-343) meta-synthesis is an umbrella term that

refers to the synthesis of findings across multiple primary qualitative research reports to create a new interpretation and is designed to facilitate knowledge development. Noblit, Thorne, Jensen and Sandelowski (2004), Sandelowski and Barosso (2003:18), postulated that when using qualitative meta-synthesis the rule of thumb is that a problem and retrieval process should be identified before looking for relevant primary studies, inclusion and exclusion criteria are explicated, characteristics of the study are measured on a common scale, findings are identified and aggregated, classified, and coded, and indices of effect magnitude are calculated and, ultimately, transformed into a new conceptualization. Synthesizing qualitative articles is a methodology that increases the credibility and trustworthiness of the research study (Bondas & Hall, 2007:54). This study therefore, discusses the purpose and stages of meta-synthesis and the epistemological status of knowledge generated from the technique. Currently there is a growing interest in meta-synthesis as a technique for generating new insights and understanding from qualitative educational studies in higher education research.

An increasing number of meta-synthesis papers are appearing in the face-to-face and distance education institutions literature. In addition the researcher formulated the following research question: What are students' experiences of formative and summative assessment in an open and distance learning environment? The researcher used the meta-study approach for synthesis. The components of a meta-study are namely, meta-data analysis, meta-method and meta-theory. All these concepts were explained in the methodology section of this study. The researcher critically interpreted the synthesis of the study, followed by the strengths and limitations of the study.

LITERATURE REVIEW

Many authors tried to define meta-synthesis in a variety of ways. For example, Barroso and Powel-Cope (2000:340-343) defined meta-synthesis as a study of relevant qualitative research articles that attempt to synthesise or integrate findings of qualitative studies to seek new insights beyond the findings of each included primary study. To add on Barroso and Powel-Cope's (2000:342) assertion, Sandelowski and Barroso (2003:905-923) posit that qualitative meta-synthesis is an interpretive integration of qualitative findings that are themselves interpretive syntheses of data, including basic qualitative phenomenological studies, ethnographies, grounded

theories, and other integrated and coherent descriptions or explanations of phenomena, events, or cases. According to Bondas and Hall (2007:121) meta-synthesis is the bringing together and breaking down of findings, examining them, discovering the essential features, and in some way combining phenomenon into a transformed whole. As such, it can be understood as a form of discourse that contributes to a fuller understanding of the phenomenon of interest. According to Cooper (2000:279-291), Noblit and Hare (2004:1242-1265), the goal of meta-synthesis is firstly, to go beyond narrative and systematic literature reviews, and secondly, to produce a new and integrative interpretation of findings that is more substantive than those resulting from individual investigations. The key characteristic of a meta-synthesis is the transformation of qualitative research studies into a conceptualization of student in open and distance learning (Sandeloski & Barroso, 2003:905-923). Before conducting this qualitative study the researcher discovered that there were huge and diverse number of qualitative studies on student assessment practices completed between the prescribed period 2000 and 2014. Studies using different methods such as phenomenology, ethnography, grounded theory and case study approach were also included. Literature on the technique of meta-synthesis and examples of meta-synthesis papers were searched and reviewed. In this study the researcher started by identifying a problem before looking for relevant primary studies, identifying a retrieval process, inclusion and exclusion criteria were explicated, characteristics of the study were measured on a common scale, findings were identified, classified, coded, aggregated and ultimately, transformed into a new conceptualisation. Research into student assessment in open and distance learning had significantly contributed to the understanding and development of practical strategies that could be used to improve teaching, learning and assessment practices in distance education.

Over the past decade, there was a proliferation of qualitative studies on student assessment in higher and distance education. More than ever before authorities are reviewing the means by which students are assessed by asking questions like: How can we effectively and efficiently cope with the vast number of students now in higher education? How can we offer appropriate assessment methods to the diverse range of students who present themselves to us, often with a broad range of competences and knowledge which is largely unaccredited?

The proposed framework for learning-oriented assessment locates assessment's learning oriented functions in the context of the many other functions required of assessment in higher

education (Wilson & Scalise, 2006:635-663). There are three principal factors that explicate the relationship between learning and assessment namely: the nature and structure of assessment tasks that appropriately direct student effort, the characteristics of feedback that make it helpful in promoting learning and the kinds of student involvement in the assessment processes that can lead student to develop the capacity to evaluate the quality of their own work (Gibbs & Simpson, 2004:3-29). Furthermore, the authors Gibbs and Simpson (2004), Nicol (2009:335-352), and Ecclestone (2002:54) posit that assessment is based on the idea that it addresses four principles namely: (1) developmental perspectives, (2) a match between instruction and assessment, (3) the generation of quality evidence, and (4) management by instructors to allow appropriate feedback, feed forward and follow-up. According to Gibbs and Simpson (2004:3-29) if education institutions claim to provide educational services, they must prove to society that they do by applying some kind of cutting-edge assessment mechanisms.

THEORETICAL FRAMEWORK

Every researcher is aware of the importance of theory in teaching, learning and research. Theory teaches us what we know. Theory also tells us what we do not know and guides us in our research. Theory points to where/how research can further advance a discipline, a professional practice and public policy. “Research that is not grounded in theory is wasteful.” (Moore, 1991:1-6). Against this backdrop, this study has made use of Gibbs and Simpson’s (2004:3-29) constructivist-interventionist theoretical framework because the main idea in any student assessment is to provide constructive feedback aimed at enhancing learner motivation. Gibbs and Simpson (2004:3-29) view assessment as the process by which the institution is able to confirm that a student has achieved the learning outcomes and academic standards for the module or award for the program for which he or she is registered.

RESEARCH METHODOLOGY

This was a qualitative integrative literature review of interpretive synthesis of data from primary qualitative research studies conducted between 2000 and 2014 worldwide. Despite the variations

from a typical meta-analysis, the researcher began this meta-synthesis in the manner common to all literature reviews: by circumscribing a time period for inclusion from 2000 to 2014. Although the researcher recognised that many studies pre-date this period and many important works have been published since, the time frame chosen coincided with the rapid growth of qualitative studies in education. The review began in 2000, at the same time several influential works on qualitative data analysis were published. Whereas a decade seems a long period, the researcher believed that it allowed him time to find enough quality studies to develop themes useful for assessment practitioners in distance education.

The search terms for this study were open and distance learning, formative, summative and innovative assessment. Before conducting the screening processes the researcher used the following six steps of a qualitative meta-synthesis: Broadly formulating the review question related to the phenomenon being studied, conducting a systematic literature search, screening and selecting appropriate research studies, analyzing and synthesizing findings, maintaining quality control and presenting the findings. In order to identify studies that were related to the topic, objectives and the research question, the researcher completed an electronic literature search by submitting the search terms to the librarians and other international primary search source indexes such as: Pro Quest, EBSCO HOST , Educational Resource Information Centre (ERIC), Google Scholar and Academic Search Premier to mention a few.

Inclusion and exclusion criteria

The selection criteria for this meta-study had to meet the following inclusion criteria: a primary qualitative design, English language, relevance to the topic, a focus on student assessment in ODL published between 2000 and 2014 in peer-reviewed journals. All studies published before 2000 were not included even though they had information on student assessment in ODL. Once the processes of retrieval, inclusion and exclusion criteria were accomplished the systematic review of qualitative studies started. To minimize bias against non-published research literature, a search through Pro Quest Dissertations and Theses was conducted to locate studies published between 2000 and 2014. Before these studies were considered for inclusion, they had to pass through various standards of academic rigor for their suitability for inclusion in the final review.

After different combinations of search terms and revising search strategies in the various databases, the final outcome of this long search yielded fourteen primary qualitative studies. From the fourteen studies screened, nine were rejected because they either did not directly refer to student assessment in open and distance learning or they had a quantitative research focus. After passing various standards of academic rigor only five studies were selected for the final synthesis.

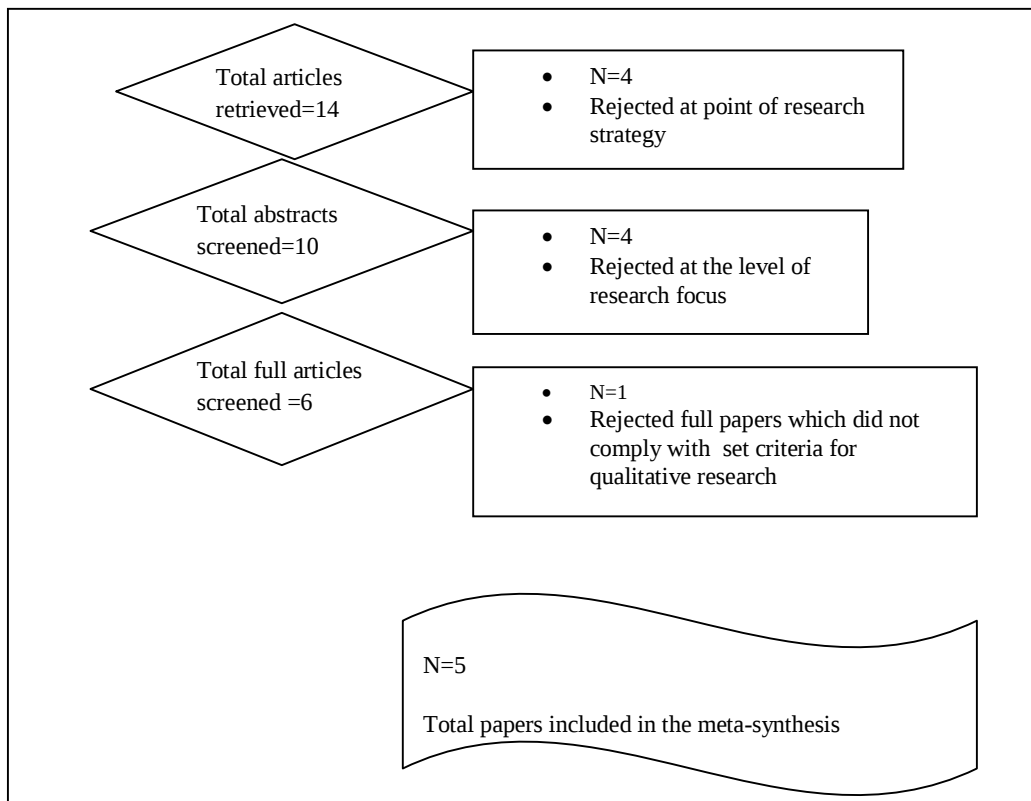


Figure 1: Summary of the screened and selected studies

Table 1 shows the screening criteria for synthesis (Adapted from Paterson, Thorne, Canam & Jillings, 2001)

No	Screening criteria for inclusion and exclusion	0	1	2
1	Research question stated clearly and adhered to			
2	Design clearly designed			
3	Aims of the study clearly described			
4	Sampling clearly described			
5	Data collection setting identified			
6	How were data collected?			
7	How were data recorded and ethical aspects described?			
8	Data analysis described with transferability			
9	How were themes and categories identified?			
10	Credibility (member checks, validation of data)			
11	Clear statement of findings			
12	Justification of data interpretation			
13	Clear demarcation between data and researcher's views			
14	General transferability of the research			
15	Was research useful and relevant?			
16	Will the results help?			

List of full studies screened for this meta-synthesis

1. Brookhart SM 2001. Successful students' formative and summative uses of assessment. *Assessment in Education*, 8(2):153-169.
2. Carless D 2007. Learning Oriented assessment: conceptual bases and practical implications. *Innovations in Education and Teaching International*, 44(1):57-66.

3. Deborah C, Mathias H 2009. *Assessment options in Higher education*, 34(2):127.
4. Getzlaff B, Perry B, Toffner G, Lemarche K , Edwards M. 2009. Effective Instructor Feedback: Perceptions of Online Graduate Students. *The journal of Educators Online*, Volume 6(2):1-22.
5. Gibbs G, Simpson C 2004. Conditions under which assessment supports students' learning. *Learning and Teaching in Higher Education*, 1(1):3-29.
6. Hallas J 2008. Rethinking teaching and assessment strategies for flexible learning environments. In Hello! Where are you in the landscape of educational technology? Proceedings ascilite Melbourne. [Online]. Available on: <http://www.ascilite.org.au/conference/melbourne08/procs/hallas.pdf>. (Accessed on 18 April 2013).
7. Johnston PM 2010. Towards culturally appropriate assessment? A contribution to the debates. *Higher Education Quarterly*, 64(3):231-245.
8. Kramer P 2009. Assessment and Evaluation in Higher Education, *Journal of Distance Education*, 31(5):597-609.
9. Thorpe M 2010. Assessment and Third generation distance education. *Journal of Distance Education*, 19(2):265-286.
10. Rae AM, Cochrane DK 2008. Listening to students: How to make written assessment feedback useful. *Active learning in higher education*, 9(3):217-230.
11. Rowntree D 2008. Designing an assessment system. Distance learners. [Online]. Available at: <http://www.iet.open.uk/pp/D.G.F.Rowntree/Distance-learning.htm>. (Accessed on 26 November 2013).

12. Stefani L 2004. Assessment in partnership with learners. *Assessment and Evaluation in Higher Education*, 23(4):339-350.
13. Williams J, Kane D 2009. Assessment and feedback: Institutional experiences of student feedback, 1996-2007. *Higher Education Quarterly*. 63(3):264-286.
14. Wilson M, Scalise K 2006. Assessment to improve learning in Higher Education: The Bear Assessment System. *Higher Education*, 52(4):635-663.

List of studies included in meta-data analysis

1. Brookhart SM 2001. Successful students' formative and summative uses of assessment. *Assessment in Education*, 8(2):153-169.
2. Getzlaff B, Perry B, Toffner G, Lemarche K, Edwards M 2009. Effective Instructor Feedback: Perceptions of Online Graduate Students. *The journal of Educators Online*, Volume 6(2):1-22.
3. Thorpe M. 2010. Assessment and Third generation distance education. *Journal of Distance Education*, 19(2):265-286.
4. Kramer P 2009. Assessment and Evaluation in Higher Education, *Journal of Distance Education*, 31(5):597-609.
5. Rae AM, Cochrane DK 2008. Listening to students: How to make written assessment feedback useful. *Active learning in higher education*, 9(3):217-230.

The process of meta-synthesis is discussed below using the following sequence: The meta-method, the meta-data analysis and the meta-theory. After this the researcher described the theoretical underpinnings in each study under meta-study.

META-METHOD

Meta-method is a study of the epistemological soundness of existing research and includes an examination of methodological positions, an evaluation of the research methods in terms of weaknesses, limitations and applicability to the specific study. Meta-method offers a strategy by which to reflect on the role of methodological orientation and decision making as it shapes the findings of individual studies, and also provides an angle from which to interpret a body of knowledge as it has evolved. From the meta-method, the researcher identified the approaches and patterns that have been applied and why such approaches may have been used in contrast with others. Table 2 shows the demographic data of the study population used. The table indicates the sample methods, sample size, sample characteristics, status of support and the geographical location where the study was conducted. The researcher started the screening procedure by doing study sampling wherein a clearly defined purposeful sampling was used in order to set tighter boundaries for synthesis and to ensure fair representation of findings. The sample characteristics of most of the studies were composed of students and lecturers from distance education institutions. This study obtained its data from different distance education institutions across the world namely, the United States of America, Canada, and the United Kingdom. The next step in the meta-method was to analyze the research designs which include the following aspects: research questions, settings, objectives of the study and data collection.

Table 2: Demographic data of the study population

Articl es	1	2	3	4	5
Autho rs	Brookhart (2001)	Getzlaff et al (2009)	Thorpe (2010)	Kramer (2009)	Rae & Cochrane (2008)

Sample	Purposeful sampling	Purposeful	Purposeful	Purposeful	Purposeful
Status of support	Successful use of formative and summative assessment in ODL	Successful use of effective instructor feedback	How lecturers development of online assessment	Instructional support	How educators made written assessment feedback useful in ODL
Country	University of Duquesne, Pittsburgh, USA	Athabasca University, Canada	OUK, United Kingdom	St John's University, Minnesota, USA	University of Glasgow Caledonian, United Kingdom
Sample Characteristics	Students doing English Honours	Students who are registered online	Students who were doing online course	Researcher was a participant observer	Registered nurses divided into 2 focus groups

These studies collected data through phenomenology, case study and focus groups. Three studies namely, Brookhart (2001), Getzlaff et al (2009) and Kramer (2009) used phenomenological approach, the other two used focus group and case study. All the studies used themes, codes and quotations to analyze their data. To validate their data triangulation and member-check were utilized as displayed in table 3. The overall appraisal of the five studies on ODL assessment resulted in a conclusion that researchers used basic interpretive qualitative research designs to understand how participants make meaning of student assessment methods in open and distance learning. The review of the primary studies revealed that most of the research questions focused on student perceptions of assessment practices in ODL.

INSIGHTS FROM META-METHOD

The comparison of data collection techniques was helpful in exposing the way in which data are collected in meta-synthesis. The overall appraisal process revealed that interviews were predominantly used to provide a highly descriptive and rich understanding of the process of planning, designing, and implementing student assessment processes. One study by Rae and Cochrane (2008) used focus-group interviews as a technique and it allowed for a debate, interaction and engagement of the participants in the topic of written assessment feedback. Even though these studies yielded a lot of knowledge on assessment practices in ODL, there were discrepancies on some of their data collection strategies. A study by Rae and Cochrane (2008) used focus-group interaction as its data collection strategy. The researcher suggests that the study could have used unstructured-in-depth interviews because focus-groups have limitations. However, the most significant challenges for this study were, first, difficulty in capturing non-verbal interactions since researchers may have less control over the direction of the discussion than in a one to one interview. Large groups may preclude everyone from having a chance to contribute. It should have been better had the researchers decided to write down notes while the focus-group was in process so that they could link non-verbal interaction to the verbal accounts. The last major drawback the researcher has noticed were the aims of these studies. All of them were either interested in determining students' perceptions or reflections of formative and summative assessment or online learning and assessment.

Table 3: Summary of the aspects investigated in the meta-method

Articles	Brookhart (2001)	Getzlaff et al (2009)	Thorpe (2010)	Kramer (2009)	Rae et al (2008)
Research question	Six questions	Two questions	One question	One question	One question

Aim of study	To document students' perceptions of formative and summative assessment	To determine students' perceptions of effective instructor feedback	To explore students' reflections of online teaching practice	To explore how anonymity influences success in DE assessment	To capture and interpret student perspective of written assessment feedback
Research design	Phenomenology	Phenomenology	Case-study	Phenomenology	Focus group
Data collection	In-depth interviews	In-depth interviews	Semi-structured interview	In-depth Interviews	Focus group interviews
Data analysis	Coding of important categories	Data analysed through thematising	Data analysis was based on reduction and interpretation	Data was qualitatively analysed	Thematic content analysis
Rigor	Triangulation from two researchers	Investigator triangulation	Transcripts validated by researchers	Transcripts checked with participants	Experienced researcher used as transcriptionist

FINDINGS AND DISCUSSION OF THE THEMES

The meta-data analysis involves the re-interpretation of the actual findings from primary qualitative studies and provides a technique of aggregating and making sense of findings from various individual pieces of research about a particular phenomenon. For this study an interpretive and comparative approach was used. Furthermore, the researcher adopted a

hermeneutic view of synthesis in his search for the meaning of student assessment in open and distance learning. The researcher accomplished the analysis of the studies through different steps of reflection. In the first step, the researcher used an analytic protocol on which information about the author, the sample size, and the main findings were captured. In table 4 the researcher wanted to know how the concepts in each study were related and how assessment practices were described. Each study has been re-read and re-interpreted with the aim of getting the analytical strategy used in each study before coming to conclusion. To analyze the data, different studies were grouped into aspects of student assessment in ODL. Firstly, each article was read in detail noting how the phenomenon of student assessment in ODL and online learning were described. Initial codes were made and key concepts were highlighted with the codes being allocated to phrases and quotations on the studies. Secondly, studies were compared with each other noting the similarities and differences between the key codes of each study. This part was time consuming and intense because of the movement between the articles and reading and re-reading. A list of initial codes to read and check each study for major categories in assessment in ODL was developed. Thirdly, the researcher hypothesised about the nature of the relationships between the studies. When the processes of comparing and contrasting came to an end five important themes emerged: (1) assessment feedback, (2) assessment as a driver of teaching and learning, (3), relevance of assessment, (4) gentle guidance and (5) team approach.

Theme one: Assessment feedback

This theme was about the provision of student feedback. Participants shared their thoughts with researchers as illustrated here: “It’s good if you sort know which bit [of assignment] you’ve fallen down on and what you could improve on...I feel that’s what we’re here to do is to improve.”(Rae & Cochrane, 2008:222). In this theme students expressed various opinions relating to the time gap from handing in the assignment and receiving feedback. Furthermore, researchers discovered that most students regard mark allocation as the most important part of their feedback as indicated in this comment: “I’ve had both, [handwritten and typed] and I think the typed is easier to read but you still get the personal touch with the handwritten, it makes you feel that it is more addressed to yourself” (Rae & Cochrane, 2008:224). The overwhelming

emphasis from the students in relation to this theme is that they value personalized feedback and the opportunity to have face to face dialogue with their lecturers to facilitate understanding of the feedback. The above quotations reinforce that feedback is crucially important to students in open and distance learning contexts.

Theme two: Assessment as a driver of Teaching and learning

In this theme students talked about the successful use of formative and summative assessment in teaching and learning. Notice in the following comment the student's description of how studying led to learning: "He expects us of course to pay attention in class, he expects us to study on our own. I guess it's good he gave us quizzes because that forces you to study specifics. I think it's really important to get that feeling of mastering something for once." "After doing this poetry unit and after reading to the class, I actually decided to create some of my own examples, I went to the library on my own time, as a hobby." (Brookhart, 2001:162). In the above examples, the process of doing the assignment motivated the student to do additional work. The comments of these successful students were detailed enough to allow the researchers to understand students' reasoning about the use of formative assessment information to improve learning.

Theme three: Local control of assessment practices

This theme emphasized that student assessment should be locally controlled. This was evidenced by the comments made by some of the participants, for example: "It was important to bring all assessment constituents to the table when planning and conducting student assessment, failing to do that, meant the mission of assessment is going to encounter roadblocks and resistance." (Kramer, 2009:604). The issue of providing effective student feedback would be easy to carry out because it would be locally controlled as indicated in this quotation where students characterize assessment feedback as "unique to me," "specific to the learner," "just for/ about me," "tailor made to what I said or submitted," "customized," (Getzlaff et al, 2009:10). Participants in the study saw effective feedback not as a top-down process with an instructor in

control of determining those aspects of the student's learning on which feedback would focus, in isolation from the student. Rather, student participants saw feedback as a mutual process with both the instructor and the student coming to agreement early in a course regarding the feedback foci for that individual

Theme four: Gentle guidance

This theme relates to gently guiding or coaching students as they navigate their way through course activities. This theme is in line with Holmberg's (2003:79-85) guided didactic conversation theory which states that: "Friendly conversation is important to motivate the learners to work hard and achieve the outcomes in both traditional and distance education contexts". Phrases such as "kept the flow of the post... [going] in the right direction," or "moved the process or pointed it into a different direction," and "steered the course" gave indication that the study participants saw effective instructor feedback as both helping to set the direction for the course and keeping them headed that way. Students acknowledged that they desired feedback from instructors that they found "supportive," "positive," "encouraging," and "friendly." (Getzlaff et al, 2009:11-12).

Theme five: Group work

This theme discovered that collaborative work plays an important role because it encouraged the students to work together. They enjoyed the exchange of information and different points of view as indicated in the following comment: "Some of us had set up our own self-help group. There were seven of us originally and six of us got together." "At first it was slow going with no-one contributing until the last minute. It was a bit off-putting. I was expecting everybody to contribute right at the very beginning. I found nobody had contributed anything when I logged on each day." (Thorpe, 2010:279). The evidence from the above quotations indicates that group work plays a very important role in student learning and assessment.

Table 4 Main findings per study

Article	Sample	Findings	Quotes and references	Main themes
Brookhart (2001)	50 students	This study found out that students are interested in using assessment information in both formative and summative ways.	‘He expects us of course to pay attention in class, he expects us to study on our own’ (Brookhart, 2001:162)	Feedback
Getzlaff et al (2009)	30 students	The study revealed that effective feedback is a crucial aspect of the direct instruction component of teaching presence of online instructors.	‘Not a cookie cutter approach’ ‘Tailor made to what I said or submitted’ (Getzlaff et al, 2009:10)	Assessment drives teaching and learning
Thorpe (2010)	30 students	The study discovered that collaborative work played an important role because it encouraged the students to work together.	‘The course is a time stealer’ (Thorpe, 2010, p. 276)	Group work
Kramer (2009)	17 individuals	This study by Kramer found out that for assessment protocol to be a success stakeholders should be involved.	‘It was important to bring all assessment constituents to the table when planning and conducting assessment’. (Kramer, 2009:604)	Team approach
Rae &	2 focus	The study indicated that	‘It’s good if you sort	Clear

Cochrane (2008)	group	students require that assessment criteria should be communicated clearly before they commence with their assessment.	know which bit [of assignment] you've fallen down on and what you could improve on...I feel that's what we're here to do is improve''(Rae & Cochrane, 2008:224)	expectations
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INSIGHTS FROM META-THEORY

The meta-theory involves examination of the theories leading to the primary researcher's topics, frameworks and research questions. Meta-theory involves analysis of the underlying structures on which the research is grounded. It requires scrutiny of such features as the philosophical, cognitive and theoretical perspectives underlying research design strategies, the sources and assumptions inherent in emerging theory, and the consideration of relationships between emerging theory and the larger contexts in which it has been generated. The underlying theoretical frameworks on student assessment in ODL were based on concepts such as assessment feedback, electronic submission, formative and summative assessment. In this study the major paradigms underlying the theoretical framework on assessment practices in ODL were naturalism and constructivism (Brookhart, 2001; Rae & Cochrane, 2008; Kramer, 2008). In a naturalistic enquiry the aim is to understand meaning from the participants' point of view. Kramer (2009) respectively came up with behaviourist and social constructivist paradigms.

Table 6: Meta-theory

	1	2	3	4	5
Authors	Brookhart (2001)	Getzlaff et al (2009)	Thorpe (2010)	Kramer (2009)	Rae& Cochrane

					(2008)
Theoretical orientations	Naturalistic inquiry	Community of inquiry framework	Constructivist framework	Constructivism	Naturalist paradigm
Influence on context	Assessment to be integrated in teaching and learning	Effective feedback to be provided to students	The importance of online teaching, learning and assessment	Inclusion of stakeholders in assessment	Engaging students in assessment

RIGOR

As with any research and methodology, a meta-synthesis should be conducted in a scientifically rigorous manner to establish the reliability and validity of the findings. To come up with trustworthy answers, the analysis has to treat the evidence fairly and without bias, and the conclusions must be compelling, not least ruling out alternative interpretations (Tesch, 1990). On this line of thinking, rigor was determined by using the following processes namely: credibility and triangulation. Studies were then assessed for methodology, with non-qualitative studies being removed from meta-synthesis cohort. Upon the elimination of inappropriate studies, five qualitative studies with an emphasis on assessment practices in ODL remained for synthesis. To enhance credibility the researcher engaged with the data for about six months, reading, coding and re-reading the selected studies. Immediately after studies were identified, the researcher embarked on a compare and contrast exercise. Furthermore, the researcher made use of investigator triangulation. Data collected were analyzed and validated by two researchers with experience in student assessment in ODL to independently check the process at each stage. The two researchers started the process by embarking on the process of checking if all the studies included had met all the inclusion criteria as set out in the beginning. Data validation was further ensured by describing the process of meta-study as it unfolded. Stages demonstrating the rigor that have been included in this study include amongst others the following: How relevant studies

were selected? Reading and review of the selected studies, a description of how studies relate to each other, how the studies were translated into one another to present a unified theme? How results were presented and interpreted?

SYNTHESIS AND LIMITATIONS OF THE STUDY FINDINGS

This study reflected on the primary qualitative studies from different contexts world-wide. The study participants were distance education students from various countries around the world. The methodologies used to collect data were relevant to the research questions and yielded the results that were congruent to the findings. Regarding rigor, all the five studies included for this synthesis were found to be of high quality during the appraisal phase. The study discovered that all the studies had used purposeful sampling to select participants. Data analyzed yielded the following themes: Assessment feedback, assessment as driver of teaching and learning, local control of assessment practices, group- work, gentle guidance and team approach. The themes represented the feedback experience of the students. An important useful finding of this study was that the majority of the online teaching and assessment strategies motivated students to participate interactively with technology and to collaborate with their peers. The study also revealed that assessment process had major implications for what was assessed and how it was assessed. Though there were some studies from the African continent, the researcher could not use them for this synthesis because they did not meet the inclusion criteria since most of them lacked academic rigor. In fact the rigor in most of the studies was not of high standard although the data sources were published in peer-reviewed journals. Another limitation was that the data sources did not describe the theoretical frameworks used in their research clearly. Like any other research undertakings, the researcher's methodology faced numerous challenges and criticisms namely:

Data collection

When conducting this qualitative meta-synthesis, one major challenge the researcher came across was (1) Limited number of quality studies: To deal with this challenge the researcher decided to

use quality rather than quantity to guide decision regarding adequacy of available studies if a choice has to be made that is: Is the topic under study a new area of investigation? What is the estimated number of relevant primary studies out there? (2) Setting inclusion criteria: It was not easy to set up the inclusion criteria, however, the researcher paid careful attention to setting parameters for time cut-off, location, subjects, language of publication, nature of publication, etc, (3) Availability and accessibility of qualified primary studies: To deal with this challenge the researcher conducted systematic and sufficiently exhaustive literature search by using multiple databases and a combination of electronic and hand searches. The researcher consulted with professional librarians for best search terms and strategies.

Data analysis

When dealing with data analysis in meta-synthesis the researcher discovered that there were studies which contained both quantitative and qualitative data. In cases where some of the studies included were found to have used mixed methods, the researcher ended up extracting the qualitative component for inclusion into the synthesis. In certain circumstances studies were based on identical samples. This challenge was dealt with by including both or all studies in each report on different aspects or parts of the results. Each study was included if the findings were not repetitive. Another challenge the researcher came across was that of separating relevant data for analysis and validity of findings. To deal with these problem two researchers with expertise in assessment in ODL were engaged. Furthermore, the issue of qualitative meta-synthesis was also problematic because during the search for qualitative primary studies, the researcher came across very good quantitative primary studies that were relevant to the research topic but, the researcher was forced to eliminate them on the basis that they were not qualitative in nature. Had it not been the pre-determined clause set at the beginning of this search: “only peer-reviewed primary qualitative studies should be included,” the researcher could have included them.

CONCLUSION

The purpose of this study was to analyze and synthesize primary qualitative studies on student assessment in open and distance learning. The research approach, qualitative meta-synthesis was

utilized to locate quality studies on the topic under investigation. This study was able to discover that student feedback plays an important role in improving student teaching and learning in both face-to-face and distance education contexts. Even though it was not the aim of this study to investigate the role of technology in student assessment in ODL, the study found that most of the students in distance education want to embrace the use of technology enhanced assessment. Finally, this study reminded us that when planning and conducting assessment it is important to include not only those who have assessment expertise and academic leaders but also those internal and external stakeholders who affect or are affected by assessment.

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