

# The Linguistic Obstacles in Higher Education During the COVID-19 Epidemic in a Multilingual Society: A Qualitative Evidence Synthesis (QES)

N Thusi

University of Johannesburg, South Africa

---

**Abstract:** The Coronavirus (COVID-19) was declared a pandemic in March 2020, indicating that the disease had spread to all continents. Many South African universities began implementing online-based learning to replace classroom lectures. The problem in a multilingual society is that there are numerous impediments to students learning online with English as a medium of instruction. The purpose of this study is to identify the language challenges that arose as a result of the introduction of online learning in higher education. This study's investigative activities were guided by the theories of Cognitivism and Connectivism. The study conducted a Qualitative Evidence Systematic Review a summary of research literature that focuses on a single question, and purports the role of systematic reviews within evidence-based practices. A qualitative meta-synthesis according to the (Population/Place; Intervention; Comparator; Outcome) PICO framework seek to answer the question: 'Could proper implementation of e-learning in institutions of higher learning during COVID-19 pandemic resolve challenges in a multilingual society in Gauteng Province?' Articles were critically appraised for eligibility using the PRISMA flow diagram, screening the relevance and removing duplicates through assessment tool called CASP – Critical Appraisal Skills Programme. This method provides an opportunity to analyse data both deductively using positivist approach while using interpretivist approach to understand phenomenon. The researcher has used purposive sampling to select a number of articles that must go into the study. Thematic analysis was performed on a sample of 20 articles. The articles that were considered for analysis are those that have received Ethical approval by the authors. The findings of this ongoing study are expected to contribute to the existing body of knowledge on the language challenge in higher education with students in a multilingual society. Recommendations would be aimed at informing language policy makers.

**Keywords:** COVID-19, Multilingual society, Online Learning, Pandemic

---

## 1. Introduction

The Coronavirus (COVID-19) was declared a pandemic in March 2020, indicating that the disease had spread to all continents. Many South African universities began implementing online-based learning to replace classroom lectures. It should be noted that South African institutions of higher learning are characterized by multilingual societies. The Latin words "multi" (meaning many) and "lingua" (meaning language) combine to get the term "multilingualism" (Bussmann, 1996). As a result, the term "multilingualism" refers to the ability of a speaker to converse fluently in more than one language (Li, 2011). It has been found, however, that expertise in one language tends to outweigh others in a multilingual setting, in both written and spoken communication. It is also possible to think of multilingualism as the coexistence of multiple languages in a society (Li, 2011)

Many of these languages can be official or unofficial, native or foreign, and domestic or worldwide. When referring to the ability to speak two languages with native-like fluency, the term "multilingualism" is often employed. There are situations in which a single person can speak more than three languages fluently, and the term "multilingualism" is used in this article to refer to the capacity to speak two or more languages fluently (Lyons, 1981). Both "bi" and "tri" can be used to describe someone who is fluent in more than one language because the prefix "multi" means "more than one." We get more multilingual as we use more languages. To be labelled a multilingual country or society, its population or residents must be fluent in many languages (Lyons, 1981). Many times, the whole range of communicative competence in many languages is visible among the multilingual persons. However, perfect multilingualism does exist in the real world. Even if we learn

two or more languages at the same time, there is a noticeable tendency for one language to always take precedence over the others that are regarded inferior (Okal, 2014).

Furthermore, in a multilingual society, there are numerous impediments to students learning online with English as a medium of exchange. A study conducted by UNESCO (2016) and further ratified by Erling, Adinolfi and Hultgren (2017) found out that students who use English as a second or third language were often faced with challenges related to comprehension and application during instruction where English was the medium.

This problem is compounded by lack of skills regarding online platforms that are used by most universities. While the students are regarded as digital natives (Shtepura, 2018), navigating online and digital platforms does not present any form of impediment, but older lecturers and facilitators, regarded as digital immigrant (Wang, Myers & Sundaram, 2013; Prensky, 2001) seemed to struggle with use of digital platforms as part of instruction. So, in view of the above, a combination of generational challenges between digital natives and digital immigrants compounded learning delivery problems in a multilingual society that features prominently in South African institutions of higher learning. All these problems were attributed to improper implementation of e-learning. It is for that reason seeks to answer the question, 'Could proper implementation of e-learning in institutions of higher learning during COVID-19 pandemic resolve challenges in a multilingual society in Gauteng Province?'

## 2. Methodology and Techniques

### 2.1 Methods

A qualitative evidence synthesis (QES) was used as a method of inquiry for this study. According to Grant and Booth (2009), a qualitative evidence synthesis is an approach that does not seek to intergrate findings of qualitative studies, but seeks to configuratively inteprete these findings for broadening understanding on a phenomenon while at the same time solving a particular problem. Furthermore, the value of using a QES, sometimes referred to as a Meta-Synthesis is its inherent ability to:

- Build theory.
- Explicate theory.

- Develop theory.
- Social intervention (Chrastina, 2018).

An established approach to QES is first the determination of a research question alligned to the (People/ Place, Intervention, Comparator, Outcome) PICO framework (Leonardo, 2018). The research question of this study is 'Could proper implementation of e-learning in institutions of higher learning during COVID-19 pandemic resolve challenges in a multilingual society in Gauteng Province? To answer this question, the second step in the process of QES was to develop a search strategy (McGowan, Sampson, Salzwedel, Cogo, Foerster & Lefebvre, 2016) and reporting guidelines (McKenna-Plumley, Groarke, Turner & Yang, 2020). The strategy was to extract data (articles) from Google Scholar, Crossref, PubMed, Microsoft Academic, Scopus and Web of Science through the Harzing's Publish or Perish software (Harzing, 2010). Reporting guidelines for selected articles was conducted according to the Proffered Reporting Items in Systematic Reviews and Meta-Analysis (PRISMA) Framework (McKenna-Plumley *et al.*, 2020). This is demonstrated in Figure 1 on the next page.

#### 2.1.1 Review Process

As proposed by Noblit and Hare (1988) and McKenna-Plumley *et al.* (2020), and as shown in Table 1 and further described below, the review procedure followed a step-by-step methodology.

#### 2.1.2 The Origin/Source of the Research Data

Systematic Review process involves collecting secondary data studies in a systematic, logical and organized way and Critical Appraisal to avoid biases.

**Step 1** has been addressed above using a PICO framework to establish the research question (Booth *et al.*, 2016). It is well understood that in most systematic reviews, the PICO deals with all variables mentioned above except the phenomenon of interest, which features suitably in systematic QES studies (Booth *et al.*, 2012). The proper implementation of e-learning in institutions of higher learning during COVID-19 pandemic. Secondly, the phenomenon of interest was resolve challenges in a multilingual society in Gauteng Province.

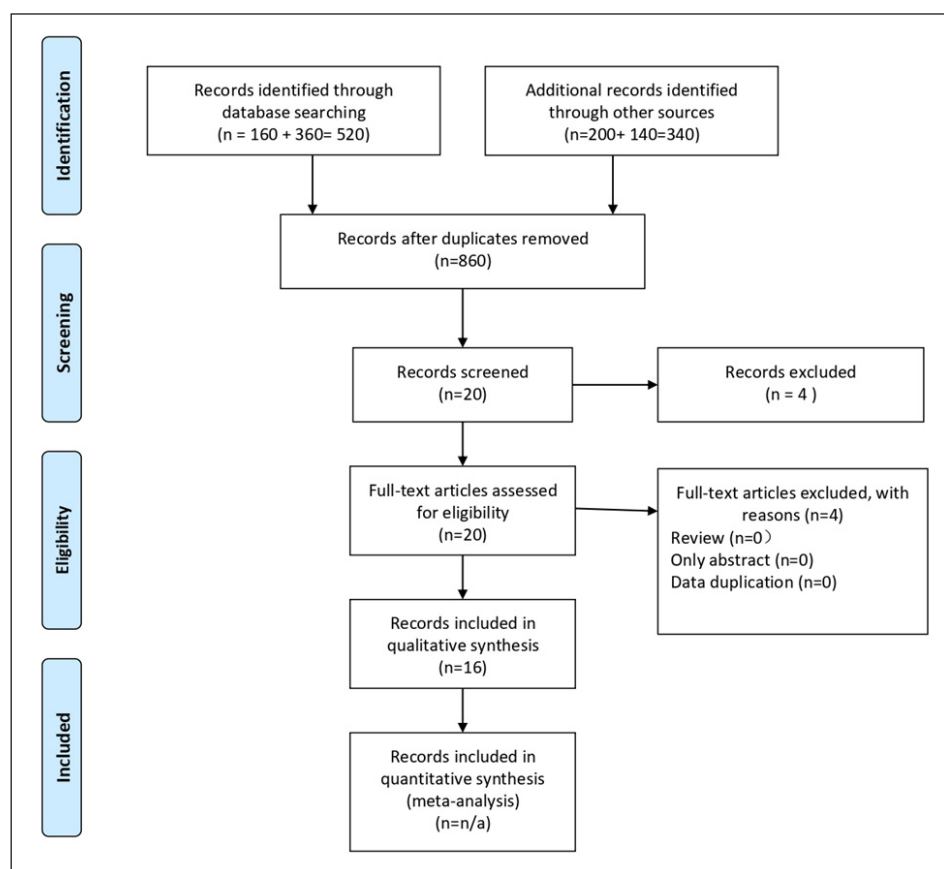
**Step 2** was met by using Harzing's Publish or Perish software, which provides access to databases and indexing platforms such as Crossref, Google Scholar, Scopus, Web of Science, PubMed, Semantic Scholar

and OpenAlex (Harzing, 2010). Google Scholar was chosen for this exercise, justifying this choice to minimise duplications if many databases could be used.

**Step 3 and Step 4** were integrated into this investigation. Search terms were made up of crucial concepts/variables within the research question and were used to obtain articles in the search. Using Google Scholar, Harzing's Publish or Perish

software returns a maximum of 1000 articles per hit. However, the purpose of QES is not to conduct an exhaustive search (Flemming & Jones, 2020), as in the case of systematic reviews, but to conduct a comprehensive search (Booth, 2019). The following figure reflects the workflow of articles selected through the search strategy mentioned in this paragraph, aligned to the PRISMA method (Moher, Liberati, Tetzlaff & Altman, 2009).

**Figure 1: PRISMA Flowchart**



Source: Author

**Table 1: Study Protocol**

Step	Description
1	Crafting a specific question
2	Deciding on search databases
3	Developing search terms and retrieving articles
4	Screening articles for duplicates and later on relevance
5	Quality appraisal for legibility
6	Critical Skills Appraisal of purposively selected qualitative studies
7	Final synthesis and presentation of findings

Source: Author

**Step 5** focused on the quality appraisal of qualitative studies retrieved. In an unsettling contrast, the methodological approach of qualitative research quality assessment brings together the dual heritages of a systematic review of effectiveness and primary qualitative research. Epistemological and practical discrepancies emerge at every level, from what quality means to whether a quality evaluation is even necessary (Carroll & Booth, 2015).

### 2.1.3 Presentation of Protocols

This structure places rigor at the heart of all systematic reviews and requires researchers to fulfill certain procedural activities such as explication of how articles were Identified, Appraised, and Synthesized (PRISMA, 2015).

## 2.2 Criteria for Inclusion and Exclusion of Studies

Articles for inclusion into the study were appraised using the Critical Appraisal Skills Programme, recommended as a best-fit appraisal tool in academic research by Cochrane and the World Health Organization (Majid & Vanstone, 2018). Table 2 depicts 10 assessment criteria for appraisal of qualitative research studies in qualitative evidence synthesis.

### 2.2.1 CASP – Included Article Appraisal Report

Data analysis was conducted using synthesis guidelines for the literature review as propounded in Onwuegbuzie, Leech and Collins (2012). Out of the five critical approaches to synthesizing the

literature, such as constant comparison analysis, domain analysis, taxonomic analysis, componential analysis, and theme analysis, this study used a themed approach to the literature analysis.

Criteria for inclusion in this study involved articles that:

- Were written in English and published in recognised journals.
- Were published between 2018 and 2021.
- Were based on qualitative research methods and designs.
- Met the CASP (Long, French & Brooks, 2020) criteria for article critical appraisal.
- Focussed on higher education and learning.

## 2.3 Data Analysis

In analysis of qualitative data within the tradition of systematic reviews, Meta-ethnography (Noblit & Hare, 1988), meta-synthesis (Lachal, Revah-Levy & Orri, 2017, and narrative synthesis (Popay, Roberts, Sowden, Petticrew, Arai, Rodgers & Britten, 2006) are all acknowledged methods for analyzing and synthesizing qualitative research (Grant & Booth, 2009). For the current QES, the author used the method of thematic synthesis in order to gain a more comprehensive grasp of the various ways that affected the phenomena under investigation (Grant & Booth, 2009). Thematic synthesis refers to the development of descriptive themes that adhere closely to the source studies. As a next step, the

**Table 2: CASP – Included Articles Appraisal Report**

Appraisal Question	Yes	Can't Tell	No
Was there a clear statement of the aims of the research?	13	0	0
Was a qualitative methodology appropriate?	13	0	0
Was the research design appropriate to address the aims of the research	12	1	0
Was the recruitment strategy appropriate to the aims of the research?	11	1	1
Was the data collected in a way that addressed the research issue?	11	2	0
Has the relationship between researcher and participants been adequately considered?	6	4	3
Have ethical issues been taken into consideration?	9	3	1
Was the data analysis reported in sufficiently detailed manner?	13	0	0
Is there a clear statement of findings?	13	0	0
Does the paper provide information about the value of the research?	10	2	1

Source: Author

reviewer goes "beyond" the source studies' interpretations to build higher-order constructs or explanations based on these descriptive themes (Booth, Sutton & Papaioannou, 2016; Newton, Griffith & Soundy, 2020).

In this study, 20 articles were critically appraised using CASP and finally 16 articles met the requirements of the analysis and as such were included as demonstrated in Figure 1 (Munthe-Kaas, Glenton, Booth, Noyes & Lewin, 2019). In academic research, particularly in Systematic Reviews, The CASP tool is the most often used checklist/criteria-based instrument for assessing the quality of qualitative evidence synthesis in health and social care (Long *et al.*, 2020). For its flexibility and user-friendliness as a quality appraisal tool, both Cochrane Collaboration and the World Health Organization as a preferred tool have endorsed CASP for novice and academic researchers. Figure 2 below reflects of the results of CASP Inclusion and exclusion report.

### 2.3.1 CASP – Excluded Article Appraisal Report

Articles were rated in terms of their strength against the 10 key questions in the CASP rater for quality. All articles falling below the score of 10 were excluded and all articles above this quality score were included in the final analysis in this study. Figure 3 on the following page demonstrates the

strength and weakness of articles included as per the CASP tool.

## 3. The Theory of Connectivism and Cognitivism

A theory, in the words of Oladele (1998), "represents broad laws or principles of observed phenomena." According to Omideyi, Adesina and Adika (2002:73), a theory is an organized, integrated collection of claims that both explains and anticipates behavior. A theory of learning is the result of extensive research and analysis by academics in the field of education. The instructor can use the material from learning theory as a practical and useful set of teaching guidelines. According to Gagne, Ing (2012), there are three components of teaching that can profit from an understanding of learning theory.

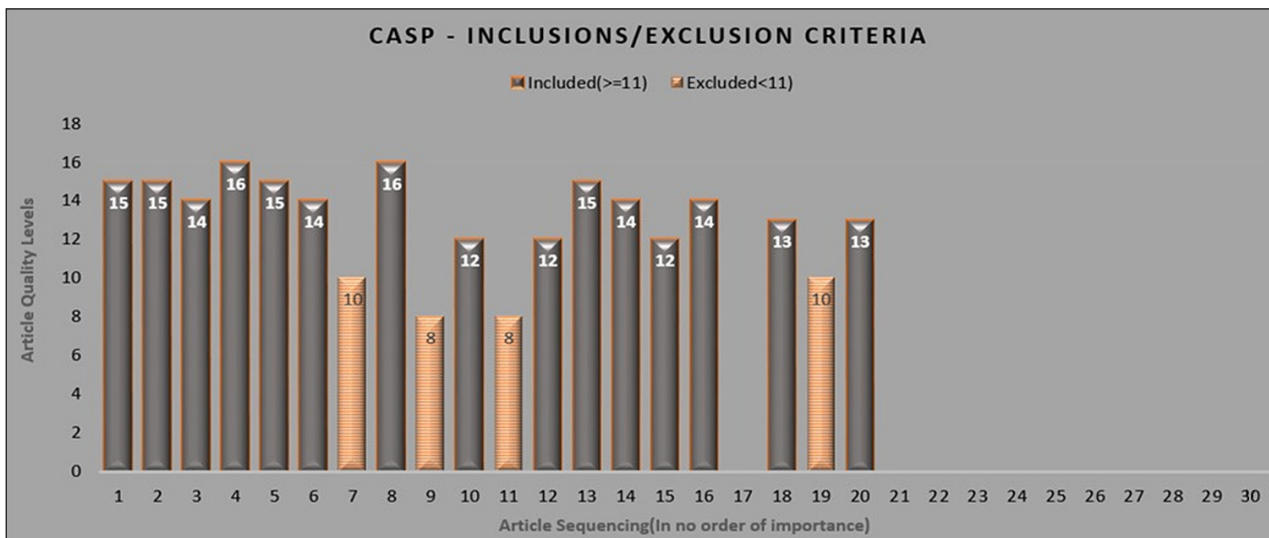
The first is the planning of courses, curricula and lessons. The second is the conduct of instruction; while the third is the assessment of what has been learnt. Teachers' adequate understanding of learning theories will greatly assist learners in gaining the most from learning activities. Ing (2012) adds that learning theory can help guide the presentation of what is to be learned. The investigative activities of this study will be guided by the theory of Connectivism and Cognitivism.

Figure 2: Inclusion/Exclusion Report

Article Number	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Rating	Decision
	Clear Research Aims	QUAL - Suitable Method	Research Design Suitable	Sampling Strategy Suitable	Data Collection Strategy Suitable	Researcher Role Consideration	Ethical Consideration	Data Analysis Rigor	Clear Statement of findings	Research Value Proposition		
1	0	2	1	0	1	2	1	2	2	1	15	Include
2	2	2	1	2	2	1	1	1	1	2	15	Include
3	2	1	1	1	1	2	2	1	2	1	14	Include
4	2	2	1	1	2	1	2	1	2	2	16	Include
5	2	1	1	2	1	2	2	1	1	2	15	Include
6	1	1	1	2	2	1	1	2	1	2	14	Include
7	1	1	1	1	1	1	1	1	1	1	10	Exclude
8	2	1	2	1	2	2	1	2	1	2	16	Include
9	1	1	0	1	0	1	1	1	1	1	8	Exclude
10	1	1	1	2	1	2	2	1	1	1	12	Include
11	1	1	0	1	1	1	0	1	1	1	8	Exclude
12	1	1	1	2	1	2	1	1	1	1	12	Include
13	1	1	1	2	1	1	2	2	2	2	15	Include
14	1	2	1	2	1	1	2	1	2	1	14	Include
15	1	1	2	1	1	1	2	1	1	1	12	Include
16	2	2	0	1	1	2	1	2	2	1	14	Include
17	1	1	1	1	2	1	1	1	1	1	11	Include
18	1	2	1	1	1	2	1	1	1	2	13	Include
19	1	1	1	1	1	1	1	1	1	1	10	Exclude
20	1	1	1	2	1	1	2	2	1	1	13	Include

Source: Author

Figure 3: CASP Article Rating Report



Source: Author

### 3.1 Connectivism Theory

George Siemens (2004), one of the early MOOC (massive open online course) pioneers, has been the main proponent of connectivism, a learning model that acknowledges major shifts in the way knowledge and information flows, grows, and changes as a result of vast data communications networks. Internet technology has shifted learning from internal, individualistic activities to group, community, and even crowd activities. Siemens recognized the contribution of networks and Alberto Barabasi's work in creating the theory. Additionally, he mentioned Karen Stephensen's piece from 1998, "What Knowledge Tears Apart, Networks Make Whole," which briefly described how big networks have evolved into a necessity for helping people and businesses manage data and information. "The integration of ideas investigated by chaos, network, and complexity theories, as well as self-organization theories, in which learning occurs within hazy settings of shifting fundamental elements that are not static," is how Siemens describes connectivism.

Learning is more important than our existing level of knowledge because it can occur outside of oneself and is defined as "actionable knowledge," which focuses on building connections between specialized information sets (in an organization or database). According to Siemens (2004), the dynamic of information movement is what gives connectivism its momentum. The ability to traverse

and recognize huge, dynamic, and evolving amounts of information is crucial for pupils. Connectivism is particularly effective in courses with a very large enrollment where the learning purpose or objective is to generate and produce knowledge rather than to convey it.

### 3.2 Cognitivism Theory

Cognitive theorists, who aimed to focus on the time between the appearance of an external stimulus and the student's reaction, popularized the notion that the mind plays a fundamental role in learning (Rnic & Dozois, 2017). They believed that motivation and imagination – two mental processes that connect environmental cues and pupil responses – were crucial elements of education. For instance, Noam Chomsky (1959) stressed the significance of creative mental processes that are not evident in the physical world in his critique of Skinner's behaviourist approach. Chomsky's position acquired popularity in other disciplines, like as psychology, while being written primarily from the perspective of a linguist. In order to understand how the brain functions and the stages of cognitive development that lay the groundwork for learning and knowledge acquisition, cognitive science is an interdisciplinary field that draws on psychology, biology, neuroscience, computer science, and philosophy.

Cognitivism has consequently become one of the most popular learning philosophies. The development

of more sophisticated online software into adaptive and customised learning apps that aim to include learning analytics and artificial intelligence into training makes the future of cognitivism particularly intriguing. Behaviourism, which stressed the study and evaluation of numerous processes in the learning process, contributed to the creation of taxonomies of learning. To break down and clarify the components of learning, behaviourists continually examined learning activities.

One of the first psychologists, Benjamin Bloom, stressed the value of problem solving as a higher order ability and created a taxonomy of learning that corresponded to the development of intellectual talents in 1956. Using Bloom's Taxonomy of Educational Objectives, published in 1956: The educational sector still considers Cognitive Domains to be a foundational literature and required reading.

#### 4. Results and Discussion

Studies reveal that institutions of higher learning in South Africa and around the world were already accepting huge numbers of students from a variety of linguistic backgrounds before COVID-19, and they will do so going forward. Decolonisation as well as transformation is complicated by the fact that English monolingualism coexists in South Africa with the execution of multilingual policy. This is a challenge for Higher-Educational Institutions (HEIs) in particular. This research has shown, however, that these rules are out of step with contemporary views of language as a social practice and digital practices, as well as linguistic perspectives that emphasise translanguaging (Heugh, Li & Song, 2017; Hurst & Mona, 2017). The field of translanguaging has received a massive amount of academic attention. As a result, it has become incredibly difficult, if not impossible, to keep contained. Examples include translanguaging scholarship, which opposes the normative colonial-era ideologies that project monolingualism as a universal standard for theorizing languages. To the contrary, it recognizes and validates the linguistic repertoires of speakers of other languages that are flexible, hybridised, and cross-boundary in nature. The recognition of language's fluidity and complexity (Garcia & Wei, 2014; Makoni & Pennycook, 2012) is also a key component. When used in the classroom, translanguaging gives multilingual students, who are typically construed as linguistic outcasts and illiterates, a transformative praxis and a liberating voice. Translanguaging

in South African universities, on the other hand, is a theory with limited empirical support.

Despite the fact that online education is not considered a new phenomenon, electronic learning has grown in popularity over the previous decade across the globe (Bhuasiri *et al.*, 2012). While it has been widely disseminated, it has not been fairly distributed throughout all countries and cultures (Hodgkinson-Williams, Slay & Sieborger, 2008). With similar issues to those faced by other countries, South Africa shifted its higher education system from face-to-face to online learning. For face-to-face university courses to be given online there was a pressing need. The study investigated the perceptions, obstacles, and determinants of e-learning acceptability among university students and faculty during the COVID-19 pandemic in this study.

#### 5. Conclusion and Recommendations

This study found out that most universities in South Africa were not ready for the use of online learning in multilingual societies. Despite the difficulties students face in transitioning from face-to-face to e-learning – particularly the prominence of the digital divide as the primary barrier to students achieving effective e-learning – customizing the Moodle LMS to meet the local needs of disadvantaged students is beneficial to achieving online learning in general. Furthermore, while there may be numerous obstacles that prevent students from realizing the full potential of e-learning, alternative pathways such as the provision of free data bandwidth, free physical and online resources, and the use of a blended learning information center, among others, appear to be the solution in the context of COVID-19. However, while this may be a viable option, students are unevenly challenged, necessitating continued capacity building in the use of learning management systems and other newly adopted online learning technologies. When supporting the use of online learning, it is equally critical that university-wide teaching and learning pedagogy, instructional designers, and e-learning policy examine the possible benefits and problems. Because of the digital gap in South Africa, there is an urgent need for increasing investment in upgrading resources, both in universities and in communities. While further study is needed, this paper emphasizes the practical as well as theoretical alternate pathways that can be employed to help university students and academics realize the full potential of online learning in multilingual societies.

The way literature appraisal is handled may make significant contributions to rigor in qualitative research. The CASP tool rigorously assesses all qualitative studies for quality appraisal, setting the standard for primary qualitative research investigators. It is recommended that primary qualitative researchers streamline their drawing conclusions to the rigorous methods used in Qualitative Evidence Synthesis. Their findings would be more realistic, reproducible, and provide funders with an alternative option.

## 6. Limitations

Qualitative Evidence Synthesis though they provide a rich account of the critical results of a specific study topic, synthesis and another type of systematic review can only address and synthesize the material presented in the primary studies. As a result, the large number of articles addressing opinions about the educational benefits of technology does not represent the world, but rather the research interests of the scholars. Another limitation is that QES only uses qualitative research studies to draw conclusions, as opposed to primary qualitative studies. There is no requirement to choose studies from a specific research paradigm.

## References

- Bhuasiri, W. *et al.* 2012. Critical success factors for e-learning in developing countries: A comparative analysis between ICT experts and faculty. *Computing Education*, 58(2):843-855.
- Bloom, B. 1956. *Taxonomy of Educational Objectives Handbook*. s.l.:David McKay.
- Booth, A., Cook, A. & Smith, D. 2012. Beyond PICO: the SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*, 22(10):1435-1443.
- Booth, A., Sutton, A. & Papaioannou, D. 2016. *Systematic Approaches to a Successful Literature Review*. LA: Sage.
- Bussmann, H. 1996. *Routledge Dictionary of Language and Linguistics*. London: Routledge.
- Carroll, C. & Booth, A. 2015. Quality assessment of qualitative evidence for systematic review and synthesis: Is it meaningful, and if so, how should it be performed? *Research Synthesis Methods*, 6(2):149-154.
- Chomsky, N. 1959. A review of B.F. Skinner's verbal behaviour. *Language*, 35(1):26-58.
- Chrastina, J. 2018. Meta-Synthesis of Qualitative Studies: Background, Methodology and Applications. *Education and Educational Research*, pp. 113-121.
- Erling, E., Adinolfi, L. & Hultgren, A. 2017. *Multilingual classrooms: Opportunities and challenges for English medium instruction in low and middle income contexts*, London: The British Council.
- Flemming, K. & Jones, L.V. 2020. Using evidence from systematic reviews. In: J.V. Craig & D. Dowding, eds. *Evidence Based Practice in Nursing*. s.l.:Elsevier, p. 109-125.
- García, O. & Wei, L. 2014. *Translanguaging: Language, Bilingualism and Education*. London: Palgrave Macmillan.
- Grant, M. & Booth, A. 2009. A typology of reviews: An analysis of 14 review types and associated methodologies. *Health Information and Libraries Journal*, 26:91-108. DOI: 10.1111/j.1471-1842.2009.00848.x.
- Harzing, A. 2010. *Publish or Perish: Your guide to effective and responsible citation analysis*. Melbourne: Tarma Software Research Pty Ltd.
- Heugh, K., Li, X. & Song, Y. 2017. Multilingualism and Translanguaging in the Teaching of and through English: Rethinking Linguistic Boundaries in an Australian University. In: S. Fenton-Smith, P. Humphreys & I. Walkinshaw, eds. *English Medium Instruction in Higher Education in Asia-Pacific*. Cham: Springer, p. 259-280.
- Hodgkinson-Williams, C., Slay, H. & Sieborger, I. 2008. Developing communities of practice within and outside higher education institutions. *British Journal of Educational Technology*, 39(3):433-442.
- Hurst, E. & Mona, M. 2017. Translanguaging as a Socially Just Pedagogy. *Education as a Change*, 21(2):126-48. Available at: <https://doi.org/10.17159/1947-9417/2017/2015>.
- Lachal, J., Revah-Levy, A., Orri, M. & Moro, M. 2017. Metasynthesis: An original method to synthesize qualitative literature in psychiatry. *Front Psychiatry*, (269):8-8.
- Leonardo, R. 2018. *Evidence Based Medicine and Practice*, 3(2). DOI: 10.4172/2471-9919.1000115.
- Long, H., French, D. & Brooks, J. 2020. Optimising the value of the critical appraisal skills programme (CASP) tool for quality appraisal in qualitative evidence synthesis. *Research Methods – Medicine and Health Sciences*, 1(1):32-42.
- Lyons, J. 1981. *Language and Linguistics: An Introduction*. Cambridge: Cambridge University Press.
- Majid, U. & Vanstone, M. 2018. Appraising Qualitative Research for Evidence Syntheses: A Compendium of Quality Appraisal Tools. *Qualitative Health Research*, 28(13):2115-2131.
- Makoni, S. & Pennycook, A. 2012. Disinventing Multilingualism: From Monological Multilingualism to Multilingual Francas. In: M. Martin-Jones, A. Blackridge & A. Creese, eds. *The Routledge Handbook of Multilingualism*. New York: Routledge, p. 439-453.
- McGowan, J. *et al.* 2016. Peer review of electronic search strategies: 2015 guideline statement. *Journal of Clinical Epidemiology*, (75):46.
- McKenna-Plumley, P., Groarke, J., Turner, R. & Yang, K. 2020. Experiences of loneliness: A study protocol for a systematic review and thematic synthesis of qualitative literature. *Systematic Reviews*, (9):1-8.
- Moher, D., Liberati, A., Tetzlaff, J. & Altman, D. 2009. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Medical* 6(7):e1000097.

- Munthe-Kaas, H. *et al.* 2019. Systematic mapping of existing tools to appraise methodological strengths and limitations of qualitative research: First stage in the development of the CAMELOT. *BMC Medical Research Methodology*, 19(113):1-13.
- Newton, G., Griffith, A. & Soundy, A. 2020. The experience of fatigue in neurological patients with multiple sclerosis: A thematic synthesis. *Physiotherapy*, (107):306-316.
- Noblit, G. & Hare, R. 1988. *Meta-ethnography: Synthesizing qualitative studies*. California: Sage.
- Okal, B. 2014. Benefits of Multilingualism in Education. *Universal Journal of Educational Research*, 2(3):223-229.
- Onwuegbuzie, A., Leech, N. & Collins, K. 2012. *Qualitative Analysis Techniques for the Review of the Literature*, s.l.: The Qualitative Report,17(28).
- Popay, J. *et al.* 2006. Guidance on the conduct of narrative synthesis in systematic reviews. *ESRC Methods Programme*.
- Prensky, M. 2001. Digital natives digital immigrants. *NCB University Press*, 9(5):1-6.
- Rnic, K. & Dozois, D.J.A. 2017. Available at: <https://www.science-direct.com/book/9780128034576/the-science-of-cognitive-behavioral-therapy>. The Science of Cognitive Behavioral Therapy.
- Shtepura, A. 2018. The Impact of Digital Technology on Digital natives' learning: American outlook. *Comparative Professional Pedagogy*, 8(2):128-133.
- UNESCO. 2016. *If you don't understand, how can you learn?*, Geneva: Global Education Monitoring Report. Policy Paper 24.