



**An Exploration of Commerce Education Students' experiences of learning using  
virtual collage**

**By**

**OBUM PRINCE EZEAGBA**

**Student Number: 219094394**

**A dissertation submitted to the School of Education**

**University of Kwa-Zulu Natal (Edgewood Campus)**

**In partial fulfillment of the requirements for the degree of Master of Education**

**Supervisor: Dr Jugathambal Ramdhani**

**Date Submitted: November 2023**

## DECLARATION

I Ezeagba Prince Obum do hereby declare that this dissertation is my work and the views of authors in my research have all been duly acknowledged and listed in the bibliography.

This research has not been submitted previously for a degree at this or another university.



.....

...01 July 2024.....

**Obum Ezeagba**

Date

(Researcher)



.....

01 July 2024.....

**Dr Jugathambal Ramdhani**

Date

(Supervisor)

## ACKNOWLEDGEMENT

- Firstly, the acknowledgement goes to the Almighty God for keeping me alive and making everything possible for the completion of this study.
- Secondly, it is a great honour for me to finally say thank you to my supervisor, **Dr Jugathambal Ramdhani** for giving me hope, support, and guidance.
- Thirdly, I would like to acknowledge my family my Wife, and my kids and the COHORTS at UKZN for their support and understanding during this journey.

## DEDICATION

I would like to dedicate this work to the Almighty God. This work is dedicated to my Wife, my mother, and my late father. Their teachings have always been the source of my inspiration and pillar of support.

## ABSTRACT

This is qualitative research is an Exploration of Commerce Education Students experiences of learning using virtual collage. Students in EMS 4 Module were grouped for an assessment which required them to submit a virtual collage. This study analysed 17 group submissions which included both a virtual collage and a reflection. This study involves the generating of information that is both rich and deep and is mostly used in qualitative research methods; this information is then represented from the perspective of the participant. Purposive sampling was applied in the selection of the virtual collage used in this research study. Additionally, reflections of students were used to enrich the data. The study considered that this would reflect and draw on the type of experience the students had in making these collages so that the data collected could provide thick descriptions of how had learning occurred in these rural contexts as compared to the university context.

Critical Discourse Analysis (CDA) was used to analyze the data from the collages collected. The findings categorized under the themes of topicalisation, connotation, and presupposition. The findings show that the post reflections helped the students improve their corporation in learning how to create a collage. It also show that innovative teaching methods can deepen conceptual knowledge among students. The study recommends a change in the style of teaching to incorporate innovative teaching methods to motivate students to learn and perform better and enhances their understanding of the topic and improvement in their overall performance.



# TABLE OF CONTENTS

<b>DECLARATION</b> .....	ii
<b>ACKNOWLEDGEMENT</b> .....	iii
<b>DEDICATION</b> .....	iv
<b>ABSTRACT</b> .....	v
<b>TABLE OF CONTENTS</b> .....	vii
<b>CHAPTER ONE: INTRODUCTION AND ORIENTATION</b> .....	1
1.1 Background of the study.....	1
1.2 Rationale.....	2
1.3 Purpose and Focus of the Study .....	3
1.4 Research Objectives .....	3
1.5 Questions to be asked.....	3
1.6 Problem Statement .....	3
1.7 Significance of the Study.....	4
1.8 Structure of dissertation'- .....	4
<b>CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK</b> .....	6
2.1 Introduction.....	6
2.2 Collage: Historical Background .....	6
2.3 Uses of Collage in Education .....	8
2.4 Collage as an Inquiry .....	9
2.5 Collage-making as a virtual learning tool .....	11
2.6 Mobile Collage.....	14
2.7 Theoretical perspective.....	15
2.8 The Definition of a Theoretical Framework .....	15
2.8.1 Understanding the Social Constructivist Theory.....	17
2.8.2 The Origin of Social Constructivism Theory.....	18
2.9 Application/relevance of the theory to this study.....	19
2.10 Different Fields that have used the Social Constructivist Theory.....	22
2.11 Limitations of the Social Constructivism Theory.....	23
2.12Chapter Conclusion .....	23
<b>CHAPTER THREE: RESEARCH METHODOLOGY</b> .....	25
3.1 Introduction.....	25

<b>3.2 Research Design</b> .....	25
<b>3.3 Critical Paradigm</b> .....	26
<b>3.4 Sampling Strategy</b> .....	27
<b>3.4.1 Target Population</b> .....	28
<b>3.4.2 Sampling Techniques</b> .....	28
<b>3.4.2.3 Rationale for Adopting Non-Probability Sampling</b> .....	28
<b>3.1.1 Sample and Size</b> .....	28
<b>3.5 Data Generation</b> .....	28
<b>3.6 Data Analysis</b> .....	29
<b>3.7 Trustworthiness</b> .....	32
<b>3.8 Ethical Considerations</b> .....	33
<b>3.9 Limitation to study</b> .....	34
<b>3.10 Chapter Summary</b> .....	35
<b>CHAPTER FOUR: DATA PRESENTATION</b> .....	36
<b>TOPICALIZATION, CONNOTATION AND PRESUPPOSITION</b> .....	36
<b>4.1 Introduction</b> .....	36
<b>4.2 Presentation of Data</b> .....	36
<b>4.2.2 Topicalization Markets</b> .....	37
<b>4.2.3 Topicalization of circular flow</b> .....	40
<b>4.2.4 Topicalization budget</b> .....	41
<b>4.3 Connotation</b> .....	41
<b>4.3.1 Connotation budget</b> .....	41
<b>4.3.2 Connotation budget</b> .....	43
<b>4.3.3 Connotation of the circular flow</b> .....	43
<b>4.4 Connotation markets</b> .....	44
<b>4.4.1 Presupposition</b> .....	44
<b>4.4.1 Presupposition market</b> .....	45
<b>4.4.2 Presupposition budget</b> .....	46
<b>4.4.3 Presupposition circular flow</b> .....	46
<b>4.5 Reflections</b> .....	46
<b>4.6 Chapter conclusion</b> .....	58
<b>CHAPTER FIVE: DISCUSSION OF THE FINDINGS</b> .....	59
<b>5.1 Introduction</b> .....	59
<b>5.2 Discussion of the Findings</b> .....	59
<b>5.3.1 Topicalisation: Colour</b> .....	59
<b>5.4.1 Connotations: Cultural Knowledge and Metaphors</b> .....	67

<b>5.4.2 Connotations: Metaphors</b> .....	69
<b>5.5 Presupposition</b> .....	73
<b>5.7. Chapter Conclusion</b> .....	75
<b>CHAPTER 6: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS</b> .....	76
<b>6.1. Introduction</b> .....	76
<b>6.2. Summary of the study</b> .....	76
<b>6.3 Summary of the findings</b> .....	77
<b>6.4. Conclusions</b> .....	77
<b>6.5 The study’s contribution to new knowledge</b> .....	78
<b>6.6. Recommendations</b> .....	78
<b>6.6.1 Recommendation for Improvement strategy for teaching</b> .....	79
<b>6.7 Need for future research</b> .....	79
<b>6.8 Chapter Summary</b> .....	80
<b>REFERENCES</b> .....	81
<b>APENDIX 1: Informed consent</b> .....	87
Research Office, Westville Campus .....	88
Govan Mbeki Building, Private Bag X 54001, Durban, 4000 .....	88
<b>APPENDIX 2: TOPICALIZATION ON MARKET APPENDIX</b> .....	88
<b>APPENDIX 3: ETHICAL CLEARANCE</b> .....	96
<b>APPENDIX 4: GATEKEEPERS PERMISSION</b> .....	97
<b>EDITORS CERTIFICATE</b> .....	97
<b>TURNITIN REPORT</b> .....	97

# CHAPTER ONE: INTRODUCTION AND ORIENTATION

## 1.1 Background of the study

This is qualitative research about an Exploration of Commerce Education Students experiences of learning using virtual collage. This study was conducted in the university of Kwazulu-Natal, Edgewood Campus. The collages was used to explore students experience of using virtual collage as a learning strategy. These virtual was collected and analyses by the researcher to the learning theories in action in the students' experiences.

Collage is used in teaching and learning for commerce students. This study focused on the student experience of learning using virtual collage. Harrison (2023, p. 265) defines collage as “the cutting and sticking of found images and image fragments from popular print or magazines onto cardstock”. Butler-Kisber (2021, p.269) states that in collage “images enable meaning to travel in ways that words cannot”. There are different forms of collage namely, “peppier collage, blended collage, photo mosaic collage, trendy shape collage” and others but the study will be steered towards the use of virtual collage in learning (Butler-Kisber (2008, p.269).

Studies have shown that the difference between remote and online learning is thin (Harrison, 2013, Butler-Kisber, 2008). Virtual classrooms have the potential to be quite different from conventional classrooms. First, this is a shift away from the “norm” of having one teacher and a group of students all in one place at one time in a virtual classroom (Yilmaz 2021, p.5). Students may be in a different location from their lecturer, or from other students in their class. Second, lecturers and students in virtual classrooms may be using a range of Information communication and technology (ICTs) to facilitate learning, communication, and collaboration in ways that may not be typical in a conventional classroom (Yilmaz 2019).

Online learning is an educational process that takes place over the Internet. It is a form of distance education to provides learning experiences for students, both children and adults, to access education from remote locations or who, for various reasons, cannot attend a school, vocational college, or university. Distance education addresses issues related to geographical distance but also for many other reasons that prevent in-person attendance at classes (Hrastinski 2008; Moore et al. 2011; Singh and Thurman 2019; Watts 2016; Yilmaz 2019 as cited in).

Online learning experiences through distance education can be either asynchronous or synchronous. Asynchronous learning occurs when students can choose their own time for participation in learning through different media tools such as e-mail or discussion boards. Students can log into communicates and complete activities at times of their choosing and learn at their own pace. In contrast, synchronous learning activities occur through live video and/or audio conferencing with immediate feedback (Hrastinski 2008).

Whether it is asynchronous or synchronous, online learning has several advantages: For instance, it does not depend on being in the same physical location and can thus increase participation rates. In addition, it can be cost-effective because online learning reduces travel and other costs required to attend in-person classes and may provide learning opportunities for adult students while also engaged in full-time or part-time jobs (Fedynich 2014; Yilmaz 2019). Moreover, online learning can be a convenient means of communication among participants as well as instructors because participants do not have to meet in person.

## 1.2 Rationale

Personally, when I was an undergraduate and currently postgraduate student, I found it very difficult to obtain necessary resources that affected my learning as a student. I did not have enough resources such as a laptop and data to assist in learning. Currently, the internet and social media play a big role in conveying messages as learning materials. Professionally, using the internet and any kind of social media requires data bundles. Noting my challenges of online learning, I was interested in exploring the experiences of learning using virtual collage.

The situation is challenging for students and lecturers. Professionally, pre-service teachers experience challenges in obtaining the necessary learning materials. There are insufficient resources to assist in conveying materials to students. This creates problems for lecturers (Mokhele, 2014). Several online platforms for teaching and learning come with challenges, especially in a developing country like South Africa. Knowing this situation, I noticed that commerce students use online methods in lectures. This includes for example virtual collage. I am interested in exploring their experience of drawing on the usage of virtual collage in the commerce modules.

### 1.3 Purpose and Focus of the Study

The study seeks to explore how a commerce student learns through virtual collage.

### 1.4 Research Objectives

The objectives of this study are:

1. To conceptualize the commerce student experience of learning through virtual platforms in a South African university
2. To theorize the commerce students, experience of using virtual collage in the lectures at a South African university

### 1.5 Questions to be asked.

In line with the objectives, the following research questions will guide this study:

- 1 What are commerce student experiences of learning using the virtual collage in a South African university?
- 2 How did the commerce student use the virtual collage to learn their content in a South African university?

### 1.6 Problem Statement

Universities are operating online globally. It is a critical moment in the history of education. This moment requires a great deal of innovation, creativity, strategy, and taking pragmatic steps to extend and sustain academic functions (Yilmaz, 2019). Although it is unclear and unrealistic to expect that the pedagogic approach would be the same across the university context, what is

significant is the commerce students' use of online or virtual collage to learn. The problems evolving from this sudden pedagogical switch are enormous and complex and thus, are unpacked as follows:

The problem is connected to the unpreparedness of students in implementing a sudden task is enormous and is of great concern to students. Correspondingly there are challenges in creating, maintaining, and improving learning through virtual collage.

## **1.7 Significance of the Study**

This study could be useful to all students and lecturers, especially those studying specifically commerce students there is a need to create awareness and to understand their experiences and challenges of learning through virtual collage. Considering the above rationale and the significance of the study, the gap created in knowledge for effective strategies in promoting a new way of learning that will be useful to expose the gains and challenges inherent in the method.

The study will make several recommendations that will aim at promoting effective learning for commerce students which will help the Department of Education in capacity building in the areas of virtual collage learning. Furthermore, the research will contribute to knowledge through the research outcomes which will invariably and significantly contribute to the existing knowledge of e-pedagogy in South African universities and the Department of Higher Education.

## **1.8 Structure of dissertation'-**

### **Chapter 1**

#### **Introduction**

This chapter presented the introduction to the study. A description of the research background aims and objectives of the research, problem statement, and significance of research as well as the structure of this research study was outlined in this chapter.

## **Chapter 2**

Literature review

This chapter will present in-depth information on the relevant literature reviewed for example theoretical frameworks, books, journals, etc.

## **Chapter 3**

### **Research Methodology**

A comprehensive analysis of the research method was carried out by unpacking the instrument used to collect data. The researcher also described the sampling techniques to be utilized and the administering of the interview schedule. The method chosen to analyse the results and testing for reliability and validity was discussed and motives for their use explained.

## **Chapter 4**

### **Data Analysis**

The data collected in Chapter 3 was analysed to get a complete understanding of a research problem by converging qualitative and quantitative data and comparing the databases.

## **Chapter 5.**

### **Conclusion and recommendations**

Following the data analysis conducted in Chapter 4, conclusions was drawn in this chapter, and detailed recommendations of the strategies that can be used by the government and policy makers to address how a commerce student learns through virtual collage.

### **1.9 Chapter Conclusion**

This chapter has discussed the orientation of the study which gives an overview of the aims and objectives of the study. It also gave the reader a picture of what the study entails. The next chapter discusses the literature review.

## CHAPTER TWO: LITERATURE REVIEW AND THEORETICAL FRAMEWORK

### 2.1 Introduction

The literature review is conceptualized as a systematic analysis and evaluation of scholarly works focused on a particular topic (Baker, 2020). The literature review is very important in every academic work because it enables researchers to be aware of what is known and unknown about a phenomenon. This section presents a literature review that is central to the overview of learning through collage.

### 2.2 Collage: Historical Background

Collage has a long, largely untold history of craft and ritual assemblages and religious folk art from many cultural traditions and native peoples, women, and children. Other than these, collage came to the West via 12<sup>th</sup>-century Japanese calligraphic poems on torn and pasted sheets of paper, scraps of leather and paper in 13<sup>th</sup>-century Persian bookbinding, Mexican garments decorated in beads and feathers brought back in the 16<sup>th</sup> century from the New World by explorers and a 18<sup>th</sup> trend for hand-crafted Valentine's cards and fans. In Western Europe from the 19<sup>th</sup> onwards, collage began to particularly interest those working with children, exemplified by educationalists Rudolf Steiner, Friedrich Froebel, and Maria Montessori's creative approach to materials, or children's writer Hans Christian Andersen's collage and paper cut books.

Though collage has a French name and is associated with Braque and Picasso's experiments of 'Papier-Collé' with newspaper and card, the Russians arguably invented its most interdisciplinary form, with distinctly individual female artists from the Russian avant-garde such as Olga Rosanova and Lyubov Popova collaborating with poets in collaged illustrations, book jackets, and posters (Bird, 2021, p. 53). Their and other powerful children's illustrated books from the Soviet period (such as Dmitri Bulanov's *The Zoo*, 1928, or Nikolai Denisovsky's *The Machine Got Going*, 1929) enact the principle that 'the Soviet children's book was intended to become an active participant in the public consciousness.' This may well

have had a ‘regulative role in enforcing a uniform social identity’, but it is important to add that ‘this meta-commentary also insists on aesthetic media as powerful sources of individual agency in an oppressive society’ (Bird, 2021, p. 53).

Kazimir Malevich, who did a series of collages in his teens that he called ‘a logical’ associations, wrote: ‘the logical collision of two forms...illustrates the moment of struggle between logic, the natural law, bourgeois sense, and prejudice’ (Malevich in Wescher, 2018, p. 94). Tellingly, avant-garde poets, artists, and writers in Russia who became hounded under Stalin retreated into children’s literature as a less monitored space where they could experiment visually and playfully. The poet Samuil Marshak, (who created 40 works of children’s literature with Vladimir Lebedev) wrote to poet Kornei Chukovsky ‘We both could have perished; the children saved us.’ (Marshak in Rothenstein & Budashevskaya, 2023, p. 99). Collage is also a form of academic scholarly practice, or citation, such as critic Walter Benjamin’s use of collage-allegory to shock people into new understandings (Wescher, 2021, p. 94). In his career Benjamin abandoned the book in favour of collage-style essays or fragments, also exploring children’s books and cartoons, using collage as a kind of metaphor that could be applied to child-centred new forms of literature, arts, and pedagogies, such as his recognizing children’s play as ‘bringing together materials of widely different kinds in a new, intuitive relationship’ (Benjamin, 2024, p. 408). Similarly, for poststructuralist Jacques Derrida, ‘the art of collage proves to be one of the most effective strategies in the putting into question of all the illusions of representation’ (collages, 2021 p. 34-5) and the contamination between language and its user. This is what the Dada poet Tristan Tzara – on seeing a Hans Arp exhibition in Zürich in 1915- called ‘uproar collage’, or the noise made visible in the work (Motherwell, 2019, p. 235). Noise is a particular quality of collage. The collage’s apparent imperfections are part of the aesthetic because the cut, the tear, the texture, and the impossibility of the perfect outline are intrinsic to the form - and demonstrates that the mix of shapes and textures concerning each other is more important than aesthetic perfection or realism.

Collage, taken from the French verb, coller (to stick), is the process of using fragments of found images or materials and gluing them to a flat surface to portray phenomena. Collage is not new. Over 1,000 years ago Japanese artists used collage to enhance their poetry which was written in calligraphy. It was also used in folk art in the 1800s, such as in the paper mosaics created by Mary Delany (Hayden, 1980). Collage came into its own, however, in the early twentieth century when the “fathers” of collage (Picasso and Braque) used it in their work to counter the

representational demands of formalist art. In this work, they attempted to make art more accessible and to use it to question the political and social agendas of the times.

Collage has continued to permeate the art world since then as a genre of art, and as the postmodern way of thinking, knowing, and communicating (Brockelman, 2021). With the growing interest in arts-informed approaches in research, collage, as a form of inquiry (Butler-Kisber, 2020), has been attracting interest in qualitative circles because it allows the researcher to work in a nonlinear and intuitive way by arranging image fragments that reveal unconscious connections and new understandings (Davis, 2021a). In fact, “collage reflects the very way we experience the world with objects given meaning not from something within themselves, but rather through the way we perceive they stand in relationship to one another” (Robertson, 2022, p. 2). Furthermore, the basic skills of cutting and sticking are developed early in life and become part of everyone’s repertoire, so collage can be done by novices while acquiring more sophisticated aesthetic and compositional expertise.

## 2.3 Uses of Collage in Education

It has been described elsewhere how collage has been used in inquiry in three basic ways--as a reflective process, as a form of elicitation, and as a way of conceptualizing ideas (Butler-Kisber, 2021; 2020). As a reflective process, collage acts in much the same way that memos do in qualitative inquiry. Memos serve the research process by providing a series of pauses in the work where the researcher writes in abbreviated form about thoughts, connections, and questions that are arising in the analysis (Miles & Huberman, 2021). Memos help to open up thinking to new possibilities and interpretations. Memos, however, maintain linear thinking. When using collage reflectively, the researcher focuses on a question, dilemma, or the like, and then selects pictures that metaphorically reflect aspects of this thinking. Then operating intuitively, she creates a collage producing a visual composition with the selected fragments. This collage process breaks away from the linearity of written thoughts by working first from feelings about something to the ideas they evoke, instead of the reverse. The resulting visual juxtapositions frequently reveal new connections and understandings that have previously remained tacit (Butler-Kisber, 2021, 2020; Davis & Butler-Kisber, 2021).

In literary circles, free writing is used as a way of moving beyond the linear boundaries and logic of written text. It elicits and allows inner and unconscious thoughts to bubble to the surface. Some writers fold the page in half during a free writing sprint to disrupt even the physical boundaries that constrain the written word (Charlotte Hussey, personal communication, 2022). When collage is used as an elicitation approach to help the researcher articulate her writing, it acts similarly. Pamela Markus (2021) used this approach in her thesis, a self-study of her experience as an artist and art teacher. Once major themes had emerged from her field observations and journals, she created a collage to represent a particular theme. Then she used the resulting visual to bring forth the words subsequently used to elaborate and discuss her interpretations. The collage process elicited ideas that before this work remained elusive. Collaging can also help conceptualize a phenomenon by fleshing out different facets to get a nuanced understanding of it. A useful way of doing this is to create a series or a cluster of collages (Butler-Kisber, 2020) about a phenomenon. “Art cards,” or small-scale collages the size of hockey cards (2 x 2.5 inches) provide a helpful structure because their sheer size limits the number of fragments that can be used; hence the metaphorical content becomes quite focused (Butler-Kisber, 2020). It is productive to work intuitively repeating in each collage how the phenomenon “feels” or what it “feels like” to experience something. It is important to work from the feeling to the idea and not the reverse (Butler-Kisber, 2020). Once a cluster of three or four collages has been produced showing various visual portrayals of the phenomenon, the collages can be named based on the essence of what has emerged. Each collage then shows a facet of the phenomenon. Finally, the collages can be examined collectively based on content, colour, shape, size, content, space, directionality, or any other compositional dimensions, to see if there are unintended commonalities that exist across the collages. When identified, these common aspects help to push the analysis further and provide a deeper interpretation of the phenomenon in question.

## 2.4 Collage as an Inquiry

Collage work is always an engaging process. Whenever it is introduced to a group of researchers, they become engrossed and inspired by the work (Butler-Kisber, Davis, & Stewart, 2021). Inevitably new insights emerge about the research in question, or about the researcher herself. As mentioned earlier, making a collage is not daunting because everyone, whether a novice or veteran, can cut and paste and ultimately get a sense of satisfaction with the product.

It is always delightful to see how researchers who never considered they had artistic talent can gain confidence using this visual medium, and how some have gone on to produce wonderful instances of collage inquiry (Promislow, 2021). It remains an issue, however, in collage and other arts-informed inquiries, about who should undertake collage work in research. A polarized version of this issue is that on the one hand, anyone who wishes should use collage, and a somewhat elitist view on the other, that collage should be restricted to those researchers who have acquired the necessary artistic skills. The middle ground is that researchers wishing to use collage in formal and public products need to develop the necessary skills to produce technically sound work and develop aesthetic sensitivities so that the gains that have been made in arts-informed inquiry in the last decade are not lost by the proliferation of poor-quality work (Butler-Kisber, 2020). This still provides lots of leeway for using collage as part of the analytic process to reap the kinds of understandings that result from this approach to inquiry that might not emerge otherwise. It suggests, however, that more of an emphasis has to be made on support systems in graduate programs for developing both an awareness of the potential of collage inquiry and developing the necessary artistic skills and aesthetic sensibilities. This does not suggest that the emergent and messy thinking that results from collaging and provides interesting insights should be eliminated (Butler-Kisber, 2020). These collages can be used throughout the research process and can help make the research process transparent. It just suggests that the final representational forms need to be able to stand up to artistic/aesthetic scrutiny.

The second issue that is closely related to the first is how arts-informed inquiry and more specifically collage work, can and should be evaluated. This conversation has been growing but the jury is still out, and in the conversations that have transpired, most have focused on arts-informed literary/written work rather than visual texts. Space does not permit a summary of what has emerged, but Bamford (2015) has offered some interesting insights on the evaluation of digital theses that hold promise for ways of assessing collage inquiry and other visual forms of research. Cole and Knowles (2021) also suggest some interesting criteria for examining modes of visual inquiry. What is clear is that this conversation merits broader involvement and extended discussion that will encourage and not penalize worthy work.

Finally, there is insufficient guidance on the copyright issues around using found images from popular magazines in collage inquiry (Butler-Kisber, 2021, 2020, 2020). The solution is of course, to avoid using found images, or to use public images not constricted by copyright, but

this has implications for both the researchers and the types of collages that can then be produced. As the interest in collage inquiry increases, as it is bound to, more discussion and guidelines/solutions are needed.

## 2.5 Collage-making as a virtual learning tool

A collage is defined by Harrison (2023) as a form of art whereby images and objects are combined into one piece of artwork. Magazine picture collage refers to Butler-Kisber (2021, p. 265) defines collage as “the cutting and sticking found images and image fragments from popular print/magazines onto cardstock”. Butler-Kisber (2020, p.23) also argues that collage gives a picture through the way you perceive it. Butler-Kisber (2021, p.269) also states that in collage “images enable meaning to travel in ways that words cannot”. According to Khanare, Mitchell, and Kisber (2021), collage changes people from speaking to action. ‘What I like about collage is that it attracts peoples’ eyes and involves both the researcher and the participants. The participants will be asked to create a collage on this topic “shapes around the classroom”. Raht, Smith &MacEntee (2021, p.12) state that the use of pictures, and symbols, in a collage helps to convey a message. This study is interested in conceptualizing and theorizing the use of online picture collages in the EMS 4 modules.

One of the assessment of EMS 4 was the inclusion of collage to produce their personal experiences on how to use collage to learn in a classroom setting. This creative process involves working together in a group to connects their inner compass to the outer world. Whereas academic training and research privileges critical reasoning and cognitive ways of knowing Collage, however, is an accessible form because it relies on basic skills of cutting and pasting that are generally mastered in childhood. The collage, personal statements, and students’ perspectives on their experience of collaging that are presented in the remainder of this study build a case for the powerful possibility of collage as reflective practice and pedagogy in teacher education.

Artistic representations can be a way of “transforming the contents of consciousness within the constraints and affordances of a material” (Eisner, 2022, p. 6). In this way, tacit knowledge can be made explicit, as the act of creating art “stabilizes what would otherwise be evanescent” (Eisner, 2022, p. 11). As Ritchhart and Perkins (2021) note, “fostering thinking requires

making thinking visible: Thinking happens mostly in our heads, invisible to others and even to ourselves. Effective thinkers make their thinking visible, meaning they externalize their thoughts through speaking, writing, drawing, or some other method” (Ritchhart and Perkins (2021) p. 58).

Rose (2021) provided guidelines for interpreting visual data—arguing that interpreting images is just that, interpretation, not the discovery of *truths*. Vision refers to what we can physically see, whereas *visuality* refers to how we attach meaning to what we see (Rose, 2021). Researchers must consider how and why they construct certain narratives based on positionality and call to question how positionality impacts their ability to see/unsee (Rose, 2021). In doing so, researchers might challenge the presumption that all individuals conceptualize the world in the same way (Rose, 2021). When analysing visual data, researchers must recognize how visual products take on a different meaning to each observer based on how their positionality and lived experiences inform their *visuality* (Rose, 2021).

When engaging with visual data, researchers must remember the circumstances in which the visual product was created (Rose, 2021). When looking at how an image is produced, we must consider what materials were used to create the image, how the image was created, and the economic, political, and institutional circumstances that inform the image (Rose, 2021). When looking at an image, a researcher creates categories based on genre and looks for recurring themes throughout (Rose, 2021). Rose (2021) provided the following potential considerations: content, colour, spatial organization, light, and expressive content. Researchers must also consider the social modality by asking: Who made the piece? Why was the piece made? In what location was the piece made (Rose, 2021).

Drawing and collage are two popular art therapy media often used by art therapists that are easy to transport and clean up, relatively inexpensive, and can elicit a wealth of information from and about clients. Drawing involves using materials to make marks on some surface, usually paper. It is a medium that requires people to come up with an idea on their own, although in some cases expression can be stimulated by a starting point such as a doodle, a circle, or a specific directive. (Butler-Kisber, 2020) Collage is the process of selecting, cutting, composing, and then gluing materials onto a surface. Magazine images, fabric, and tissue paper are examples of the many materials that can be used in a collage.

Collage is a structured, non-threatening medium that can engage clients in artmaking and encourage creativity, even in those who may feel intimidated by other materials (Landgarten, 2011, 2023; Linesch, 2021; Wadson, 2017, 2020). Landgarten (2021) noted that collage can be used to “facilitate creativity and to lessen superego demands on performance” (p. 4) because it requires little technical skill. Linesch (2021) wrote that structured materials such as collage have inherent limitations that prevent regression or overstimulation. Because magazine images can be found everywhere, Landgarten (2023) used them as the basis of the Magazine Photo Collage assessment, noting that not only does collage facilitate creativity, but it is also not culture bound as long as the images provided are thoughtfully selected to suit the client population. Collage has also been used to help focus clients and provide a reflective distance that promotes verbalization and communication (Butler-Kisber, 2020). Vick (2019) found that using readymade imagery in a short-term care environment quickly engaged adolescents in making art. Comfort (2021) encouraged clients to find published pictures that offered an outer illustration of their inner experiences and so provided a metaphor that permitted the safe distance needed to reduce anxiety when discussing feelings. In an unpublished master’s level study examining the subjective experience of collage-making, Johnston (2021) noted that the selection of images helped focus the participants’ work in a four-phase process: a free-associative or unconscious thought process during the selection of images; the emergence of more coherent personal memories and reflections as images were organized and assembled; the synthesis and evaluation of the thoughts that emerged; and, finally, logical and defensive judgments about the context and unexpected results in the finished product (Butler-Kisber, 2020).

Collage is an attractive choice for a construction technique because it supports creative expression but does not require participants to have prior artistic or technical skills. Nearly everyone has created a collage as a child; it is a common (and enjoyable) art project in kindergarten and primary school. It is possible to create attractive and meaningful collages with a minimum of time, effort, and skill although if the participant does have an artistic flair or talent in sketching or even doodling, then the artifact created can be more deeply personalized and meaningful. While everyone is creative, to a greater or lesser extent (Ritchhart and Perkins (2020), many people do not believe themselves to be creative and do not often express their innate creativity (Rose, 2021). Because collage creation is a familiar activity and the result is based on re-using existing images, participants may find creating a collage less daunting than developing an artifact from scratch. Most of us are diffident about showing off the products of

our creative efforts; since the elements of a collage are mainly selected rather than created by the collage developer, it may be easier to engage a participant in discussing a collage than, for example, a drawing.

Collage has become increasingly popular in arts-based research (Butler-Kisber et al., 2022-2023; Butler-Kisber&Poldma, 2020; Davis, 2020; Davis & Butler-Kisber, 2020). Butler-Kisber and Poldma (2020) used a technique of clustering collages to investigate visual tools for experiential research approaches: “Collaging can also help conceptualize a phenomenon by fleshing out different facets to get a nuanced understanding of it” (p. 4). Davis and Butler-Kisber (2021) used collage as an analytic tool for memoing, lauding the flexibility of collage to both contextualise and categorise. Butler-Kisber and Poldma (2020) identify three attributes of collage in qualitative research: “as a reflective process, as a form of elicitation, and as a way of conceptualizing ideas” (p. 3). Diaz (2022) used collage as a research tool to blend images and text to create a reality and find meaning, most notably in the study of gendered social roles in 1950s middle-class white America using the art as a symbol and metaphor. Furthermore, Diaz (2002) posits that the visual arts can open up dialogue among diverse people, offer new insights and reflection, and provide new ways to critique a subject. In her study of her father’s early life, Vaughan (2025) used collage as a way to create new meanings from selected images, and she views collage as a method of gathering, selecting, analysing, and presenting a methodological process similar to traditional qualitative research.

## 2.6 Mobile Collage

Collage has been put forward as an interface that can support user creativity and allow users to tailor the visual elements of their virtual environment. The collage machine streams an interactive collage of web images, with the display and choice of images learned from preferences indicated by the user. The user thus becomes a part of the interface design. A collaborage, or collaboratively constructed collage, has been used to support awareness of the presence and activities of group members. A handful of user studies and product design studies have incorporated collage. In Ritchhart and Perkins (2021) for example, participants developed individual collage representations of the images they snapped in a mobile probes exercise. The individual collages were then discussed in small groups, to pull together the common themes from these individual experiences. The claim is that creating a visual representation such as a

collage taps into emotional, abstract, sensitive, and experiential associations that participants may find difficult to otherwise express (Rose, 2021). Certainly, the visual nature of a collage may be particularly appropriate for participants who find it tedious, time-consuming, or potentially embarrassing to express their thoughts in words (a common difficulty with diary studies (Ritchhart and Perkins (2021)).

A complex of visual metaphors, the narrative of collage is composed of fragmentary images and ideas appropriated from a visual culture whose contradictory meanings are in opposition with each other. As such, collage narrative enables a critical examination of its fragments, namely their contrasting socially and historically constructed assumptions. In the in-between spaces of the fragments of collage, where knowledge is mutable and indeterminant, there exist opportunities for creative and political intervention and production.

From the literature, it can be concluded that collage is a form found in many classic and popular picture books for children, and contemporary picture book artists have increasingly used the cross-modality of the form, but its more radical use is perhaps less well known. The collages used in this study were given to students in groups assignment and they produced different results and experiences in this module in the next section, I present the theoretical framework that informed this study.

## **2.7 Theoretical perspective**

Learning theories such as connectivism, constructivism, and behaviorism, are situated pedagogic theories that cannot be skipped through in literature relating to technology (Fitzpatrick & Donnelly, 2021) and learning. More so, we live and function in a digital age whereby all transactions including education functions are conducted digitally on technological applications. People are interconnected through well-designed nodes (Siemens, 2020) structured to facilitate smooth interaction. This makes the connectivist theory useful in the study of how to adjust pedagogy suddenly.

## **2.8 The Definition of a Theoretical Framework**

A theoretical framework is described as the structure that holds and supports the theory of research (Ocholla & Roux, 2021). Anfara and Mertz (2021) also pose that a theory provides a lens for understanding a phenomenon. Thus, a theory offers researchers the framework for making sense of their observations (Yamauchi, Ponte, Ratliffe & Traynor, 2021). On the other hand, Amanda (2021) explains that research without a theoretical framework lacks direction for discussions of the findings from the research. However, there are several theoretical frameworks, depending on the researcher's goals and purposes, to guide the qualitative research study (Ornek, 2020; Collins & Stockton, 2021). For example, the researcher may want to describe behaviour, understand beliefs, or explain phenomena. To achieve either of these intentions, the researcher chooses an appropriate theory that serves the aim (Collins, & Stockton, 2021; Ornek, 2020).

Based on the above view and drawing from the objectives of this proposed study which seek reality from individuals' narratives of their experiences and feelings to produce in-depth descriptions of the phenomenon (Yuksel & Yildirim, 2015), the choice of social constructivism for this study is justified as an appropriate theoretical framework. This will provide a lens to explore Commerce Education Students' experiences of learning using virtual collage. As the researcher, I am interested in understanding the phenomenon, which is the different teaching strategies, to which the commerce education students were exposed to.

Most research (Drill, Miller & Behrstock-rratt, 2021; Sentence & Csizmadia, 2021; Kratt, 2021; Mahdum, Hadriana & Safriyanti, 2021; Bautista, Wong, & Cabedo-Mas, 2021; Li, 2021; DeLuca, Bolden & Chan, 2017) on teaching strategies focuses on the teaching perspectives. This reveals that the students are on the receiving end of these teaching strategies. As a result, it is important to explore the learners' experiences of the various teaching strategies used by their lecturer to teach them. This implies that these teaching strategies might assist them in understanding commerce. It is well reported in the literature (Isdale, Reddy, Juan & Arends, 2021; Bansilal, Long & Juan, 2021; Makgato, 2020; Mutodi, & Ngirande, 2021) reviewed that learners perform poorly in mathematics in South Africa.

Therefore, the researcher felt that social constructivism is the better-suited theory to understand commerce education students' experiences of using virtual collage to do tasks. However, the next section discusses the origin and development of social constructivist theory which was employed as a lens to frame this study.

## 2.8.1 Understanding the Social Constructivist Theory

For this proposed study, I employed the theory of social constructivism as a theoretical framework. This theory is used to give direction to and illuminate the findings of this study since it evolves into a process that seeks reality from individuals' narratives of their experiences (Cilesiz, 2009; Neubauer, Witkop & Varpio, 2021). Added to this, Cuthbertson, Robb, and Blair (2020) argue that the theory of social constructivism recognizes that individuals seek to understand their world and develop their meanings from their life experiences. Thus, student experiences in the virtual classroom are a real source of knowledge, a kind of cultural capital that can be tapped by teachers to improve pedagogic practices (Schall, McHatton, & Saenz, 2020).

Meanwhile, Rudduck and Flutter (2000) argue that research that places learner's experiences at the center of attention is relatively scarce. As a consequence, there has been a strong emphasis on improving effectiveness as a means of enhancing learners learning in the classroom (Burroughs, Gardner, Lee, Guo, Touitou, Jansen & Schmidt, 2021). Therefore, these lead the researcher towards the theoretical underpinnings of the theory of social constructivism.

Thus, social constructivism theory is a theory of knowledge that examines knowledge and understandings of the world that are developed jointly by individuals (Aminah & Asl, 2021). However, Mohammed and Kinyo (2020) are of the same notion that through sharing and socially interacting, ideas are developed. Along the same line, Ernest (2006) admits that social constructivism theory recognizes that learning and understanding are constructed by social interactions. However, the learners develop knowledge and understanding through social interactions learners have with their peers (Taylor, 2021). Consequently, social interaction has played an important role by creating opportunities for learners to engage in social skills both individually and in groups (Finn, 2020; Forsell, ForslundFrykedal&Hammar, Chiriatic, 2020). However, working together with a more knowledgeable person has also proven to be more efficient in helping the learners organize their learning and reflect on their understanding (Okita, 2012; Hurst, Wallace & Nixon, 2013).

This theory was developed by Lev, Vygotsky (1978) who strongly suggest that individual understanding improves by the virtue of social interaction. Thus Lev, Vygotsky's theory of social constructivism states that knowledge is co-constructed and that individuals learn from each other in the process (Thompson, 2023; Lialikhova, 2019).

Similarly, Lev Vygotsky (1978) and many other studies (Halberstadt, Timm, Kraus & Gundolf, 2019; Salomon & Perkins, 1998) argue that learning only takes place with the help of peers who are more knowledgeable thus contributing to the social aspect of the theory. Furthermore, another part of this theory is the Zone of proximal development (ZPD) which Vygotsky (1962) and Silalahi (2019) describe as a level where a learner can achieve what would have been impossible for him to achieve alone with the help of a more knowledgeable person, peers or a guardian. Under normal circumstances, teachers are seen to be more knowledgeable (Vygotsky, 1978) because of their role in providing learners with the required social instruction in the classroom (Wilson & Devereux, 2021).

Though, scaffolding is an additional part of this theory that can assist the learner in solving problems, and accomplishing a task that would be beyond his unaided efforts (Xi, & Lantolf, 2020; Bruner & Ross, 2021; Pitkanen, Iwata, & Laru, 2020). Scaffolding is regarded as a teaching technique that assists learners in learning more while working with a more knowledgeable person to achieve their learning objectives (Pitkanen, Iwata & Laru, 2020). This teaching technique is very useful to the learners because the learners are in charge of their lessons while getting little assistance from their teacher. When a learner can do a school task when assisted, the learner is gradually in a position to master it. Thus, this technique will not only enhance learner's motivation but subsequently improve their competence in solving Algebraic problems.

However, in the context of learning, Bredo (1997) posits that the social construction of learning also presents learning as a social and cultural process that occurs in the context of human relationships and not just in the heads of individual learners. According to Brophy (2002), learning involves negotiating understanding through dialogue or discourse shared by two or more members of the community.

Thus, scholars (Chen, Li & Huang, 2020) have also argued that to have an understanding and to facilitate learning, it is necessary to engage in discourse, share knowledge, and compare beliefs with others (Vygotsky, 1978). Base on the above literature shows that the creation of knowledge cannot be separated from the social environment in which it is formed.

## 2.8.2 The Origin of Social Constructivism Theory

The social constructivism theory was developed by Lev Vygotsky in the year (1978). Lev Vygotsky was born on the 17<sup>th</sup> of November 1896 in a city called Orsha in Russia. However, before his death on June 11<sup>th</sup>, 1934, he had written on many subjects although, his passion was on issues of child development. According to Vygotsky (1978), social interaction plays a vital role in children's learning. Interestingly, this implies that learners acquire knowledge as a result of social interaction (Verga, & Kotz, 2017). Furthermore, Vygotsky was also well-known for his good work on the concept of the zone of proximal development (ZPD), which is the distance between what a child would be able to do properly without help and what a child would do when assisted by someone more knowledgeable about the task (McLeod, 2022; Zuckerman, 2020; Xi, & Lantolf, 2020). In addition, some of Vygotsky's works are on the relationship between languages and beliefs, the development of language, and the overall theory of development through actions and relationships in a socio-cultural environment (Panhwar, Ansari, & Ansari, 2021).

## 2.9 Application/relevance of the theory to this study

The main purpose of learning and education is primarily leading to the development of individuals through the concept of social constructivism (Halberg, Assafi, Norholm, 2020). According to Fischer (2021), social constructivism explains that all knowledge is acquired as a result of social interaction. Along the same line, Watson (2021) argues that social constructivism views teaching and learning as a shared social experience in which meanings are jointly and actively constructed.

In a constructivist classroom, the emphasis tends to move from the teacher to the learners (Palincsar, 1998). According to Alzahrani and Woollard (2013), the role of a teacher in the social constructivist classroom is to help learners build their knowledge and control the existence of learners during the learning process in the classroom. The teachers who are facilitators in social constructivist classrooms first provide support and help for learners, little by little this help is decreased, and learners learn independently (Amineh, Asl, 2021). Therefore, the social constructivist-oriented teacher is seen as an organizer and potential source of information (Smith, 2020) and their role is as a facilitator (Coles, 2019) to provide learners

with opportunities and incentives to construct knowledge and understanding (Singh, & Meyer, 2020).

On the other hand, learners in social constructivist classrooms through peer interaction, the learners seek help, respond to requests for help and interact with one another (Theobald, & Ramsbotham, 2019). According to Saunders and Wong (2020) learners learn best by trying to make sense of something on their own, and with the teachers' guide or a more knowledgeable order. The word facilitator is more suitable than the teacher in a social constructivism context (Amineh, & Asl, 2015) where the learner is actively constructing knowledge rather than passively receiving information (Gray, 2020).

Consequently, classrooms that engage in constructivist teaching and learning empower the learners to gain access to their experiences and beliefs and reshape their prior knowledge in the light of the applied course content (Gunduz, & Hursen, 2021). Watson, (2021) concurs and indicate that the usage of constructivist principle within the classroom reveal that teachers make use of constructivist principles to promote and accept learners' self-sufficiency and creativity, thus, learners are motivated to become more resourceful over the use of constructive principles.

On the other hand, social constructivism learning theory can be applied in the classroom setting to encourage collaboration (Zhang, Wen, & Liu, 2021). Thus, collaborative learning is defined as teaching and learning strategies that promote learners' collaboration in a small group to improve their own and one another (Brindley, Blaschke, & Walti, 2021). In Palincsar words, (2021) peer collaboration refers to interactions between teachers and learners resulting in the generation of new techniques and more mature forms of solving problems than learners had demonstrated alone. This suggests that engaging learners in collaborative learning while learning commerce will enable them to be in a mixed-ability group where they will draw on the differences of their group members as assets to be tapped to enhance their learning. In this way, the learners would be allowed to work in pairs such that the ones who understood the problem would assist the rest of their peers who did not. For example, if a learner does not understand commerce terminologies for solving systems, a process to solve economic problems using a substitution method. The teacher might have a more knowledgeable peer in the group who would solve and explain the procedures to her peers who do not understand.

However, this is under the aspect of Vygotsky's (1978) theory of zonal proximal development which shows that knowing adults around the lives of children is very important in shaping the growth and development of those children as the adults will assist them in learning better.

Subsequently, evidence from the research also depicts that the Zone of proximal development offers a platform of processing for any activity with the help of a teacher, a parent, a language instructor, or another peer who is more knowledgeable (Christmas, Kudzai & Josiah, 2021).

In their study (Shabani, Khatib, & Ebadi, 2020), they argue that children learn best when working together with a more knowledgeable person and through that children internalize new concepts (Shabani, Khatib, & Ebadi, 2020) which algebra is based on (Kumah, & Wonu, 2020). Based on these above views, suggested that the social constructivist theory is a useful and appropriate theory for this study.

### **2.9.1 Connectivism**

Connectivism is a theoretical framework for understanding e-learning in a digital age (Siemens, 2004). Stephen Downes described it as “the thesis that knowledge is distributed across a network of connections, and therefore that learning consists of the ability to construct and transverse those networks” (2020, p.1). In short, connectivism is just a networked academic social activity (Duke, Harper & Johnston, 2020). According to this model, knowledge not only exists in the individual’s mind but also exists in a distributed manner through the network, which is useful for the function of connectionist theory (Downes, 2020). He explains that connectivism is about forming connections between people and technology, and the thesis that knowledge is distributed across a network of connections. Within that defined social network, there is a focus on groups of people with common, (Siemens, 2004), meaning that teachers, students, and parents can engage in meaningful complex academic exercises in connectivist networks. However, the first point of connectivism is the individual (Duke, Harper & Johnston, 2021) who feeds the network.

### **2.9.2 Constructivism**

There is little doubt in the literature that virtual collage is one of the most important component aspects of education on social constructivist principles (Picciano, 2002) to the 21st-century learner. Social constructivism theory and its pedagogic practices according to Westbrook et.al, (2021) prioritize students-teacher or student-student collaborative learning. In the former formation, they argue that social constructivism supports student-centered pedagogy but with more roles for the teacher. Another perspective that links social constructivism with e-learning

is that contrarily to behaviourism, the flexibility accompanying the students-centered pedagogy promotes democratic interaction between teacher and students to the extent that teachers can permeate into students' world, understand their thinking and engage with them in their online culture and language. Other perspectives to draw on that will firmly establish the connectivism theory are constructivism, cognitivism, and behaviorism.

Behaviourism cannot be ignored in the study of virtual collage. The classical learning theory of Behaviourism as postulated decades ago by Thorndike (1911), Pavlov (1927), and Skinner (1957) was used to test behavioral responses, operant conditioning, and adaptation to environmental stimuli. Behaviourist theory was later remodelled into social teaching, enabling students to learn through observation (Bandura, 1977), or imitation (Westbrook et.al, 2023). Behaviourism supports-teacher-centered pedagogy, a strategy that teaches facts and what is required for the understanding of concepts with minimal or no interaction or contribution from students except “say what I say”, it negates the social aspect of behaviourism and its primordial assessment pattern is examination (Westbrook, et.al, 2023). Thus, it is sufficient to say that theories of connectivism, constructivism, and behaviourism provide the lens through which we obtain the ideas of how pedagogic activities function contributing uniquely to the design of online materials (Duke, Harper & Johnston, 2021). Although teaching is essentially a ‘social process’ (Westbrook, et. al, 2020, p.12) driven by an understanding of human behaviour, the long-standing structured, traditional teaching method that promotes memorization, repetition, and imitation favours the behaviourist, and may not support virtual collage entirely.

## 2.10 Different Fields that have used the Social Constructivist Theory

The relevance of this theory cannot be underrated as it has been used in other fields such as medicine, psychology, business management, accounting, sciences, literature, and languages, and not only in the area of mathematics. For example, this theory was employed by Marshall (2017) to examine the dialysis of social workers' perceptions of stress. The findings reveal that social workers experienced significant stress in their workplace.

Another study by Jwili (2021) which was conducted in KwaZulu-Natal South Africa also used the social constructivism theory to explore teenage mothers' experiences of the psycho-social

support services provided for them in a secondary school in KwaZulu-Natal. The findings of the study revealed that the teenagers experienced diverse support such as educational support, financial support, and emotional support (Jwili, 2021).

Moreover, the study by Yigit (2020) also used the social constructivist theory to ascertain pre-service social studies teachers' opinions about the digital storytelling process that they experienced. He found out that the preservice teachers had both positive and negative experiences with the digital storytelling process they engaged in (Yigit, 2020). Amadasun (2020) also used this theory to explore the experiences of social workers regarding their services to people living with disabilities (PWD, thereafter) in Nigeria and found that social work services provided to PWDs are inadequate and are not in line with the person-in-environment focus of the social work profession Application. Whilst Smyth and Carless (2020) also used the theory to explore how teachers of English for Academic Purposes managed the process of using exemplars. Meanwhile, the next section presents the limitations of the social constructivist theory.

## 2.11 Limitations of the Social Constructivism Theory

A limitation of using social constructivism theory is that learners would require more time in the construction process within the constructivist setting (Hoemann, Xu, & Barrett, 2021). This is very important in a constructivist classroom because the learners would need to question one another to find a solution.

Another limitation is that learners are required to solve commerce with little or no guidance from the teacher (Cilliers, & Pylman, 2020). This therefore affects students' academic success in the classroom because when left without guidance from the lecturer the students would be reluctant to do their class activity (Kasama, 2020; Oosthuizen, De Lange, Wilmshurst, & Beatson, 2020). On the other hand, when they are given all the support they require, it makes way for using that knowledge individually (Jabbarova, 2020).

## 2.12 Chapter Conclusion

This chapter discussed the literature review and the theoretical framework used to guide this study which explores Commerce Education Students' experiences of learning using virtual collage. It explored the social constructivism theory by discussing the definitions of a theoretical framework, the origin of the social constructivist theory, and its applications. Furthermore, it also explored other fields in which this theory has been applied as well as the limitations of the theory. Therefore, the next chapter discusses the research design and methodology adopted to conduct this study.

## CHAPTER THREE: RESEARCH METHODOLOGY

### 3.1 Introduction

This chapter discusses the methodology that this study adopt and the rationale for the selection. The methodology adopted in this study and the various steps methods adopted by the researcher in analyzing the research problem are demonstrated in this chapter. The description of the population, sample characteristics, sampling procedures, research instruments used, data collection procedures and analysis procedures, and ethical considerations used for the study were also examined. It explains the approach, paradigm data generation methods, data analysis, and ethical issues.

According to Maree (2007:17), research methodology is a plan or a strategy that moves from the underlying philosophical assumptions to specify the selection of the data-generating techniques to be used and the data analysis to be done. Leedey and Ormrod (2010:12) state that research methodology refers to the researcher's general approach in carrying out the research project.

### 3.2 Research Design

The research design is the entire study plan that contains all hypotheses, research concepts, variables, and their relationships, as well as proper data collection and analysis methods (Wakari, 2012 & Yin, 2011). This study is qualitative because this approach explains behaviours, processes as well as the 'actors' in the process, attitudes, and motivations. (Rahman, 2016) agrees that qualitative research is concerned primarily with processes, rather than outcomes or products. The research design can be described as the overall scheme of the plan for the study which includes all ideas, research concepts, variables and their relationships, and the appropriate ways of collecting and analyzing data (Wakari, 2012; Yin, 2011).

This study is non-experimental research. The non-experimental research, studies are conducted in a natural setting and phenomena are observed as they occur. The major benefit of non-experimental research is that it describes phenomena, explores, and at the same time explains the relationship between variables. Brink, van der Walt, and van Rensburg (2013) note that the researcher in non-experimental research is regarded as a bystander because the researcher

needs to obtain valid research results; as a result, there is a need for the researcher to consider the extraneous variables that would validate his study. A qualitative approach was chosen to conduct this research study as qualitative methods are methods that involve collecting contextual or verbal data (Bertram & Christiansen, 2010).

### 3.3 Critical Paradigm

Notably, critical researchers are of the view that it is possible to be an objective outsider. It is also arguable that research is positioned, and the researcher can't take an objective or neutral stance/position in the process of research because everyone has their values which influence the way they understand the world. Therefore, as a researcher guided by the critical paradigm, Critical researchers strive to unpack the structural, historical, and political aspects of reality to lead change of an emancipatory nature. In other words, they set out to critique and transform. By the same token, my effort as a critical researcher was to understand the pre-service commerce students' experience using the virtual collage as a means to learn their content in a South African university.

Che (2009) opines that the critical paradigm arose out of concern for marginalized individuals or groups of individuals in society. It is argued by Ache (2017) that within the critical paradigm, reality does not only change over time but is also unjust or unfair to certain individuals or groups of individuals. Peters (2007) postulates that knowledge within the critical paradigm arises from the interaction between the researcher and the subject and should ultimately lead to emancipation. The critical paradigm views the world as unequal and full of oppression of those with power. This paradigm seeks to emancipate the powerless and to bring justice to the oppressed.

Kincheloe and McLaren (2011:140) describe the critical paradigm as a worldview that recognizes that all thought is fundamentally mediated by power relations that are social and historical that facts can never be isolated from some form of ideological inscription and that certain groups in any society are privileged over others and research should lead to the emancipation of such individuals. Cohen et al (2011) assert that the critical paradigm search for ways in which oppression constrains action, choice, and knowledge in the quest for the

emancipation of the disempowered and transformation of reality. Thus, the critical paradigm identifies what has brought the individual or group of individuals to the state of powerlessness or power and aims at uncovering the interest at work in specific situations that should lead to change. By the same token, my effort as a critical researcher was to understand the value systems pre-service commerce students experience using the virtual collage as a means to learn their content in a South African university. The critical paradigm, therefore, has given me direction on how to carry out my study in terms of choosing the methodology and methods, what type of knowledge I will seek to produce, and my role as a researcher.

Thus, as a researcher operating in the critical paradigm, I approached the analysis of the commerce student experience using the virtual collage as a means to learn their content in a South African university with a critical lens/eye to examine the texts for evidence of both overt and latent oppression, stereotyping and discrimination of the phenomenon under study.

### 3.4 Sampling Strategy

A sampling strategy refers to the generating of information from easily accessible members of the population (Yunus and Tambi, 2013). Covered in this section is the target population from where the sample for the research will be drawn and what sampling technique and method will be used.

Miles, Huberman, and Saldaña (2014) state that sampling means taking part of a population and seeing it as representative of that population according to Neuman, (2011) convenience sampling, quota sampling, snowball, and purposive sampling are non-probability sampling techniques. Sampling is the process of selecting a subset of a population to represent the entire population (Reiley, et al, 2020). There are three distinct approaches to sampling, namely convenience, random, and purposive sampling. Random sampling is the most common. Study that is quantitative study will often use a random sampling method. In qualitative research, one form of sampling approach that is frequently implemented is called purposive sampling. The concept of picking examples that are high in information content to answer a research question is central to the practice of purposive sampling (Schreier, 2018). For this research, purposive sampling will be used to analyse all seventeen collages and reflections on the collages of the EMS 4 students at the Edgewood campus. This is because the students were grouped to

complete this assessment (collage + reflection). 17 represent the total of all the collages submitted for the module.

### **3.4.1 Target Population**

According to Collins and Hussey (2009:62), a population is any precisely defined body of people or objects under consideration for research purposes. There were 17EMS collages targeted for this research study.

### **3.4.2 Sampling Techniques**

Maree (2007) refers to sampling as the process used to select a portion of the population based on either probability or non-probability sampling.

#### **3.4.2.3 Rationale for Adopting Non-Probability Sampling**

As this is a qualitative study in selecting the participants for this study, the non-probability sampling technique was used with the purposive sampling method. The purposive sampling method is where the researcher makes specific choices about which people to include in the sample. This is important because it helps the researcher to identify only the participants that have relevant information needed for this study.

### **3.1.1 Sample and Size**

According to Neuman (2011), a sample size is a selected sample from the total target population that was selected for a research study. All seventeen collages and reflections on the collages of the EMS 4 students at the Edgewood campus of University of KwaZulu-Natal were analysed. This is because the students were grouped to complete this assessment (collage + reflection). 17 represent the total of all the collages submitted for the module. There were four student per group. The data for the reflections were generated through the lecturer.

## **3.5 Data Generation**

Data for this study was generated through collage and reflections. It was conducted by looking at topicalization, presupposition, and connotations as they appear in the text being analysed. A collage is defined by Harrison (2013) as a form of art whereby images and objects are combined into one piece of artwork. Therefore, I have chosen the seventeen virtual collages and reflections that was used to generate data from the EMS 4module assignments. The virtual collage together with the reflections represents the commerce student experience using the virtual collage as a means to learn the content in a South African university. This technique was specifically chosen because of the coronavirus.

### 3.6 Data Analysis

Miles and Huberman (2014), describe data analysis as consisting of three flows of activity: data reduction, data display, and conclusion drawing and verification. Data reduction is now the method of choosing, concentrating on simplifying, abstracting, and transforming the knowledge that appears in writing. Data analysis involved three important items for this report, which are, what the data says and interprets, what the data means, and then to present the analysis to the readers. Qualitative analysis of data is typically based on an interpretative philosophy aimed at analyzing qualitative data's meaningful and symbolic content (Maree, 2007).

The researcher employs CDA (Critical Discourse Analysis) to address the critical questions in this study. The reason for choosing CDA was to provide an in-depth understanding of the meanings that the virtual collage carries. CDA is an analytical tool that is used to interrogate meanings inherent in the texts (Watson and Watson, 2011, p. 63). This is because discourse in the collage is written in a particular and unique to each of the students. It looks at topicalization, presuppositions, and connotations that are hidden in the collage.

According to Fairclough (2003), the use of CDA entails some form of detailed textual analysis which specifically includes a combination of inter-discursive analysis of texts and linguistics and other forms of semiotic analysis. This implies that CDA focuses broadly on the language of the text and the social theoretical issues underpinning it. This methodology, therefore, was appropriate since it accommodated the theory of power and ideology that emerged from the literature review. Moreover, the choice of CDA as my methodology for this study was informed by the fact that it allowed me to engage in the text of the collage which represents the pre-

service commerce student experience using the virtual collage as a means to learn their content in a South African university.

In this study, analysis refers to a detailed or systematic examination or the dissection of a whole into its constituent pieces to achieve the study's goals (Bertram and Christiansen, 2014:115). Miles and Huberman (1984) believe, for example, that data collection and data analysis should be combined to allow for flexibility in data collection processes and keep the researcher open to new ideas or patterns that may arise. Miles and Huberman (as cited in Bertram and Christiansen, 2014:116) define data analysis as 'consisting of three flows of activity: data reduction, data conclusion drawing and verification'.

The CDA method used as a data analysis instrument for this study was inspired by the ideas of Halliday (1985) as used extensively by Fairclough (1989). This consists mainly of describing, interpreting, and explaining textual data. I equally used the "grammatical resources of lexicalization, choices of modality, and patterns of transitivity as my instruments to analyse the textual data" (Creswell, 2017). All these were linked to the theoretical framework in that the indicators in the framework served as signifiers in the instrument of analysis. Thus, the researcher checked such aspects as "lexicalization, choices of modality, and patterns of transitivity against these indicators" (Cohen et al, 2017 p. 276). In the end, the nature of the representation of virtual collage on pre-service commerce student experience using the virtual collage as a means to learn their content in a South African university (Cresswell, 2007; Marshall and Rosman, 1996) suggest specific steps to analyse data, but Cohen et al (2007:2011) are of the view that there is no prescribed technique for analysing qualitative data and ways of interpretation are diverse. The study focuses on exploring the experience of student use of virtual collage. Depending on the objective, therefore, the researcher analysed the data accordingly. This means that analysis is thoroughly done carefully to understand and make meaning of the data.

According to Kelly (2009:347), qualitative data analysis in critical emancipatory techniques is "not" a mechanical or limited procedure, but rather an open interaction with texts throughout the investigation, as used strategically in this framework. Therefore, the choice of CDA in this study granted me the opportunity to critically engage with both the textual and the visual discourses on the phenomenon of values and their representation in the collage.

Fairclough (2003) argues that CDA as an analysis approach entails some form of detailed textual analysis which specifically includes a combination of inter-discursive analysis of texts, linguistic, and other forms of semiotic analysis. This implies that CDA focuses broadly on the language of the text and the social theoretical issues underpinning it. Thus, when applied in qualitative approaches, CDA accentuates that it is not enough for people to understand the text or the spoken word but what is done with the talk and written text in conjunction with the resources drawn from these social practices is crucial. In this way, the choices of words speakers choose are acknowledged with the understanding that words convey how people perceive themselves, their identity, knowledge, values, and beliefs, consciously or unconsciously politicized, and are used to reflect interests of the picture representations in a collage.

In addition, Fairclough and Wodak (1997) alert us that the CDA has several assumptions. This study will focus on society and culture, ideologies, and historical representations if any present in these collages and reflections. In this study, therefore, CDA was appropriate to analyse the themes in the selected collage as they fall within the category of virtual material. The tools I will use to analyse the collage, for example, Huckins topicalization, presupposition, connotations as well as the agency of power relations in the virtual representation of the collage.

Topicalization is the focusing on how a sentence is being framed which is referred to as 'topicalization' whereby the decision to place a particular sentence in the topic position manipulates the reader to think in a particular way Modality is the introduction of a certain word to create a sense of certainty and authority called 'modality' word such as "may, can, might, could will can, must, it seems to me, without a doubt its, possible that, maybe or probably " are used to create "doubt or surety". By contrast, certain words are introduced to signify a voice of authority, such as" don't challenge me" (Huckin, 1997 cited in McGregor, 2003, p. 6)

Presuppositions and Insinuations are other tools, where words are slyly suggestive, carrying double meanings, giving the author power to readily indicate that there was no "intention to mislead". Lastly, register and agency identify the agency or power relation in terms of "Who is depicted as in power and over whom" "Who is depicted as powerless and passive" and "Who is exerting as powerless and passive?" " (Huckin, 1997 cited in McGregor, 2003, p. 6)

### 3.7 Trustworthiness

Christiansen *et al.*, (2014) note that the word trustworthiness is a construct used in interpretivist research by Guba and Lincoln (2014). The term trustworthiness refers to how the investigator reassures the viewer that it is worth paying attention to the results of the analysis and that the test is of high quality (Lincoln and Guba, 2014). In addition, Lincoln and Guba (2014) propose that paying attention to the following dimensions would improve the quality of confidence in a qualitative study which is credibility, transferability, dependability, and conformability.

Trustworthiness is a concept used by Guba and Lincoln (2014) for qualitative research. It involves credibility, transferability, dependability, and conformability. Credibility means that the findings reflect the 'reality' and lived experiences of the participants. To ensure that this happens, all the collages produced by the students virtually was compared to achieve accuracy since this was done online. Although I am conducting a research study where I am a student, I remained objective and unbiased throughout the study.

Transferability means to what extent the research can be transferred to another context. Commerce student' experience of using the virtual collage as a means to learn their content in a South African university was achieved in another setting. So, it is possible to transfer the findings obtained to another situation because it has a similar context.

According to Guba and Lincoln (2014), credibility is defined as the researcher's belief in the study's ultimate conclusions. 2020 (Statics Solutions). This research investigation began honestly, with no preconceived notions about the study's outcome. The research is exploratory, intending to learn more about the subject. The research is trustworthy as a result of this, as the results are less significant than a greater comprehension of the issue.

Dependability (replicability) is a further criterion listed by Lincoln and Guba (2007) to establish the trustworthiness of the study. Dependability is about giving correct and direct information in the study, thus the researcher offered concise evidence of data generated in this study by including direct quotations to allow readers to assess the findings.

According to Christiansen *et al.*, (2014), confirmability can be improved by making the research process transparent with enough details for readers to check if they would have reached the same or similar conclusion.

Reflexivity is crucial in research agendas involving Critical Discourse Analysis in education research. Bucholtz (2001) defined reflexivity as a process whereby “the analyst's choices at every step in the research process are visible as a part of the discourse investigation and critique does not stop with social processes, whether macro level or micro level, but rather extends to the analysis itself” (p. 166). CDA practitioners, particularly those working with natural speech in dynamic settings, are attuned to the nuanced ways in which researcher identity is implicated in the research process. Illuminating the researcher's identity whether ethnicity, mother tongue, age, gender, social class, educational level, or racial aspects of identity (among other qualities) can open up space for increased critical interpretation of data and deepen the reflexive component of inquiry.

### 3.8 Ethical Considerations

As a researcher, I am the primary instrument for data collection. The issue of ethics is very important for the researcher; thus, the researcher will ensure adherence to ethical practices all the time. The researcher addressed the ethical issues by requesting permission from the University to conduct this research study. An application for ethical clearance will be sought from the University ethics department.

Ethics has to do with behaviour that, when doing research, is considered right or wrong. In research, therefore, it is necessary to consider, especially research involving humans and animals (Christiansen *et. al.*, 2014). When they write about ethics in research, Mouton (2001), agrees with Christiansen *et. al.*, (2014), who note that science ethics concerns what is wrong and what is right in the conduct of research since scientific research is a type of human activity. It follows that such conduct has to conform to generally accepted norms and values.

#### 3.8.1 Participants have given Informed Consent

The process of obtaining the collages and reflections required participant's learned consent is known as informed consent. The researcher also stated that collages and reflections in the study is entirely voluntary. The permission letter in Appendix D informs the participants about the research's purpose and ethical considerations that apply to them.

### **3.1.2 Ensuring no Harm comes to Participants.**

The researcher ensured that the study did not injure the participants and did not threaten their studies. The nature of the data generating assures that the students' collages and reflections are not subjected to any physical or psychological harm. The collages and reflections used in this research project was entirely voluntary, and participating students were offered the option of remaining anonymous.

To ensure that no damage happens to research participants. All the collages and reflections were conducted by CDA.

### **3.8.3 Respecting Confidentiality and Anonymity**

Confidentiality and anonymity were assured as this is of critical importance in social science research (Kimmel, 2007). Where personal information about research is collected, stored, accessed, used, or disposed of, the researcher must ensure that privacy, confidentiality, and anonymity are protected. All collages and reflections remained anonymous as the collages were the assignments of students collected virtually and only used for this research.

Data will be stored for five (5) years and was used for this research. Collages were stored in an encrypted file locally on a computer to ensure the privacy of information and not stored on cloud services.

### **3.8.4 Ensuring Permission is obtained.**

The official representative of the organization where the researcher works granted official permission to conduct the research project. As shown in Appendix A, the researcher has secured authorisation from UKZN to conduct the research study within the organisation, ensuring the institution's acknowledgment and acceptance.

## **3.9 Limitation to study**

The sample size of this study is only seventeen virtual collages. This is one factor that has largely restricted the size of the sample used. Another concern of qualitative research is that

people often interpret phenomena from a certain perspective which can be influenced by personal prejudices (Kalof, Dan & Dietz 2022, p.79).

In any research study there must be some limitations, and my study, therefore, is not an exception. As a result of that, the anticipated limitation is the constraints of time. The limitation of one module is noted as the recommendation of this study is not generalized. Another limitation is the limited number of participants hence there will be no generalization possible. Lastly, the issue of funding this study is another limitation that I anticipated.

### 3.10 Chapter Summary

The chapter discussed the research design, research methodology, population and sample, sampling strategy, data collection instruments, validity and data analysis, and ethical considerations. This chapter has discussed the methodology that this study adopted and the rationale for the selection. It explained the approach, paradigm data generation methods, data analysis, and ethical issues. The next chapter will discuss the Analysis and discussion of the findings.

## CHAPTER FOUR: DATA PRESENTATION

### TOPICALIZATION, CONNOTATION AND PRESUPPOSITION

#### 4.1 Introduction

The study's design and methodology were discussed in the previous chapter. This chapter aims to give a detailed study of data collected using qualitative approaches, with thematic data analysis as the method of analysis. Critical Discourse Analysis (CDA) was used to analyze collages and reflections using the modes of topicalization, presupposition, connotation. The identification of themes was followed by a discussion of those themes. Based on the data, these themes were identified and classified into several categories, with codes assigned to each category to gain a better understanding of the phenomenon the study wanted to investigate. This chapter offers data analysis and is organized in a way that responds to the primary research questions defined in the first chapter to give meaning to the data collected. The students' experiences of doing a virtual collage are presented below. The first section unmasks the meaning through the modes of topicalization, connotations and presupposition. These modes helped to analyse their representation of the assessment topics.

The second section reveals their reflections of interacting with other group members using the online space.

Moreover, in this section, the researcher provides a detailed discussion of the results of the data.

#### 4.2 Presentation of Data

The data analyzed were 17 collages collected from students of commerce used in Economic and Management Science in Edgewood Campus.

The students were given an assessment requiring them to develop a collage to show their understanding of the economic content within the EMS curriculum as it pertains to financial markets, National budget, standard of living, and Circular flow. These collages were analysed

using the modes of topicalization, connotation and presupposition. Topicalisation is a mechanism of syntax that focuses on how a sentence is framed (Ferguson 2007, McGregor and Huckin, 2004)

They are presented and analyzed below:

### 4.2.1 Topicalization

This focuses on how a sentence is being framed and this is also referred to as “a situation whereby the decision to place a particular sentence in the topic position manipulates the reader to think in a particular way” (Wodak, 1995, p. 204).

### 4.2.2 Topicalization Markets



Figure 1: Markets

The picture of this collage is presented in the square form, the picture of MARKETS is positioned in the centre, written in capital letters. According to CAPs documents (DOE, 2015), there are many types of markets namely goods and services market, factor market, labour market, and financial market. This collage A is on the financial market.

A financial market is a market in which people trade financial securities and derivatives at low-cost transaction costs, and financial instruments including bonds equities, the various international currencies and derivations. The picture of the market is surrounded by a global picture with the colour gold on the top side, the left side is the picture of the market niche with the colour green, and the right side is the picture of goods and services with the colour red, while the bottom side is the picture of different picture of currencies, British pound, US dollar, Euro, Japanese Yen, and Chinese Yan.

The positioning of the word market in the centre can be seen as a strategy of ‘topicalization’ (McGregor, 2003, p. 5). Topicalization places a particular sentence or words in a topic spot and thus influences the reader to think in a particular way. In this instance, the reader is being manipulated to think of the free market as the market of choice. The picture of this collage 2 in Appendix 2 is presented in the form of a man, the picture of FINANCIAL MARKET is positioned in the centre and written in capital letters. This is to say to the reader that this type of market is called the financial market. This collage shows economic activities on the shoulder and leg of the man, but there were no economic activities represented on the head and leg.

Furthermore, in collage 1 appendix 3 the usage of the colour black to depict the market environment may be associated with power, elegance, formality, death, evil, and mystery (Cerrato, 2012, p.15). Psychologically black means authority, power, and control of many situations it can be intimidating, unfriendly, and unapproachable (Cerrato. 2012, p.15). The picture of the financial market is represented as the people in the labor market picture with color white on the top side, and the right side is the picture of stock exchange data with color blue, while the bottom side is the picture of the hospital room with color blue.

The red arrow in the collage picture represents attraction and attention in the financial market while black colors in the man’s head and legs indicate that there is no economic activity that is hanging around the head and leg of the man in the collage. black colour in the business environment is associated with power, elegance formality death evil, and mystery (Cerrato 2012).

The picture of this collage 3 in appendix 3 is presented in the square theme the word of MARKET AND ECONOMICS is written in capital letters, this type of market is called a factor market, A factor market in economics is where factors of production including land, labor, and capital are traded. The picture of the market and economics is surrounded by an emerging market picture with the colour grey and yellow on the top side, the left side is the picture of the national budget with the colour white and the right side is the picture of the standard of living with colour yellow, while the bottom side is the picture of the budget with colour black.

The colour yellow in the picture of market and economics in the collage represents warmth, sunshine, and cheers, also it is associated with food. physiologically color yellow stimulates the mind and mental activity. (Cerrato, 2012, p. 8). The collage picture explains an economic relationship between budgets circular flow standard of living and the market towards the economy.

The picture of this collage 4 in Appendix 4 is presented in square form, the word MARKET is positioned in the centre, written in capital letters. This type of market is called the goods and services market, A Goods and services market is the market where households purchase consumables items and business sell their wares. Also, the picture of the market is surrounded by a budget picture with the colour gold on the top side, the left side is the picture of the market with the colour grey, while the bottom side is the picture of the supermarket with the colour yellow

The colour red in collage 4 appendix 4 the marketing context represents attraction and brings attention or danger in the marketing environment, it is also a warm and positive colour, a very physical colour that draws attention to itself. In psychology the colour red means energy, passion, strength, and excitement. (Cerrato. 2012, p 4). The picture of the market is surrounded by a budget picture with colour gold on the top side, the left side is the picture of the market with colour grey, while the bottom side is the picture of the supermarket with colour yellow.

The picture of Collage 5 in Appendix 5 is presented in the form of arrows theme. the word financial markets are placed in the center of the collage. The financial market is a market in which people trade financial securities and derivatives at low-cost transaction costs, financial instruments including bonds equities, the various international currencies and derivations. The picture of financial markets is surrounded by a stock exchange data picture with color blue on

the top side, the left side is the picture of the definition of the market with color grey, while the bottom side is the picture of stock exchange data with color blue.

The colour blue in the ECONOMY represents stability, coldness, trust, and the integrity in economy (Cerrato,2012, p. 11). The collage shows that there is exponentially increased growth in the economy by the sign of arrows moving up.

### 4.2.3 Topicalization of circular flow.

The picture of this collage 6 in Appendix 6 is presented as a form of circular flow, the picture of the economy is placed in the center and written in capital letters. The circular flow is the flow of goods and services, money, and factors of production in the circular flow of a closed economy, according to the CAP document (DOE, 2011).

In this collage picture, the economy picture encompasses the national budget on the top with the colour blue, while both sides of the economy picture are circular flow and standard of living with color blue, the bottom side of the economy is the market picture with color blue.

The colour blue in the ECONOMY represents stability, coldness, trust, and integrity in economy. (Cerrato, 2012, p.11). Psychologically blue color is calming, reducing tension and fear.it shows the pulse rate and reduces appetite, being a cool color, it creates a sensation of space. (Cerrato, 2012, p.11)

The collage picture in Appendix 7 is presented in a circular flow theme. The picture of the economy is surrounded by the market picture on the left side with color yellow and the right side is the picture of the budget with color blue while the bottom side is the picture of circular flow with purple red. The colour blue in the ECONOMY represents stability, coldness, trust, and integrity in the economy (Cerreto, 2012, p .11)

The picture of this collage in Appendix 8 is presented as a square theme. The picture of the new economy is placed in the center with color yellow. The new economy picture is surrounded at the bottom side, with the picture of cooperative ownership in yellow colour.

The colour yellow in the marketing context represents stability, attraction, sustainability, and integrity in the economy (Cerrato 2012, p 8)

## 4.2.4 Topicalization budget

The picture of this collage 9 in Appendix 9 is presented in the form of a tree, with the picture of the national budget placed in the center. The budget according to CAP (2011) is government revenue, direct tax, indirect tax, and government expenditure on services such as education, health, housing, social grants transport, and security, etc.

The picture of the national budget is surrounded by a market picture with color black on the top side, the left side is the picture of the 2021 budget in a nutshell with color grey and the right side is the picture of income in the economy with color grey, while the bottom side is the picture of the market with color green.

The black colour in the economic environment is associated with power, elegance, formality, death, evil, and mystery (Cerrato 2012, p.15). Psychologically black means authority, power, and control in many situations it can be intimidating, unfriendly, and unapproachable. (Cerrato 2012, p.15). The collage picture 10 in Appendix 10 is presented as a human being man, the picture of the 2020 budget by number is positioned in the center and well written in capital.

The picture of the 2020 budget by number is surrounded by household pictures with color blue on the upside, the left side is the picture of the stock house with color red, while the bottom side is the picture of the government house with color blue. The color gray in the picture of the 2020 budget by number is the collage represents intellect, Wisdom, and security in the economy, grey is a conservative color signifying neutrality, indifference, and reserve (Cerrato, 2012, P .20).

## 4.3 Connotation

### 4.3.1 Connotation budget

Connotation is a word or words that can be used to convey a strong meaning (McGregor, 2005) this means that connotations are not always or seldom, in the dictionary, but are often assigned based on the cultural knowledge of the participants.



**Figure 2: High Income**

This collage number 5 selected the theme of a human being to present “HIGH income,” (McGregor, 2007). The word High is used as a comparative adjective to convey the strong meaning of income in the standard of living in the collage. This implies that it has a positive connotation based on my cultural knowledge.

The connotation in the collage displays the high number of rands currency such as trillion rands, and billion rands thereby neglecting other small rands currency such as million and thousands of rand this indicates that connotation is used to convey a strong meaning by using trillion and billion rands.

Concerning position, High income is surrounded by a household picture with the colour blue on the top side, the left side is the picture of the stock house with colour blue and the right side is the picture of the business warehouse with colour red, while the bottom side is the picture of government house with colour.

### 4.3.2 Connotation budget

This collage picture 11 in appendix 11 is presented as a tree, "NATIONAL BUDGET" The word national is used to convey the strong disparity among types of budgets in the economy, this implies that it has a positive connotation based on my cultural knowledge.

The budget according to CAP (2011) is government revenue, direct tax, indirect tax, and government expenditure on services such as education, health, housing, social grants transport and security, etc.

This collage 11 makes use of some words such as business, money, and finance to convey a strong meaning in the national budget thereby neglecting some important words such as government revenue, direct tax and indirect tax, and government expenditure as less important.

The picture of the national budget is surrounded by a market picture with the colour black on the top side, the left side is the picture of the 2021 budget in a nutshell with the colour grey and the right side is the picture of income in the economy with the colour grey, while the bottom side is the picture of the market with the colour green.

### 4.3.3 Connotation of the circular flow

The collage picture in Appendix 13 is presented in a square theme to present the content on "THE economy". The word the is used as a phrase to convey the strong meaning of economy in the standard of living in the collage this implies that is a positive connotation based on my cultural knowledge,

The circular flow is the flow of goods and services, money, and factors of production in the circular flow of a closed economy, according to the EMS CAP document (2011). such words as national budget, markets, and standard of living are used as strong word connotations to convey meaning in the circular flow, thereby omitting the keywords that are used in the circular flow, such words such as goods and services and factors of production, as less important the

economy picture is surrounding at the bottom side, with the picture of cooperative ownership in the yellow colour.

## 4.4 Connotation markets

The picture of this collage<sup>1</sup> in Appendix 1 is presented in the square form, the picture of MARKETS is positioned in the centre, written in capital letters. According to EMS CAP documents (2011), there are many types of markets namely goods and services market, factor market, labour market, and financial market. This collage A is the financial market.

The financial market is a market in which people trade financial securities and derivatives at low-cost transaction costs, financial instruments including bonds equities, the various international currencies and derivations.

This collage displays some countries' currencies and their flags such as the British pound us dollar, euro, Japanese yen, and Chinese Yen to convey a strong meaning about currencies in the financial markets thereby neglecting other countries' currencies such as the South African rand, Nigerian naira, etc. This implies that is a connotation based on my cultural knowledge, (McGregor, 2003)

The picture of the market is surrounded by a global picture with the colour gold on the top side, the left side is the picture of the market niche with the colour green, and right side is the picture of goods and services with the colour red, while the bottom side is the picture of different picture of currencies, British pound, us dollar, euro, Japanese yen, and Chinese Yen.

### 4.4.1 Presupposition.

A presupposition is using certain words that take certain ideas for granted as if there is no alternative (MC Gregor,2003). The following collage is used to discuss how prepositions were used in them.

## 4.4.1 Presupposition market



Figure 3: Markets 2

The picture of this collage is presented in the square form, the picture of **MARKETS** is positioned in the centre, written in capital letters. According to CAP documents, there are many types of markets namely goods and services market, factor market, labour market, and financial market. This collage A is the financial market.

This collage displays some countries' currencies and their flags such as the British pound us dollar, euro, Japanese yen, and Chinese yan to convey a strong meaning about currencies in the

financial markets thereby taking other countries' currencies such as the South African rand, Nigerian naira for granted as on other alternative. (presupposition)

#### 4.4.2 Presupposition budget

This collage picture 11 in appendix 11 is presented as a tree, "NATIONAL BUDGET"

The budget according to EMS CAP (2011) is government revenue, direct tax, indirect tax, and government expenditure on services such as education, health, housing, social grants transport and security, etc.

This collage 11 makes use of some words such as business, money, and finance to convey a strong meaning in the national budget as important thereby using certain words such as government revenue, direct tax indirect tax, and government expenditure for granted.

The picture of the national budget is surrounded by a market picture with the colour black on the top side, the left side is the picture of the 2021 budget in a nutshell with the colour grey and the right side is the picture of income in the economy with the colour grey, while the bottom side is the picture of the market with the colour green.

#### 4.4.3 Presupposition circular flow

The picture of this collage 6 in Appendix 6 is presented as a form of circular flow, the picture of the economy is placed in the center and written in capital letters. The circular flow is the flow of goods and services, money, and factors of production in the circular flow of a closed economy, according to the EMS CAP document (2011).

This collage 6 in appendix 6 placed certain words such as business, economy, and revenue boldly written on the collage 6 as if there are no other words in the circular flow, thereby neglecting some words such as goods and services, money, and factors of production.

### 4.5 Reflections

The following reflections were captured from the students' assignments. These reflections narrated how students worked together in groups to come up with the collages. This is the most important part of this research because it is practical evidence of the theoretical framework used in this study. CDA is necessary for describing, interpreting, analyzing, and critiquing social life reflected in text (Luke, 1997). CDA is concerned with studying and analyzing written texts and spoken words to reveal the discursive sources of power, dominance, inequality, and bias and how these sources are initiated, maintained, reproduced, and transformed within specific social, economic, political, and historical contexts (Van Dijk, 1988). It tries to illuminate ways in which the dominant forces in a society construct versions of reality that favor their interests. By unmasking such practices, CDA scholars aim to support the victims of such oppression and encourage them to resist and transform their lives (Foucault, 2000), the central tenet of critical theory and the critical science approach (McGregor, 2003).

Using critical discourse analysis, this section talks to the concept of power and powerlessness expressed in the reflections.

#### **4.5.1 Reflection 1**

##### **Powerlessness**

Reflection from the first group stated:

“Working on this assignment was a bit tricky because there was much confusion about the requirements and the structure of the assignment. I wasn't sure if I clearly understood the instructions, so I asked my colleagues who gave me different explanations that confused me even more. I then decided to conduct my research on what exactly the assignment meant.

#### **4.5.2 Reflection 2**

The second group started with the challenges they faced making the collage and thus stated:

“On the internet, there are too many similar pictures, and choosing which ones would be suitable to put in our collage was a struggle, we had to change some of the pictures we chose because they simply could not fit in with the rest of the collage due to the angles not matching and other reasons. We were not used to doing a virtual collage and we only knew the traditional collage which was cutting and pasting photos. We had to learn how to navigate through PowerPoint to create a collage which took us a lot of time to finally figure out”.

## **Power**

“I then started by reminding myself about the topic which is the national budget and standard of living. I read a few readings to familiarize myself with the topic then started looking for pictures. It was easy to find pictures and putting the work together was fun.

Doing this assignment made me learn new things, especially with the Phinsh App that I used to combine all the pictures to form a beautiful shape. I had no idea how to do a presentation on Zoom and share my screen with other members because of this assignment now I know how to do it. Doing this assignment with my group members made me more familiar with working with other people and sharing ideas on how to overcome challenges that we come across as a group.

I had no idea how to conduct a Zoom presentation and share my screen with other members until this assignment, but now I know how to accomplish it. Working on this assignment with my group members allows me to get experience working with others and offer ideas on how to handle issues we face as a group. I had a great experience with working with my colleagues”.

## **Powerlessness**

The second group started with the challenges they faced making the collage and thus stated:

“On the internet, there are too many similar pictures, and choosing which ones would be suitable to put in our collage was a struggle, we had to change some of the pictures we chose because they simply could not fit in with the rest of the collage due to the angles not matching and other reasons. We were not used to doing a virtual collage and we only knew the traditional collage which was cutting and pasting photos. We had to learn how to navigate through PowerPoint to create a collage which took us a lot of time to finally figure out.

## **Power**

We learned that for us to make a great collage we have to use contrasting images meaning that the key to a great collage is using contrasting images that will make the viewers' eyes move throughout the image (Collage). We learned new skills such as how to tell a story through

pictures which will be of greater use in the future. Angles of pictures were something that we knew little about and while doing the collage we learned that to keep the collage balanced we need to place the pictures in a certain angle which was new to us”.

“Implementing a virtual collage was overall an exciting experience because everyone came up with their ideas on how the pictures should be placed, the colour of images that we will use, etc. All the members participated, and we managed to finish our collage before the due date. The challenge we faced as a group was that we lived far away from each and the only way to communicate was through WhatsApp, some people had network problems. There were many positive experiences that the group members experienced from this assignment such as: It was different from our usual assignments and projects because this assignment required creativity or thinking out of the box. Even though it was a simple assignment it was interesting, fun and it made the content much easier to understand. Working as a group made the assignment exciting as we all helped each other with motivation, we shared ideas, and we even became good friends. The assignment did not take much time as the instructions were clear and the assignment was explained well. The assignment didn’t take much time, so we finished fast and were able to submit it on time.”

### **Powerlessness**

With the positives there always must be certain negatives as well. In our case, we had negatives such as the fact that we could not meet up to have a face-to-face discussion and meet each other properly due to Covid19 was disappointing. We were indecisive on the theme for our collage because we had so many to choose from that it became difficult to choose one. One of the group members wasn’t feeling well and another group member had a family emergency so working in those conditions was exhausting and stressful. Working from home was a problem because we had to do our household chores as well as make time for discussions.

### **Power**

We learnt that when working with others it is important that everyone is working in agreement. We learned how to value other people’s opinions and how to work together with others peacefully.

### **4.5.3 Reflection 3**

#### **Power**

This group stated:

I would first like to acknowledge how interesting it was to write this assignment on these topics, easy but interesting. I was amazed by how things have changed in our country's economy since I last time, I last researched the state budget, it was quite eye-opening, and I decided to give myself some time to read about these wherever and whenever possible.

### **Powerlessness**

The requirements of this relationship were a bit challenging for me, there were times when I thought that I'd got it, then after taking a Zoom course I realized that I was lost in thoughts.

### **Power**

"It was a great experience doing this assessment, I enjoyed creating my virtual poster. I did encounter some struggles in terms of collecting pictures and putting them together, however, I managed to do my research and find all the necessary information. Working with my group has always been challenging. There is a lack of communication. Members submit late and we end up submitting late. Understanding the concept is what made my PowerPoint presentation a successful one, without the knowledge and understanding I wouldn't have completed this work.

Circular flow has shown us how the economy circulates the whole world. It has given us an understanding ability of how participants relate to each other in the economy and the role of each participant in the economy. Reading more about circular flow has also conveyed that there is an outflow and inflow of money in the economy, which I didn't know about. I have also learned that there are two types of flows in the economy, which are real flow and money flow. I also know that there is an open and closed economy.

Through the research, it was not easy to find relevant information on the circular flow, and searching sites or sources that I used required much more time to get accurate information".

### **Powerlessness**

Loadshedding caused a lot of distraction and delay in completing this PowerPoint virtual college.

## **4.5.4 Reflection 4**

### **Powerlessness**

During this virtual college, it was hard to insert many pictures as it was my first-time using PowerPoint,

### **Power**

“This is the most amazing topic it is understandable, and it allows me to know more about the economy. The relationship between Households and other sectors, what is more interesting is that it seems like households are the most important sector because if we are talking about the households we are talking about people. Businesses won't work without having managers and workers and the government is people. Also, in the factor market land is owned by people, labour is people, capital must be contributed by people, and entrepreneurs are people. In the product market, nothing would happen without having people who are going to produce those products that they are going to sell and the people who must come looking for a certain service”.

### **Powerlessness**

This was the most challenging assignment though it allowed me to get more information about the topic. Finally, it went well because I managed to finish everything on time.

### **Power**

“I have learned so many things about this task, it was so informative. First, I as a student am not familiar with using PowerPoint so it was such an interesting challenge to work around it and learn more about it and how it works, its features, and how to use it to make colourful beautiful designs that will excite learners to learn more. Researching the topic, I have chosen ‘Markets’ I learned more about Markets and how they work, I learned about different types of Markets and that in every city of each country, there are several markets, and they operate the same because the primary idea is to sell to earn profits subsequently make a living by making ends meet at home. However, I realized that the people who indulge in forming and selling in the Markets are initially unemployed people who sell products to provide for their families and pay bills.

First, I would like to say that this was my very first and exciting experience, creating this virtual collage. Besides the fact that I am a student teacher, I also happen to like artwork. When I was introducing the topic” A virtual collage” to learners, I noticed that they had no clue whatsoever about a virtual collage. For this reason, I ended up using the virtual collage I created as an

example so that they get a better understanding of what a virtual collage looks like. After showing them an example of a virtual collage, they started participating in class by asking questions that they did not understand. What I have learned from this, is that sometimes as teachers we should use visual sources as an example to explain things to learners that we are trying to teach them, so that they can build a picture in their minds about that topic. Using pictures sometimes is better than using words”.

#### **4.5.6 Reflection 6**

This group of students has this to say about their reflections.

##### **Powerlessness**

“A virtual collage is an art form created by piecing and layering together a variety of virtual images and textures from different sources to create a whole new work of art, this is something that our group came into this assessment not knowing. The beginning of creating the virtual collage was hands down the hardest part especially since we did not know where to even begin. We did our research, engaged with our peers, and finally gathered enough information that allowed us to sit with one another and discuss how we with go about developing the virtual collage.

Our first task was to gather the pictures we would need to create a collage. This came with difficulties since we didn’t know where we would get the pictures that articulate our topics. Luckily through research, we found websites that were home to pictures related to the national budget, standards of living, the markets, and the circular flow. The upside to this was viewing all these wonderful pictures and gaining information however it did come with some difficulties such as the need for data to browse these sites and the high storage that these images took up.

The next step was to find words to incorporate into our collage, loadshedding during the process of this assignment put continuous strain on us. Our group members did not want to all include the same words and communicating with one another was hard because the network with go down with the loadshedding”.

##### **Power**

“At this point we understood what we were aiming towards we got a few different apps that helped us in creating a collage, unfortunately, that failed us as we could not transfer the collages onto the PowerPoint document. We watched some YouTube videos that explained how to create a virtual collage on PowerPoint.

After hundreds of failures, we finally created the collage that went hand in hand with our selected theme at the beginning of the assignment. We chose the theme of people and created a virtual collage that depicted a person. This was a great experience, working with my group members who brought their perspectives and ideas, which in return gave us the final product that are happy with.

We would also like to add Virtual collage is easy to develop from anywhere at any time You have the freedom to complete your coursework 24/7 from anywhere and at any time that suits your busy schedule. If you're out of town on business, and busy in your free time you can make it. All you need is your laptop or other digital device to create a virtual collage. A combination of structure and freedom of working in groups online learning gave us freedom on working to individual slides. It allows you to choose the preferable them to us that will suit you. It allows you to picture as many as you can.

It requires a lot of space on your laptop or computer or any digital device you are using since you must save a lot of pictures and work on the suit collage. It distorts the perception of pictures on beauty, this is caused by re-using the picture from downloads to the app and saved digital devices the more u reuse pictures the more they are being distorted from their originality. Virtual collages make pictures thin and cut words. It is time-consuming due to the process that you need to edit pictures and decide in collage.

As earlier mentioned, there are a few demerits of integrating a virtual collage and there is no doubt that there are immensely outweighed by the many benefits. The bottom line here is that if you are aiming for the best, you should be ready to invest in a good virtual collage and well cooperate with group members”.

#### **4.5.7 Reflection 7**

##### **Powerlessness**

“As my group started early with the assignment, we divided the topics among us and initially, I selected The National Budget. I had come across this topic in many books so I thought it would be easy for me. When going deep into it we came across a lot of confusion and doubts.

We had to depend on a dictionary for word clarity. “The Federal Budget” by Aaron B. helped us for further clarity and a more advanced understanding of the topics. Sometimes we were not able to keep the important knowledge in mind. Somewhere we lacked connections and struggled to bridge the gaps until a few days before submission. We prepared a PowerPoint presentation which was a requirement to create our virtual collage. To achieve all the standards set by my group, we had to travel further to make the best presentation. Also, working with my group was very easy as they participated in all the aspects of the assignment and that is the reason, we were able to prepare and finish the assignment on time. (Mduduzi Masondo)

After the division of the work. My research started by looking up what are markets. What are the different types of markets? The decision of which markets to include made the making of the presentation a tough one to do. Keeping in mind that this is an EMS module I included the ones that are basic, but all the explanations will be there. The development of the collage was hard because everyone was doing their thing. In the end, it came out better than I had expected. Sourcing out the information was hard because the required information was found from different sources. (Hlengiwe Maphumulo)

Even though there were challenges that we faced as a group, I enjoyed working with my group on the topic that I selected, the circular flow. During the preparation of the assignment, I found it challenging to come up with relevant pictures on the topic of my choice, but I did find them. In preparation for the PowerPoint presentation, we were successful in doing a virtual collage because all group members were participating. I cannot doubt the fact that the ones this presentation presented to, will enjoy because the presentation has short and understandable points”.

#### **4.5.8 Reflections 8**

According to this group of students:

##### **Powerlessness**

“Making the virtual collage was amazing because it was more pictures and artistic. we enjoyed looking for pictures in magazines and newspapers on the internet. Explaining a topic using visuals and pictures made it easy to understand. The challenge faced when creating the virtual collage was that we had so many pictures, but we had to choose some of them and leave some of the pictures because one slide was not enough to insert all the pictures”.

## **Power**

“The virtual collage was fun to make and exciting to pass a message using only pictures. We were able to use the computer skills we had to create an attractive slide on PowerPoint. What I learned from this assignment is to be creative, know how to blend pictures and colour, able to choose the appropriate slide style, and use of relating words to the topic.

Making the collage was fun and exciting for me since well it was also easier to find pictures that independently were able to just be self-explanatory. The pictures we found were able to help us explain the lesson much better. They allowed me to be creative and play well with colours and also to explain the lesson to our learners. A lot of people tend to be visualized and understand much better if they see something with their eyes than notes. The topic that we chose the circular flow was easily explainable by looking at the business sectors which portrayed and assisted in helping the community understand the lesson”.

## **Powerlessness**

“The challenge we encountered was to find ways of involving words in the collage. It was time-consuming to come up with the idea we did on the slides and time-consuming to make the words appear on the slide. It was challenging to get the pictures relating to the topic. At first, we did not understand what was required of us. It was a challenge to divide the task because there were 4 of us in the group and there were 3 topics. We were not sure how to compile different slides from each one of us.

We had a problem finding the required pictures from the internet because of data, we ran out of data, and we did not have Wi-Fi, and it took so long for the data to be refilled. We ended up doing our collage very late. Network these past days has been a problem for some of our group members, especially for those staying in rural areas, because when there is load shedding the network also normally goes down, which made it impossible for one of our group members to attend the zoom classes where the assignment was explained by the lecturer.

In the group, nobody had heard of the gallery walk, so we were not sure what it was, how it worked, or should look like, but after doing some research and attending the Zoom class, it was clear.

It was challenging to find the right pictures for the collage. But with constant research, we were able to identify pictures that were clear and straight to the point. After finding our pictures we were not sure how to put them together to make one informative and creative collage. Researching the 3 topics allowed us to refresh our memories on the content and different concepts”.

### **Power**

“Overall, the experience was fun and informative for us, we worked well together and supported each other through all the challenges we faced, those we could not control (network problems), and advised each other on challenges we could control (finding the right pictures). The greatest skills we learned is doing a virtual collage and how to present during a gallery walk, so as a future teacher we might be able to use it in our teaching”.

### **4.5.9 Reflection 9**

#### **Power**

“When doing this assignment, we worked well as a group from beginning to end. We engaged in collaborative efforts which allowed us to learn from each other. We developed an appreciation for each member's circumstances, opinions as well and efforts throughout this assignment. In the sight of the COVID-19 pandemic we, as learners learning under remote-learning conditions, were taught how to become well-organized to be able to conduct active discussions amongst all members. It also developed our social and technological skills since we had to make use of social media platforms such as WhatsApp to conduct our discussions as well as PowerPoint to create the virtual collage.

Upon researching for this assignment, we were exposed to a deeper understanding of how the concepts regarding the national budget, markets, and circular flow operated. All members selected one topic each to research. We thereafter had a brainstorming session where we picked words, ideas, and images that would reinforce those concepts. Once each member had gathered their pictures, we then shared them with the group where we selected the ones, we thought were most relevant and created a clear image of the topic. As a group, we decided on a corporate theme which is why we created the collage in the form of a briefcase as we thought it would effectively tie the concepts together. This allowed us to acquire an appreciation for the various topics such as budgeting as we did not realise the various aspects that needed to be taken into

consideration when compiling such documents. This broadened our understanding to a national level of thinking as we were only engulfed with handling our household budgets which we thought were a daunting task. We became aware of the important tasks that the finance minister has every year when forecasting and planning the budget for the nation. We learned that the standard of living of the citizens is affected by the planned budget. Through research on the topic of the markets, we were able to learn the importance of the various markets and how it is essential in the economy. When we were researching the topic of the circular flow, it broadened our understanding and taught us how all the different components such as households, incomes, expenditures, and businesses were interrelated and the importance they hold in the economy. This assignment has taught us that all these topics have a great effect on the economy, citizens, and the ruling government.

When compiling this virtual collage, not all members were well-versed in that technological aspect. We then collaborated, researched, and shared ideas to create a virtually interesting and creative presentation. Due to certain socio-economic issues, not all members had access to resources such as laptops and continuous internet service. Therefore, we all collaborated as a group to assist each other by typing and doing research wherever we possibly could. This brought us to our end product and the successful completion of our assignment”.

#### **4.5.10 Reflection10**

##### **Power**

“The topic was easy to understand because it was easy and there was enough information. There were so many pictures illustrating the topic or the content. This reminded me of the time we were still in school and how the teacher explained it to us, and we were able to remember it well. Showing an understanding of markets enhanced my skills and knowledge of the topic. Researching the market was interesting, it has strengthened our enthusiasm and further market knowledge. We also gained a lot of market information and understood better. We would like to first acknowledge how interesting it was to write this assignment on these topics, easy and interesting. We were amazed by how things have changed within the economy of our country since the last time. We did a research study on the national budget it was quite eye-opening, and we decided to give myself some time to read about these whether possible. We would also love to highlight how delightful we were to work as a group again, we truly work well together”.

## **Powerlessness**

“We were experiencing network issues the network was not stable. There was so much information we ended up not knowing which one to take. We ended up having more pages than what was expected. Doing all this virtually was exhausting since everything is electronic and cost data, is expensive. We had difficulties searching for relevant pictures of the topic. We had to get used to the platform which we were instructed to use. The first thing that was challenging for us was creating the same theme since we were doing this assignment online, we almost communicated via WhatsApp. Another thing that was a bit challenging for me was the requirements of this assignment, there were times when I thought that I got it right, but we would have Zoom meetings that left us confused”.

## **4.6 Chapter conclusion**

This chapter has been used to discuss the data collected from the collage and the reflections from the students. The next chapter discusses the findings.

## CHAPTER FIVE: DISCUSSION OF THE FINDINGS

### 5.1 Introduction

The study's data presentation and analysis were discussed in the previous chapter. This chapter aims to give detailed findings of the study findings of data collected using qualitative approaches, with thematic data analysis as the method of analysis.

### 5.2 Discussion of the Findings

It addressed the research question. The findings was related to the literature. The identification of themes was followed by a discussion of findings. Based on the data, these themes were identified and classified into several categories, namely connotations, topicalization, and presupposition with codes assigned to each category to gain a better understanding of the phenomenon the study wanted to investigate which are the experiences of the students in the use of virtual collage. This chapter offers a discussion of the findings and is organized in a way that responds to the primary research questions defined in the first chapter to give meaning to the data collected.

In line with the objectives, the following research questions will guide this study:

1. What are commerce student experiences of learning using the virtual collage in a South African university?
2. How did the commerce student experience using the virtual collage as a means to learn their content in a South African university?

#### 5.3.1 Topicalisation: Colour

The students' experiences of using virtual collage were shown in chapter 4. Here a discussion of their experiences using the modes of analysis is further elaborated. Their use of colour to show their understanding of content and power and powerlessness was unmasked using topicalization.

Topicalization deals with colour. The mode of colour and background will be related to the research questions. The picture presented in most of the collages willingly shows that black colours prominent and this may mean in business economics, formality, death, evil, and mystery (Cerrato h 2012, p.15) psychologically in business, black means authority, power, and control .in many situations it can be intimidating, unfriendly and unapproachable. (Cerrato h 2012, p.15)

The collage picture of the Market in the previous chapter seems to depict the how market interacts and depends on budgets, circular flows, and standards of living to flourish. It shows that the words Market is in capital letters and has a black border.

The picture of the market is surrounded by a global picture with colour gold on the top side, the left side is the picture of market niche with the colour green, and right side is the picture of goods and services with coloured, while the bottom side is the picture of different picture of currencies, British pound, us dollar, euro, Japanese yen, and Chinese yan.Harrison (2018) refers to a form of art whereby images and objects are combined into one piece of artwork. Magazine picture collage refers to Butler-Kisber (2018, p. 265) defines collage as “the cutting and sticking found images and image fragments from popular print/magazines onto cardstock”. Butler-Kisber (2018) also argues that collage gives a picture through the way you perceive it.

This apparent uncertainty is evident in the boldness of the title, which can be seen as a strategy of ‘topicalization’ (McGregor, 2003, p. 5). Topicalization places a particular sentence or words in a topic spot and thus influences the reader to likely think in a particular way. In this instance, the reader is being manipulated to think of the free market as the market of choice.

In addition, Cuthbertson, Robb, and Blair (2020) argue that the theory of social constructivism recognizes that individuals seek to understand their world and develop their meanings from their lived experiences. Thus, students' experiences in the virtual classroom are a real source of knowledge, a kind of cultural capital that can be tapped by teachers to improve pedagogic practices (Schall, McHatton, & Saenz, 2020).

The findings seem to reveal that there are many colours, but the dominant colours are black. The picture of this collage is presented in the form of a man, and the picture of the FINANCIAL MARKET is positioned in the centre written in capital letters. The color blue in the market represents stability and integrity in economic environment.

The findings show economic activities on the shoulder and leg of the man, but there were no economic activities on the head and leg. The red arrow in the collage picture represents attraction and attention in the financial market while the black colors in the man's head and legs indicate that no economic activities are happening around the head and leg of the man in the collage. black color in the business environment is associated with power, elegance formality death evil, and mystery (Cerrato, 2012 p. 15)

Most of the picture of the financial market is encircled by the people in the labor market picture with color white on the top side, and the right side is the picture of stock exchange data with color blue, while the bottom side is the picture of the hospital room with color blue. Some of the pictures were presented in the form of a tree, and the picture of the national budget was placed in the center. The black colour is economically seemed to be associated with power, elegance, formality, death, evil, and mystery (Cerrato, 2012, p.15) psychologically black means authority, power, and control in many situations it can be intimidating, unfriendly, and unapproachable. (Cerrato, 2012, p.15).

This explains how the national budget interacts with the circular flow, standard of living, and markets to form a bigger economy of a nation. The picture of the national budget is surrounded by a market picture with color black on the top side, the left side is the picture of the 2021 budget in a nutshell with color grey and the right side is the picture of income in the economy with color grey, while the bottom side is the picture of the market with color green.

Meanwhile, Rudduck and Flutter (2000) at the centre of attention is relatively scarce. Consequently, there has been a strong emphasis on improving effectiveness as a means of enhancing learners learning in the classroom (Burroughs, Gardner, Lee, Guo, Touitou, Jansen & Schmidt, 2019). Therefore, these may lead the researcher towards the theoretical underpinnings of the theory of social constructivism. A few of the pictures were presented as a form of circular flow; the picture of the economy is placed in the center and written in capital letters.

The colour blue in the ECONOMY represents stability, coldness, trust, and the integrity in economy. (Cerrato h 2012, p.11). the physiological blue color is calming, reducing tension and fear.it shows the pulse rate and reduces appetite, being a cool colour. It creates a sensation of space. (Cerrato, 2012, p.11) The collage picture explains how the national budget, standard of living, circular flow, and market depend on the economy to progress.

The economy picture encompasses the national budget on the top with the color blue, while both sides of the economy picture are circular flow and standard of living with color blue, the bottom side of the economy is a market picture with the color blue. This is represented as a bag of money, the picture of \$ as a symbol of the American dollar is positioned in the center written with capital letters. The black color in the economy represents authority and power (Cerrato h2012, p.16). Also, the evidence in the collage shows how the African market is colored in black to possibly explain the negative connotation of the blacklist, and black humor transactions occur in the market environment.

The collage explains how the power of money dominates the economy and how the budget, circular flow, standard of living, and market depend on money as a medium of exchange and transactions. The picture of Money is surrounded by a budget picture with color blue on the top side, the left side is the picture of the budget with color blue, and the right side is the picture of the market with color black while the bottom side is the picture of the standard of living with color blue.

The findings show some pictures were presented as human, the picture of factor market vs product market is positioned in the center, written with capital letters. The color purple in the picture of the fact market vs product market in the collage represents royalty of product brands, spirituality, and dignity, the purple color is more suitable for products (Cerrato, 2012, p. 14). The picture of the factor market vs product market is surrounded by a budget picture with color blue on the top side, the left side is the picture of circular flow with color purple and the right side is the picture of the government budget with color red, while the bottom side is the picture of the market with color red

Hence some collages were presented as human beings, the picture of the 2020 budget by number is positioned in the center and well written in capital. The color gray in the picture of the 2020 budget by number is the collage represents intellect, Wisdom, and security in the economy, grey is a conservative color signifying neutrality, indifference, and reserve (Cerrato ,2012, p .20).

Few pictures show economic activities in the head and shoulder where budget, standard of living, and market are interrelated, but the neck of the man shows only the economic activities of circular flow. The picture of the 2020 budget by number is surrounded by household pictures

with color blue on the upside, the left side is the picture of a stock house with color red, while the bottom side is the picture of a government house with color blue,

This theoretically implies that social interaction has played an important role by creating opportunities for learners to engage in social skills both individually and in groups (Finn, 2020; Forsell, Forslund Frykedal & Hammar, Chiriac, 2020). However, working together with a more knowledgeable person has also proven to be more efficient in helping the learners organize their learning and reflect on their understanding (Okita, 2012; Hurst, Wallace & Nixon, 2013).

The collage picture is presented in a circular flow form; the picture of the economy is well positioned in the center and written in capital letters. The color blue in the ECONOMY represents stability, coldness, trust, and integrity in the economy (Cerreto, 2012, p .11)

Findings show some collage pictures explain the economic relationship between budgets circular flow standard of living and market and engagement towards the economy. The picture of the economy is surrounded by the market picture on the left side with color yellow and the right side is the picture of the budget with color blue while the bottom side is the picture of circular flow with purple red.

Some of the pictures of in square form, the words of MARKET AND ECONOMICS. Written in capital letters, the color yellow in the picture of the market and economics in the collage represents warmth, sunshine, and cheers, also it associated with food. Psychologically color yellow stimulates the mind and mental activity. (Cerrato, 2012, p. 8). The collage picture explains an economic relationship between budgets circular flow standard of living and the market towards the economy.

The picture of the market and economics is surrounded by an emerging market picture with colour grey and yellow on the top side, the left side is the picture of the national budget with colour white and the right side is the picture of the standard of living with colour yellow, while the bottom side is the picture of the budget with colour black.

The picture of some of the collages is being presented in square form, the word MARKET is positioned in the centre, written in capital letters, the colour red in marketing context represents attractions or attention or danger in the marketing environment, it also a warm and positive colour, a very physical colour which draws attention to itself. In colour psychology red means energy, passion, strength, and excitement. (Cerrato, 2012, p 4).

The picture of the market is surrounded by a budget picture with colour gold on the top side, the left side is the picture of the market with colour grey, while the bottom side is the picture of the supermarket with colour yellow.

This collage picture is being positioned in arrow form, the word QUALITY is positioned in the centre with capital letters, the colour green in the economics context represents stability, attractions, sustainability, and integrity in the economy, green color in business means the color of the growth and vitality, it associated with new life and renewal. Physiologically, the green color balances people's emotions, creating a sense of calm. (Cerrato, p.9) The collage shows how the budget, circular flow standard of living, and market revolves in the treasury. The picture of quality is positioned on the left side the picture of trees with the colour green and the right side is the picture of the marketplace with the colour grey, while the bottom side is the picture of a bag of money with the colour grey.

This collage picture is presented in a handbag form, the word national treasury is written in big with capital letters. The colour red in the financial economy represents the debts or running out of deflecks or it shows to pay particular attention (Cerrato, p.4) The collage shows how the budget, circular flow standard of living, and market revolves in the treasury.

The picture of the national treasury is surrounded by some written incomes picture with colour gold on the top side, the left side is the picture of a pie chart with multicolour, while the bottom side is the picture of the national treasure with colour red.

The collage picture is presented in scale form, the word VISA is in capital letters. Blue in the economy represents stability, coldness, trust, and the integrity in economy (Cerrato, p.11). VISA CARD in the collage explains the power of technology in the economy and the help of technology. in the growth of the economy especially in trade and money transactions.

The picture of the visa card is surrounded by a circular flow picture with color blue on the top side, the left side is the picture of the marketplace with color blue and the right side is the picture of circular flow with color red, while the bottom side is the picture of 2020 budget with colour grey.

The picture of this collage is presented in a square form, the picture of the new economy is placed in the center with the colour yellow. The colour yellow in the marketing context represents stability, attraction, sustainability, and integrity in the economy (Cerrato, 2012, p 8)

The collage picture explains how economies are developed by good budget circular flow, standard of living, and market forces. The new economy picture is surrounded at the bottom side, with the picture of cooperative ownership in the yellow colour.

This is in line with a theoretical framework that connectivism is just a networked academic social activity (Duke, Harper & Johnston, 2013). According to this model, knowledge not only exists in the individual's mind but also exists in a distributed manner through the network, which is useful for the function of connectionist theory (Downes, 2007). He explains that connectivism is about forming connections between people and technology, and the thesis that knowledge is distributed across a network of connections. Within that defined social network, there is a focus on groups of people with common, (Siemens, 2004), meaning that teachers, students, and parents can engage in meaningful complex academic exercises in connectivist networks. However, the first point of connectivism is the individual (Duke, Harper & Johnston, 2013) who feeds the network.

The purpose of this collage is presented in the form of arrows, the word financial markets are placed in the center of the collage with blue, blue in the ECONOMY represents stability, coldness, trust, and integrity in the economy (Cerrato, p11). The collage shows that there is an exponential increase in growth in the economy by the sign of arrows moving up. The picture of financial markets is surrounded by stock exchange data picture with the colour blue on the top side, the left side is the picture of the definition of the market with the color grey, while the bottom side is the picture of stock exchange data with color blue.

The purpose of collage is presented as a family of father, mother, and child, the word GM is positioned in the center of the collage with the color blue, the colour blue in the ECONOMY represents stability, coldness, trust, and integrity the economy (Cerrato, p 11) The collage picture indicates that all sectors of the economy namely budget, circular flow, standard and markets works as a team and have a massive cooperation. The picture of GM is surrounded by the picture of the household with the color grey on the left side, with the picture of two glasses of cup written at the bottom.

The collage picture is present in a square form, the words goods and services are placed in the centre of the collage with capital letters. Blue in the ECONOMY represents stability, coldness, trust, and the integrity in economy. (Cerrato, 2012, pp,11). physiological blue color is calming, reducing tension and fear. it shows the pulse rate and reduces appetite, being a cool color, it

creates a sensation of space. (Cerrato, 2012, p,11) The collage picture explains how economies are developed by good budget circular flow, standard of living, and market forces.

The picture of goods and services is surrounded by top government executives' picture with the colour blue on the top side, the left side is the picture of goods and services with the colour blue and the right side is the picture of a businessman and warehouse with colour blue,

The findings from the reflections show that. The second group started with the challenges they faced making the collage and thus stated:

“On the internet, there are too many similar pictures, and choosing which ones would be suitable to put in our collage was a struggle, they had to change some of the pictures we chose because they simply could not fit in with the rest of the collage due to the angles not matching and other reasons. They were not used to doing a virtual collage and we only knew the traditional collage which was cutting and pasting photos. They had to learn how to navigate through PowerPoint to create a collage which took us a lot of time to finally figure out. This implies that implementing a virtual collage was overall an exciting experience because everyone came up with their ideas on how the pictures should be placed, the colour of images that we will use, etc. All the members participated, and we managed to finish our collage before the due date.

The challenge they faced as a group was that we lived far away from each and the only way to communicate was through WhatsApp, some people had network problems. There were many positive experiences that the group members experienced from this assignment such as: It was different from our usual assignments and projects because this assignment required creativity or thinking out of the box. Even though it was a simple assignment it was interesting, fun and it made the content much easier to understand. Working as a group made the assignment exciting as we all helped each other with motivation, we shared ideas, and they even became good friends. The assignment did not take much time as the instructions were clear and the assignment was explained well. The assignment didn't take much time, so they finished fast and were able to submit it on time.

With the positives there always must be certain negatives as well. In our case, we had negatives such as the fact that we could not meet up to have a face-to-face discussion and meet each other properly due to Covid19 was disappointing. They were indecisive on the theme for our collage because we had so many to choose from that it became difficult to choose one. One of the group members wasn't feeling well and another group member had a family emergency so

working in those conditions was exhausting and stressful. Working from home was a problem because we had to do our household chores as well as make time for discussions. They learnt that when working with others it is important that everyone is working in agreement. They learned how to value other people's opinions and how to work together with others peacefully.

Some of the students declared that circular flow has shown them how the economy circulates the whole world. It has given us an understanding ability of how participants relate to each other in the economy and the role of each participant in the economy. They suggested that reading more about circular flow has also conveyed that there is an outflow and inflow of money in the economy, which I didn't know about.

Through the research, it was not easy to find relevant information on the circular flow, and searching sites or sources that I used required much more time to get accurate information.

This is in line with the belief that behaviourism cannot be ignored in the study of virtual collage. The classical learning theory of Behaviourism as postulated decades ago by Thorndike (1911), Pavlov (1927), and Skinner (1957) was used to test behavioural responses, operant conditioning, and adaptation to environmental stimuli. Behaviourist theory was later remodelled into social teaching, enabling students to learn through observation (Bandura, 1977), or imitation (Westbrook et.al, 2013). Behaviourism pedagogy, a strategy that teaches facts and what is required for the understanding of concepts with minimal or no interaction or contribution from students except "say what I say", negates the social aspect of behaviourism and its primordial assessment pattern is examination (Westbrook, et.al, 2013). Thus, it is sufficient to say that theories of connectivism, constructivism, and behaviourism provide the lens through which we obtain the ideas of how pedagogic activities function contributing uniquely to the design of online materials (Duke, Harper & Johnston, 2013). Although teaching is essentially a 'social process' (Westbrook, et. al, 2020) driven by an understanding of human behaviour, the long-standing structured, traditional teaching method that promotes memorization, repetition, and imitation favors the behaviourist, and may not support virtual collage entirely.

#### 5.4.1 Connotations: Cultural Knowledge and Metaphors

When engaging with visual data, researchers must remember the circumstances in which the visual product was created (Rose, 2011). When looking at how an image is produced, we must consider what materials were used to create the image, how the image was created, and the economic, political, and institutional circumstances that inform the image (Rose, 2011).

When looking at an image, a researcher creates categories based on genre and looks for recurring themes throughout (Rose, 2011). Rose (2011) provided the following potential considerations: content, colour, spatial organization, light, and expressive content. The color gray represents intellect, wisdom, and security in the economy, grey is a conservative color signifying neutrality, indifference, and reserve (Cerrato ,2012, 20) Researchers must also consider the social modality by asking: Who made the piece? Why was the piece made? In what location was the piece made (Rose, 2011)

The findings shows that when compiling this virtual collage, not all members were well-versed in that technological aspect. We then collaborated, researched, and shared ideas to create a virtually interesting and creative presentation. Due to certain socio-economic issues, not all members had access to resources such as laptops and continuous internet service. Therefore, we all collaborated as a group to assist each other by typing and doing research wherever we possibly could. This brought us to our end product and the successful completion of our assignment.

The topic was easy to understand because it was easy and there was enough information. There were so many pictures illustrating the topic or the content. This reminded them of the time they were still in school and how the teacher explained it to them, and they were able to remember it well. Showing an understanding of markets enhanced my skills and knowledge of the topic. Researching the market was interesting, it has strengthened our enthusiasm and further market knowledge. We also gained a lot of market information and understood better. They would like to first acknowledge how interesting it was to write this assignment on these topics, easy and interesting. They were amazed by how things have changed within the economy of our country since the last time. They did a research study on the national budget it was quite eye-opening, and we decided to give myself some time to read about these whether possible. They said they would also love to highlight how delightful we were to work as a group again, we truly work well together.

According to the students' reflections they were experiencing network issues the network was not stable. There was so much information we ended up not knowing which one to take. they ended up having more pages than what was expected. Doing all this virtually was exhausting since everything is electronic and cost data, is expensive. They had difficulties searching for relevant pictures of the topic. They had to get used to the platform which we were instructed to use. The first thing that was challenging for us was creating the same theme since we were doing this assignment online, we almost communicated via WhatsApp. Another thing that was a bit challenging for me was the requirements of this assignment, there were times when I thought that I got it right, but we would have Zoom meetings that left us confused.

#### 5.4.2 Connotations: Metaphors

The following Metaphors were used as themes for the seventeen collages. These included drawings of humans, man (human being), This collage picture is presented as a human being man. "HIGH income," the word High is used as a comparative adjective to convey the strong meaning of income in the standard of living in the collage this implies that is positive connotation base on my cultural knowledge. This collage picture is presented as a human being man, while the bottom side is the picture of a government house with colour.

This collage picture is presented as a tree," NATIONAL BUDGET" (appendix 11) The word national is used to convey the strong disparity among types of budgets in the economy, this implies that is a positive connotation based on my cultural knowledge. The black colour in the economic environment is associated with power, elegance, formality, death, evil, and mystery (Cerrato, 2012 p 15) psychologically black means authority, power, and control in many situations it can be intimidating, unfriendly and unapproachable. (Cerrato, 2012, p.15). The collage picture explains how the national budget interacts with the circular flow, standard of living, and markets to form a bigger economy the picture of the national budget is surrounded by a market picture with colour black on the top side, the left side is the picture of 2021 budget in a nutshell with colour grey and the right side is the picture of income in the economy with colour grey, while the bottom side is the picture of the market with colour green.

This collage picture is presented in square form. “QUALITY of life”, the word quality is used to convey the strong meaning about life in the standard of living in the collage this implies that is a positive connotation based on my cultural knowledge. The colour grey in the quality of life represents stability and the integrity in economic environment (Cerrato, p.20) The collage picture explains how quality of life interacts and depends on the budgets, circular flow, and standard of living to flourish The picture of quality of life is surrounding by global picture with colour gold on top side, the left side is the picture of market niche with colour green, and the right side is the picture of Goods and services with colour red, while the bottom side is the picture of currencies, British pound, us dollar euro, Japanese yen and Chinese yen

This collage picture is being presented as a handbag, “NATIONAL TREASURY,” the word national is used to convey the strong disparity meaning among types of Treasuries in the economy, this implies that is a positive connotation based on my cultural knowledge. The colour red in the financial economy represents the debts or running out of deflecks or it shows to pay particular attention (Cerrato 2012 p.15) the collage shows how the budget, circular flow standard of living, and market revolve in the treasury. The picture of the national treasury is surrounded by coins written incomes a picture with the colour gold on the top side, the left side is a picture of a pie chart with multicolour, and the bottom side is a picture of a national treasure with the colour red.

The collage picture is presented in square form,” NEW economy” The word new is used as refers to convey the strong meaning of economy in the standard of living in the collage this implies that is a positive connotation based on my cultural knowledge, the colour yellow in the marketing context represents stability, attractions, sustainability, and the integrity in economy (Cerrato, 2012, p.8). The collage picture explains how the economy is developed by good budget circular flow, standard of living, and market forces. The new economy picture is surrounded at the bottom side, with the picture of cooperative ownership in the yellow colour.

Making the virtual collage was amazing because it was more pictures and artistic. they enjoyed looking for pictures in magazines and newspapers on the internet. Explaining a topic using visuals and pictures made it easy to understand. The challenge faced when creating the virtual collage was that we had so many pictures, but we had to choose some of them and leave some of the pictures because one slide was not enough to insert all the pictures.

The virtual collage was fun to make and exciting to pass a message using only pictures. They were able to use the computer skills they had to create an attractive slide on PowerPoint. What

they learned from this assignment is to be creative, know how to blend pictures and colour, able to choose the appropriate slide style, and use of relating words to the topic. Making the collage was fun and exciting for me since well it was also easier to find pictures that independently were able to just be self-explanatory. The pictures we found were able to help us explain the lesson much better. They allowed me to be creative and play well with colours and also to explain the lesson to our learners. A lot of people tend to be visualized and understand much better if they see something with their eyes than notes. The topic that they chose the circular flow was easily explainable by looking at the business sectors which portrayed and assisted in helping the community understand the lesson.

The challenge we encountered was to find ways of involving words in the collage. It was time-consuming to come up with the idea we did on the slides and time-consuming to make the words appear on the slide. It was challenging to get the pictures relating to the topic. At first, we did not understand what was required of us. It was a challenge to divide the task because there were 4 of us in the group and there were 3 topics. We were not sure how to compile different slides from each of us.

We had a problem finding the required pictures from the internet because of data, we ran out of data, and we did not have Wi-Fi, and it took so long for the data to be refilled. We ended up doing our collage very late. Network these past days has been a problem for some of our group members, especially for those staying in rural areas, because when there is load shedding the network also normally goes down, which made it impossible for one of our group members to attend the zoom classes where the assignment was explained by the lecturer.

The findings reveal that in the group, nobody had heard of the gallery walk, so they were not sure what it was, how it worked, or should look like, but after doing some research and attending the Zoom class, it was clear. It was challenging to find the right pictures for the collage. But with constant research, we were able to identify pictures that were clear and straight to the point. After finding our pictures they were not sure how to put them together to make one informative and creative collage. Researching the 3 topics allowed them to refresh our memories on the content and different concepts.

Overall, the experience was fun and informative for them, they worked well together and supported each other through all the challenges they faced, those we could not control (network problems), and advised each other on challenges we could control (finding the right pictures).

The greatest skills we learned is doing a virtual collage and how to present during a gallery walk, so as a future teacher they might be able to use it in our teaching.

The findings further explained that when doing this assignment, they worked well as a group from beginning to end. They engaged in collaborative efforts which allowed us to learn from each other. We developed an appreciation for each member's circumstances, opinions as well and efforts throughout this assignment. In the sight of the COVID-19 pandemic we, as learners learning under remote-learning conditions, were taught how to become well-organized to be able to conduct active discussions amongst all members. It also developed their social and technological skills since they had to make use of social media platforms such as WhatsApp to conduct our discussions as well as PowerPoint to create the virtual collage.

The findings show that upon researching for this assignment, the students were exposed to a deeper understanding of how the concepts regarding the national budget, markets, and circular flow operated. All members selected one topic each to research. They thereafter had a brainstorming session where they picked words, ideas, and images that would reinforce those concepts. Once each member had gathered their pictures, we then shared them with the group where we selected the ones, they thought were most relevant and created a clear image of the topic. As a group, they decided on a corporate theme which is why they created the collage in the form of a briefcase as they thought it would effectively tie the concepts together. This allowed us to acquire an appreciation for the various topics such as budgeting as they did not realise the various aspects that needed to be taken into consideration when compiling such documents. This broadened their understanding to a national level of thinking as they were only engulfed with handling our household budgets which they thought were a daunting task. We became aware of the important tasks that the finance minister has every year when forecasting and planning the budget for the nation. We learned that the standard of living of the citizens is affected by the planned budget. Through research on the topic of the markets, we were able to learn the importance of the various markets and how it is essential in the economy. When we were researching the topic of the circular flow, it broadened our understanding and taught us how all the different components such as households, incomes, expenditures, and businesses were interrelated and the importance they hold in the economy. This assignment has taught us that all these topics have a great effect on the economy, citizens, and the ruling government.

This is in line with literature in Rose (2011) provided guidelines for interpreting visual data—arguing that interpreting images is just that, interpretation, not the discovery of truths. Vision refers to what we can physically see, whereas visibility refers to how we attach meaning to what we see (Rose, 2011). Researchers must consider how and why they construct certain narratives based on positionality and call to question how positionality impacts their ability to see/unsee (Rose, 2011). In doing so, researchers might challenge the presumption that all individuals conceptualize the world in the same way (Rose, 2011). When analysing visual data, researchers must recognize how visual products take on a different meaning to each observer based on how their positionality and lived experiences inform their visibility (Rose, 2011).

## 5.5 Presupposition

A presupposition is using certain words that take certain ideas for granted as if there is no alternative (MC Gregor,2003). The following collage is used to discuss how prepositions were used in them. Some of the collages are presented in square form, the picture of MARKETS is positioned in the centre, written in capital letters. According to CAP (2011) documents, there are many types of markets namely goods and services market, factor market, labour market, and financial market. This collage A is a financial market.

The collages display some countries' currencies and their flags such as the British pound us dollar, euro, Japanese yen, and Chinese yan to convey a strong meaning about currencies in the financial markets thereby taking other countries' currencies such as the South African rand, Nigerian naira for granted as on other alternative. (presupposition).

The collages are presented as a tree," NATIONAL BUDGET" The budget according to EMS CAP document (2011) is government revenue, direct tax, indirect tax, government expenditure on services such as education, health, housing, social grants transport, and security, etc.

This collage 11 makes use of some words such as business, money, and finance to convey a strong meaning in the national budget as important thereby using certain words such as government revenue, direct tax indirect tax, and government expenditure for granted.

The picture of the national budget is surrounded by a market picture with the colour black on the top side, the left side is the picture of the 2021 budget in a nutshell with the colour grey and

the right side is the picture of income in the economy with the colour grey, while the bottom side is the picture of the market with the colour green.

The collages are presented as a form of circular flow, the picture of the economy is placed in the center and written in capital letters. The circular flow is the flow of goods and services, money, and factors of production in the circular flow of a closed economy, according to the EMS CAP document (2011). These collages placed certain words such as business, economy, and revenue boldly as if there were no other words in the circular flow, thereby neglecting some words such as goods and services, money, and factors of production.

Another group of students explained that doing this virtual collage was hard to insert many pictures as it was their first-time using PowerPoint, but this is the most amazing topic it is understandable, and it allows me to know more about the economy. The relationship between Households and other sectors, what is more interesting is that it seems like households are the most important sector because if we are talking about the households we are talking about people. Businesses won't work without having managers and workers and the government is people. Also, in the factor market land is owned by people, labour is people, capital must be contributed by people, and entrepreneurs are people. In the product market, nothing would happen without having people who are going to produce those products that they are going to sell and the people who must come looking for a certain service. This was the most challenging assignment though it allowed me to get more information about the topic. Finally, it went well because I managed to finish everything on time.

A virtual collage is an art form created by piecing and layering together a variety of virtual images and textures from different sources to create a whole new work of art, this is something that our group came into this assessment not knowing. The beginning of creating the virtual collage was hands down the hardest part especially since they did not know where to even begin. They did our research, engaged with our peers, and finally gathered enough information that allowed them to sit with one another and discuss how they will go about developing the virtual collage. This was a great experience, working with my group members who brought their perspectives and ideas, which in return gave them the final product that are happy with.

As earlier mentioned, there are a few demerits of integrating a virtual collage and there is no doubt that there are immensely outweighed by the many benefits. The bottom line here is that

if you are aiming for the best, you should be ready to invest in a good virtual collage and well cooperate with group members.

They indicated that as their group started early with the assignment, we divided the topics among us and initially, they selected The National Budget. They had come across this topic in many books so I thought it would be easy for them. When going deep into it we came across a lot of confusion and doubts. They had to depend on a dictionary for word clarity. “The Federal Budget” by Aaron B. helped them for further clarity and a more advanced understanding of the topics. Sometimes they were not able to keep the important knowledge in mind. Somewhere they lacked connections and struggled to bridge the gaps until a few days before submission. They prepared a PowerPoint presentation which was a requirement to create our virtual collage. To achieve all the standards set by my group, they had to travel further to make the best presentation. Also, working with my group was very easy as they participated in all the aspects of the assignment and that is the reason, they were able to prepare and finish the assignment on time. (Mduduzi Masondo)

## **5.7. Chapter Conclusion**

This chapter has discussed the findings of the data collected for this research study. The findings were discussed according to the themes that emerged from the data. The next chapter will discuss the conclusion and the recommendations.

## CHAPTER 6: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

### 6.1. Introduction

The previous chapter discusses the findings obtained from the collected data. This chapter summarized the findings driven by the key research questions informing this study. It will draw a conclusion and recommendations will be made with suggestions for further studies.

### 6.2. Summary of the study

This study is an Exploration of Commerce Education Students' experiences of learning using virtual collage. To find out what I was looking for, I visited literature to check the background of the use of virtual college and its impact on the student's learning outcomes. The inspiration for this study originated when I noticed that most studies were conducted on virtual collage in tertiary institutions. I was inspired because virtual collage seems to be more recognized in various higher education overseas. I realized that this study was appropriate for a qualitative with an interpretive paradigm.

In Chapter One, the background of the study was introduced. This is required to give a brief explanation and justification for this study.

In Chapter Two, both local and international literature on Students' experiences of learning using virtual collage were reviewed. Reviewed literature indicated that several studies accomplished in this area focused on student performance and achievements. It discussed factors responsible for students' use of virtual collages and the reflections from students. It discussed the nature of commerce students and the theoretical framework that underpins the study.

In Chapter Three the research design and methodology were explained and explored. The study is located within the interpretivist paradigm which helped me gain and explore the factors responsible for students' use of virtual collage and their experiences of using it. This paradigm allowed me to have an in-depth understanding of how they feel about it. I accepted a case study research design.

This design was appropriate in that it explored an understanding of the phenomenon under study with the participants and also how they were sampled. I used 17 collages from 37 students and their reflections on the generated data. Thirty-seven students from the commerce cluster classes were used. Furthermore, the chapter addressed the ethical considerations of the study and its trustworthiness as a major link between the researcher and the research.

Chapter Four gave an account of the data that was used in the findings of the study by presenting the data from the data generated,

Chapter Five provided the second part of the discussion of findings focused on the research questions. Chapter Five discussed the findings from the data. The findings were discussed under the themes that emerged from the data.

### **6.3 Summary of the findings**

This study intends to understand the experience of commerce students and the use of virtual collage in one university. This study has been framed using Lev Vygotsky's, socio-cultural theory. Vygotsky's theory of sociocultural human learning is centered on the notion that learning is a social process. According to Vygotsky (1978), the main theme of this theory is that society and culture play a vital role in a child's cognitive development.

It is believed that the use of virtual collages and reflections will help the university in understanding students' experiences. This is because group assignments will make it easy for students to work together to achieve one goal. After all, in commerce education it is believed that doing group work will enable them to work with others. Therefore, group assignment should be advocated because it helps them to understand teamwork which is a topic in commerce education.

### **6.4. Conclusions**

This study aimed to explore the experiences of student use of virtual collage. The CDA method used as a data extraction tool. The study focusses to explore the experience of student's use of virtual collage. The choice of CDA in this study granted me the opportunity to critically engage

with both the textual and the visual discourses on the phenomenon of values and their representation in the collage.

This study focusses on student experiences if any present in these collages. This method can be applied to a wide range of verbal and non-verbal qualitative material such as interview transcripts, and virtual collage. In this study, therefore, CDA was appropriate to analyse the themes in the selected collage's they fall within the category of virtual material. The tools use to extract data in the collage, for example is topicalization, presupposition, connotations as well as agency of the virtual representation of the collage.

‘In a search to investigate related issues, three main research questions underpinned the study.

What are commerce student experiences of learning using the virtual collage in a South African university?

Why did the commerce student use the virtual collage to learn their content in a South African university?

The study conclude that using virtual collage to teach can be motivating and provides an alternative means of learning. This is in agreement with the learning theories that underpin the study.

## 6.5 The study's contribution to new knowledge

The experiences of students on the use of virtual collage in commerce Education in one university in South Africa. The students need to be motivated to start having a positive attitude towards their performance because they come from a background where virtual collage was not used to teach. The findings of this study suggest that students are motivated by their lecturers through the use of multimedia teaching approach and by the well-resourced learning environment at the university.

## 6.6. Recommendations

After reflecting on my findings, I offer the following recommendations, which are based on the findings of this study that I hope, may help:

### 6.6.1 Recommendation for Improvement strategy for teaching

The study recommends a change in the style of teaching because at the moment students attend and leave the class, so this study suggests that it is important to give tasks and research topics for presentation to students as it helps them to prepare for examinations and this enhances their understanding of the topic and improvement in their performance through virtual collage.

Another recommendation suggests that the lecturers need to change their teaching styles adopting new technology or theories. This can help students to focus more and get deeper insights on class works and new topics.

The study also recommends that students should be assessed on their creative abilities in terms of creating knowledge through virtual collage. This is based on what has been done in the classroom with their lecturers through continuous assessments such as the use of virtual collage.

The study recommends that the only way to find innovative way of teaching to improve performance is to create more learning environments that can improve their motivation in their studies. Such as through virtual collage.

### 6.7 Need for future research

From the literature review and the results of this study, it is recommended that future research should focus on a study that should be conducted, to determine whether students all over South African tertiary institutions have similar perspectives concerning the use of virtual collage in teaching and learning in other universities. Studies can also include the responses of the academic staff who teach commerce education, this can balance the study because all views of the parties involved can be heard. There is a need to conduct other research at different universities in KwaZulu-Natal and all-over South Africa. This can provide a holistic view of deeper research and the responses of more participants might discover more answers for the research question.

## 6.8 Chapter Summary

This chapter presented a summary of findings and conclusions drawn from the findings and the recommendations, which are offered based on these findings as well. The chapter has offered some practical recommendations and suggestions for further research. This chapter outlined the summary of the entire research study. The study recommendation was presented and discussed. In summation, the implications of the study were proffered.

## REFERENCES

- Abbey, B. (2020). *Instructional and Cognitive Impact of Web-based Education*. London: Idea Group Publishing.
- Adelman, C., Jenkins, & Kemmis, S. (2021). Rethinking case study: Notes from the second Cambridge Conference. *Cambridge Journal of Education*, 6(3), 139-150.
- Alexander, R.J (2021). *Culture and Pedagogy: International Comparisons in Primary Education*. Oxford and Boston: Blackwell.
- Amin, N.& Ramathan, P. (2020). Preparing Students to Teach in and for Diverse Contexts: A Learning to Teach Approach. *Perspectives on Education*. Vol 27(1), March 2009.
- Antonio, A.B., & Tuffley, D. (2021). Bridging the age-based digital divide. *International Journal of Digital Literacy and Competence*, 6(3), 1-15.
- Brink, H., van der Walt, C., & van Rensburg, G., (2023). *Fundamentals of research methodology for healthcare professionals* (3<sup>rd</sup>ed.). Cape Town: Juta.
- Brink, H., van der Walt, C. & van Rensburg, G. (2022). *Fundamentals of Research Methodology for Healthcare Professionals* 3<sup>rd</sup>ed. Capetown: Juta & Company Ltd.
- Braun, V. & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Bart, M. (2022, December 30). Do college students spend too much time on Facebook, YouTube, and other social networking sites? *Faculty Focus*. Retrieved from [HTTPS://www.facultyfocus.com/articles-tech-news-and-trends-do-college-students-spend-too-much-time-on-facebook-youtube-and-other-social-networking-sites/](https://www.facultyfocus.com/articles-tech-news-and-trends-do-college-students-spend-too-much-time-on-facebook-youtube-and-other-social-networking-sites/)
- Bandura, A. (2021). Self-efficacy: *Toward a Unifying Theory of Behavioural Change*. *Psychological Review*, 84(2), 191-215
- Buehl, M.M., & Alexandra, P.A. (2021). Belief about academic knowledge. *Educational Psychology Review*. 13 (4), 385-418.
- Charp, S. (2022a). Wireless vs Hard-wire Network Use in Education. *T.H.E Journal*, Vol 29, (8) 8-10.

- Charp, S. (2022b). Online Learning: Changes to Traditional Teaching. *The Journal, Technological Horizons in Education*. Vol.29, Issue 10, May 2002. Online Research Library: Questia.
- COVID-19 Crisis and Curriculum: Sustaining Quality Outcomes in the Context of Remote Learning. *Programme and Meeting Document*. UNESCO [52894]: ED/2020/IN4.2
- Duke, B. Harper. G., & Johnston, M. (2013). Connectivism as a Digital Age Learning Theory .*The international HETL Reviews*. Special Issue 2013 (PP4-13)
- Downes, S. (2021). Places to go: Connectivism and connective knowledge. *Innovate: Journal of Online Education*, 5(1),6.
- Butler-Kisber, L., (2021). Collage of inquiry. In J.G. Knowles & A. L. Cole (Eds.), *Handbook of threats in qualitative research* (pp.265-276) Thousand Oaks, CA: Sage Publications.
- Bryman, A. (2006). Integrating quantitative and qualitative research: how is it done? *Qualitative research*, 6(1), 97-113.
- Cerrato, H. (2012). The meaning of colors. *The graphic designer*.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research Methods in Education* (5<sup>th</sup>Ed.). London and New York: Routledge Falmer.
- Creswell, J.W.(1998).*Qualitative Inquiry and Research Design. Choosing among five traditions*. California: Sage Publication Inc.
- Cohen, L. Manion, L. & Morrison, K. (2011). *Research methods in Education* (seventh edition). London: Routledge.
- Cooper, J., & Schindler, M. (2008). *Perfect sample size in research*. New Jersey: Macmillan.
- Creswell, J. W., & Miller, D. L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), 124-130.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research Methods in Education* (5<sup>th</sup>Ed.). London and New York: Routledge Falmer.
- Creswell, J.W.(1998).*Qualitative Inquiry and Research Design. Choosing among five traditions*. California: Sage Publication Inc.

- Du Toit-Brits C 2018. Towards a transformative and holistic continuing self-directed learning theory. *South African Journal of Higher Education*, 32(4):51–65.
- Denzin, N.K. & Lincoln, Y.S. (Eds). (2003). *Collecting and interpreting qualitative materials*. (2<sup>nd</sup> ed.) London: Sage.
- Du Toit-Brits C & Van Zyl CM 2017. Embedding motivation in the self-directedness of first-year teacher students. *South African Journal of Higher Education*, 31(1):50-65.  
<https://doi.org/10.20853/31-1-824>.
- Eitkan, I., Musa, S.A., & Alkassim, R.S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics*, 5(1), 1-4.
- Furman, R., Langer, c. l., & Taylor, D. B. (2010). Analyzing narratives through poetic forms and structures in geronto: Applying new tools in qualitative research. *Journal of Poetry Therapy*, 23 (2), 61-71.
- Feldman, A. (2003) *Validity and quality in self-study*. *Educational Researcher*, 32 (3), 26-28.
- Eisner, E.W. (2002). Whom does the curriculum serve? In J. Gultig, U. Hoadley, & J. Jansen (eds.), *Curriculum: from plans to practices* (pp. 109-126). Cape Town: Oxford University Press.
- Fairclough, N. (1995). *Critical Discourse Analysis: the Critical Study of Language*. New York: Longman.
- Fitzpatrick, N., & Donnelly, R. (2010). Do you see what I mean? Computer-mediated discourse analysis. In R. Donnelly, J. Harvey, & K. O'Rourke (eds.), *Critical design and effective tools for e-learning in higher education: theory into practice* (pp. 55-72). Hershey, PA: Information Science Reference
- Flottechmesch, K. (2000). Building Effective Interaction in Distance Education: A Review of Literature. *Journal of Educational Technology*. Vol 40(3)46-51.
- Frankola, K. (2001). *Why Online Learners Drop Out*.  
<http://www.workforce.com/feature00/07/29>. Retrieved August 8, 2020
- Fulutile, D.O. Beyond Education Minister's Directive on Online Migration. April 9<sup>th</sup>, 2020. 12:16. retrieved April 21<sup>st</sup> 2020 from [www.http://thecable.ng](http://thecable.ng).

Guzdial, M. (2020, March 30<sup>th</sup>). So much to Learn about Emergency Remote Teaching, but so little to Claim about Online Learning [Blog post]. Retrieved July 24<sup>th</sup>, 2020. 5.36pm from [www.computinged.wordpress.com](http://www.computinged.wordpress.com).

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. *Handbook of qualitative research*, 2, 163-194.

Handal, B. (2003). Teachers' mathematical beliefs: A review. *The Mathematics Educator*, 13(2), 47-57.

Harrison, S. (2013). Visible bodily action in disfluencies when learning to sign. A classroom study of non-native sign language. *Todas as Letras-Revista de Língua e Literatura*, 15(1).

Holliday, A. (2007). *Doing & writing qualitative research*: Sage.

Hunt, K., Ntuli, M., Rankin, N., Schöer, V., & Sebastiao, C. (2011). Comparability of NSC mathematics scores and former SC mathematics scores: How consistent is the signal across time? *Education as Change*, 15(1), 3-16.

Mitchell, C. (2011). *Doing visual research*. London, Thousand Oaks: Sage.

Kothari, C., & Garg, G. (2014). Research methodology: Methods and Strategy. *New age international*.

Kumar, R. (2011). Research methodology: A step-by-step guide for beginners (2<sup>nd</sup>ed.). Thousand Oaks, CA: Sage.

Lincoln, Y & Guba, E. 2007. Naturalistic Enquiry. Beverly Hills, CA: SAGE.

Herring, S. (2010). Computer-mediated conversation: introduction and overview. *Language@Internet*, 7(2). Retrieved from <http://www.languageinternet.org/articles-2010-2801-index.html/>

Hillman, D.C.; Willis, D.J. & Gunawardena, C.N. (1994). Learner-interface Interaction in Distance Education: An Extension of Contemporary Models and Strategies for Practitioners, *American Journal of Distance Education*, 8:2, 30-42.

Hinchliffe, G. (2000), Education or Pedagogy? *Journal of Philosophy of Education*, 35(1):31-45. February 2000. Doi: 10.1111/1467-9752.00208

Le, NK.; Le, AV.; Brooks JP.; Khetpal S.; Liauw D.; Izurieta R.; & Ortiz, MR. Impact of Government-Imposed Social Distancing Measures on COVID-19 Morbidity and Mortality

around the world. [Preprint]. *Bulletin of the World Health Organisation*. E-pub30 April 2020. doi:<http://dx.doi.org/10.2471/BLT.20.262659>.

Lehman, C. (2020, March 6<sup>th</sup>). “Doing School” in the time of Coronavirus. [Blog post]. Retrieved July 24<sup>th</sup> 2020. 2 pm from <https://lehman.edu/coronavirus>.

Lynch, D. (2002). *The Online Educator: A Guide to Creating the Virtual Classroom*. New York: RoutledgeFalmer.

Mbati, L. (2012). *Online Learning for Social Constructivism: Creating a Conducive Environment*. Institute for Open and Distance Learning, University of South Africa

Milligan, I. (2020, March, 20<sup>th</sup>). Emergency Remote Teaching: A Post Secondary Reality Check. [Blog post]. Retrieved July 24<sup>th</sup>, 2020. 6pm from [activehistory.ca](http://activehistory.ca)

Mogashoa, T. (2018). A Critical Review of the Kind of Training or Professional Development Typically Offered to the Teachers. *Reimagining New Approaches in Teacher Professional Development*, 21.

Leedy, P.D. & Ormrod, J.E. (2010). *Practical Research, Planning and Design*. Boston, MA: Pearson Education.

McGregor, S. L. (2003, November). Critical discourse analysis: A primer. In *Kappa Omicron Nu FORUM* (Vol. 15, No. 1, pp. 15-1).

Pithouse, K., Mitchell, C. And Weber, S. (2009) self-study in teaching and teacher development: a call to action. *Educational Action Research*, 17 (1), 43-62.

Parke, F.I. (1972, August). Computer-generated animation of faces. Paper presented at the *Association for Computing Machinery (ACM) Annual Conference*. Vol. 1, pp. 451-457). Boston, MA. Retrieved from [doi: 10.1145-800193.569955](https://doi.org/10.1145-800193.569955)

Petrie, C.; Aladin, K.; Ranjan, P.; Javangwe, R.; Gilliland, D.; Tuaminen, S.; & Lasse, L. (2020). Spotlight: Quality Education for All during the COVID-19 Crisis. *Hundred Research Report #011*. <https://www.hundred.org/en/research>.

Piaget, J. (1977). *The Development of Thought: Equilibration of Cognitive Structures*. New York: N.Y Vikings.

- Picciano, A, G. (2002). Beyond Student Perceptions: Issues of Interaction, Presence, and Performance in an Online Course. *Journal of Asynchronous Learning Legworks*' 6 (1) 21-40, 2002.
- Prensky, M. (2001). Digital Natives, Digital Immigrants, part 2: Do they really think differently? *On the Horizon*, NCB University Press 9(6), 1-3.
- Siemens, G. (2004). Connectivism: A learning theory for the digital age. *International Journal of Instruction Technology and Distance Learning*, 2(1), 3-10.
- Skinner, B.F. (1957). *Verbal Behaviour*. Action, Massachusetts: Copley Publishing Group. ISBN 978-1-58390-021-5
- Shulman, L. S. (1987) *Knowledge and teaching: Foundations of the new Reform*. *Havard Educational Review*, 57(1) 1-22.
- Patton, M.Q. (2002). *Qualitative Research and Evaluation Methods* 3<sup>rd</sup> ed. Thousand Oaks, CA: SAGE.
- Reeves, T.C., & Hedberg, J.G. (2003). *Interactive learning systems evaluation*. Educational
- Rogan, J.M. (2007). How much curriculum change is appropriate? Defining a zone of feasible innovation. *Science Education*, 91(3), 439-460.
- Seybold, H., & Rieb, W. (2006). Research in environmental education and Education for Sustainable Development in Germany: the state of the art. *Environmental Education Research*, 12(1), 47-63.
- Thurmond, V. A. (2001). The Point of Triangulation. *Journal of Nursing Scholarship*, 33(3), 253-258.
- Universal Basic Education Commission. (2004). *The Compulsory, Free, Universal Basic Education Act and other related Matters*. Abuja.
- Wiersma, W. (2000). *Research Methods in Education: An introduction*. 7<sup>th</sup> ed. Boston: Allyn & Bacon.

Williams, C.G. (2011). Distributed Leadership of Schools through Teamwork: A Justifiable Risk? *Educational Management, Administration and Leadership* 29(2): 153-167

Willis, J.W. (2008). Qualitative research methods in education and educational technology. IAP.

Vithal, R., & Jansen, J. (2010) *Designing your first proposal: a manual for researchers in education and the social sciences* (6th ed.): Juta and Company

Watkins, C., Mortimore, P. (1999). Pedagogy: What do we know? Mortimore, P. (ed.). *Understanding Pedagogy and its Impact on Learning*. London: Paul Chapman Publishing.

Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, F. (2013). *Pedagogy, Curriculum, Teaching Practices and Teacher Education in Developing Countries*. Centre for International Education. University of Sussex. UK

Weiss, M., & Hanson-Baldauf, D. (2008). E-mail in academia: expectations, use, and Instructional impact. *EDUCAUSE Quarterly*, 31(1), 42-50.

Winerman, L. (2013). Interesting results: can they be replicated? *American Psychological Association*, 44(3), 30-56.

Yun, K. (2005). Collaboration in the Semantic Grid: A Basis for E-learning. *Applied Artificial Intelligence*. Vol. 19 (9&10)881-904.

Technology.

Yunus, O.O., & Tambi, A.M. (2013). *Essentials of research method*. Kuala-Lumpur: UiTM.

## APENDIX 1: Informed consent

Date 6<sup>th</sup> Oct 2022,

Dear student,

I, Obum Prince Ezeagba a student at the University of KwaZulu-Natal, enrolled for a Master of Education Degree in commerce request permission to conduct research at your university. In conducting the research, I will request your consent to collect data from your virtual collage and reflections. The research will involve me engaging with the teaching and learning material in forms of a virtual collage and reflections that accompany the reflections.

The topic for this study is Commerce Education Student experiences of learning using virtual

Furthermore, I wish to bring to your attention that:

- Your identity will be protected in the report writing and research findings
- Your participation is voluntary and you may withdraw at any time
- There will be no Interviews but the data will be collected by interrogating the virtual collage
- There is no financial benefit for this research.
- The Answer of your questions is YES/ NO.
- This research will not involve any risk

Should you have any concerns or queries about this study please feel free to contact me, my supervisor or the University Research Office, whose details are below:

Supervisor: Dr J. Ramdhani

Email: [Ramdhanj@ukzn.ac.za](mailto:Ramdhanj@ukzn.ac.za)

Research Office, Westville Campus  
Govan Mbeki Building, Private Bag X 54001, Durban, 4000  
KwaZulu-Natal, SOUTH AFRICA  
Tel: 27 31 2604557- Fax: 27 31 2604609  
Email: [HSSREC@ukzn.ac.za](mailto:HSSREC@ukzn.ac.za)

I hope my request will be considered.

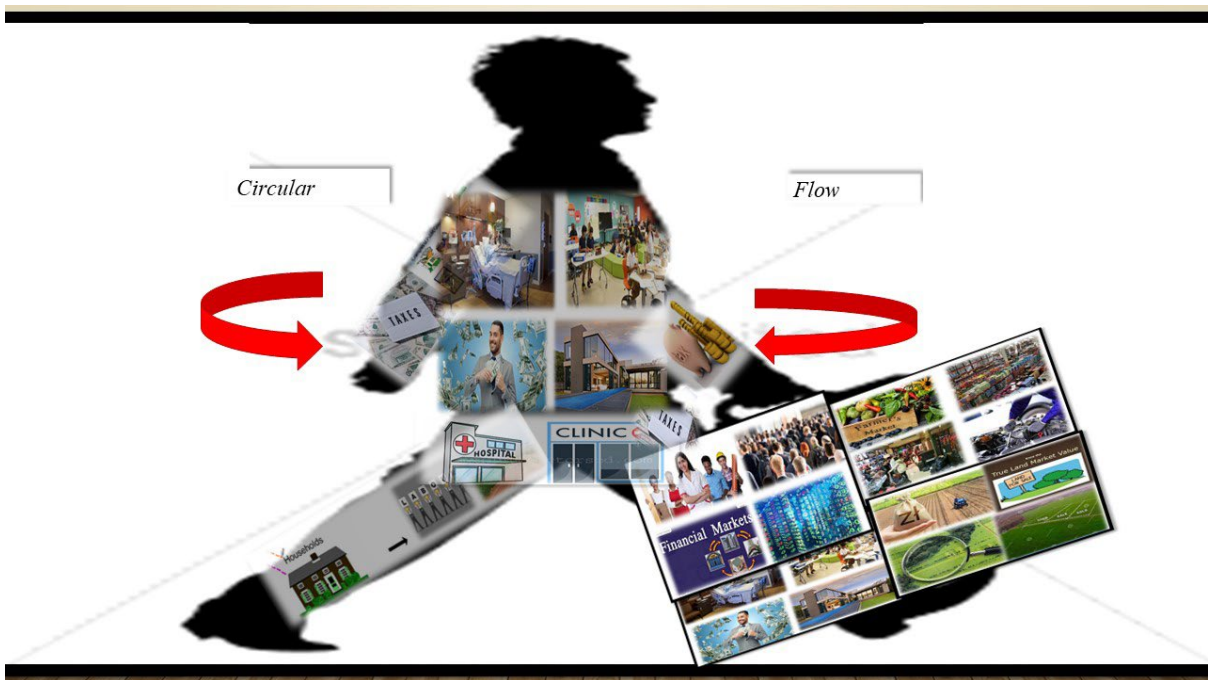
Yours Sincerely

NAME Obum Prince Ezeagba



E-mail: 219094394@stu.ukzn.ac.za

**APPENDIX 2: TOPICALIZATION ON MARKET APPENDIX**



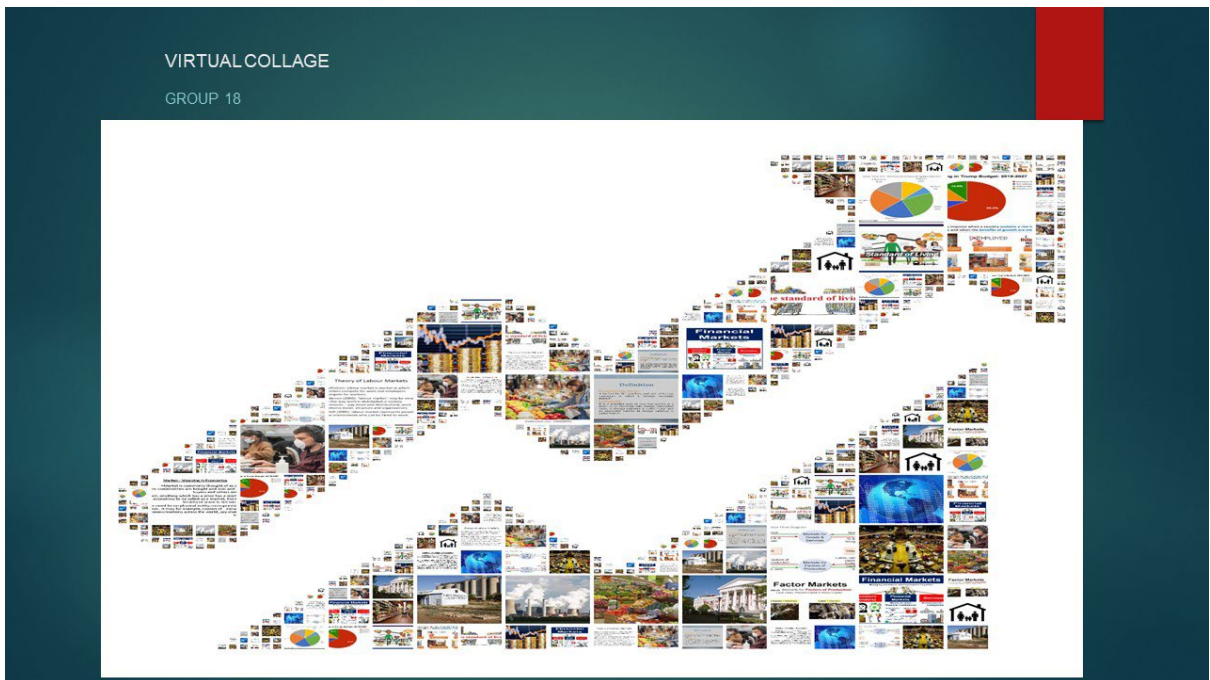
Appendix 3



Appendix 4



Appendix 5



4.2.2 TOPICALIZATION ON ECONOMY APPENDIX





**ECONOMIES ARE DEVELOPED BY ; THE NATIONAL BUDGET, STANDARD OF LIVING, MARKETS AND THE CIRCULAR FLOW.**

#### 4.2.3 TOPICALIZATION ON BUDGET APPENDIX

##### Appendix 9



##### Appendix 10



4.3.1 CONNOTATION ON BUDGET APPENDIX

Appendix 11



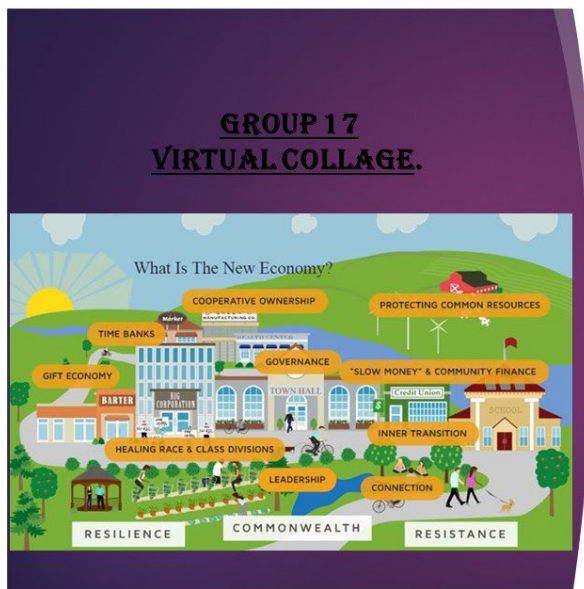
Appendix 12

# VIRTUAL COLLAGE OF ALL IMAGES



## 4.3.2 CONNOTATION ON ECONOMY APPENDIX

Appendix 13



**ECONOMIES ARE DEVELOPED BY ; THE NATIONAL BUDGET, STANDARD OF LIVING, MARKETS AND THE CIRCULAR FLOW.**

Appendix 14



## APPENDIX 3: ETHICAL CLEARANCE



Ezeagba+PO+2190  
94394+HSSREC+000

## APPENDIX 4: GATEKEEPERS PERMISSION



Gatekeepers  
permission today.pdf

## EDITORS CERTIFICATE



Editors certificate  
2023.pdf

## TURNITIN REPORT



An Exploration of  
Commerce Education