



**INYUVESI YAKWAZULU-NATALI**

**UKUCWANINGA UKULUNGELA KOTHISHA ABASAQEQESHA  
UKUYOFUNDISA IZIBALO NGEZILIMI ZOMDABU EMABANGENI  
AYISEKELO: KUGXILWE OLIMINI LWESIZULU**

**NGU**

**SIPHELELE TRUEMAN MBATHA  
211515497**

**2020**



**UNIVERSITY OF  
KWAZULU-NATAL**  
**INYUVESI  
YAKWAZULU-NATALI**

**INYUVESI YAKWAZULU-NATALI**

**UKUCWANINGA UKULUNGELA KOTHISHA ABASAQEQESHA  
UKUYOFUNDISA IZIBALO NGEZILIMI ZOMDABU EMABANGENI  
AYISISEKELO: KUGXILWE OLIMINI LWESIZULU**

**NGU**

**SIPHELELE TRUEMAN MBATHA**

Umqingo Wethulwa Ukugcwalisa Izimfanelo Zeziqu Eziphakeme ze-

**MASTER OF EDUCATION**

**SCHOOL OF EDUCATION, COLLEGE OF HUMANITIES**

**INYUVESI YAKWAZULU-NATALI**

**2020**

**UMELULEKI : Dr B.Y. Mhlongo**

**USUKU LOKUPHOTHULA : UMasingana 2020**

# SIFUNGO

MINA, SIPHELELE TRUEMAN MBATHA (211515497) NGIYAFUNGA  
NGIYAGOMELA UKUTHI:

- i. Ucwangingo okubikwa ngalo kulo msebenzi, ngumsebenzi wami othi mina, ngaphandle kwalapho kukhonjiswe khona.
- ii. Akukho lwazi nazithombe, nanoma yikuphi okunye okuqukethwe kulo msebenzi okungumsebenzi wabanye abantu, ngaphandle kwalapho okuchazwe khona.
- iii. Akukho msebenzi wabanye abantu osikwe waphinde wananyekwa kulo msebenzi otholakale kwi-*internet*, ngaphandle uma lokho kuveziwe, kwaphinde kwavezwa kahle ohlwini lwemithombo endaweni efanele.
- iv. Lo msebenzi awuqukethe mibhalo noma amazwi abanye abacwangingi ngaphandle uma lokho kucaciswe ngendlela efanele. Lapho amazwi abanye esetshenzisiwe:
  - (a) Amazwi abo abhalwe kabusha kodwa kwacaciswa kahle ukuthi amazwi abo.
  - (b) Lapho amazwi abanye ecashunwe enjengoba enjalo, kwenziwe lokhu ngokuthi afakwe kokhulunyiwe kumbe abhalwe ancishiswe, ukuze abonakale ukuthi angamazwi acashunwe enjengoba enjalo, futhi lokhu kwabe sekuvezwa ngendlela efanele ukuthi akabani lawo mazwi.

Signature by student:



Date: 30 Day of March 2020

Signature by supervisor:

*B. Mhlango*

Date: 31 Day of March 2020

# UMNIKELO

## **Lo mqingo ngiwethula ngokuhlonipha:**

Umama wami ongizalayo uDelisile Mbatha, uMaSithole. Ngimbonga ngegalelo lakhe ekutheni kutshaleke uthando lwemfundo empilweni yami. Ukhombisile ukungeseka nokungikhuthaza nangesikhathi sengiphela amandla ngenxa yezithiyo zalokhu kuphila. Ngaphandle kothando nokungeseka kwakhe, bengingeke ngifinyelele kuleli zinga.

# AMAZWI OKUBONGA

Ngifisa ukwedlulisa amazwi okubonga kubo bonke ababambe iqhaza ekwenzeni lo msebenzi ukuba ube yimpumelelo, ikakhulu laba abalandelayo:

- UMeluleki wami, uDokotela Bonakele Mhlongo ngokungihola, angeluleke futhi angikhuthaze ngenkathi kwenziwa lo msebenzi.
- Ihhovisi locwaningo laseNyuvesi yaKwaZulu-Natali ngosizo lwezimali ngenkathi kwenziwa lolu cwaningo.
- Ngaphezu kwabo bonke ngithanda ukubonga uSomandla, uNkulunkulu wami. Ngimbonile engipha umusa, ukuhlakanipha nethuba lokwenza umsebenzi uze ufike emaphethelweni.

# OKUQUKETHWE

UKUFUNGA.....	iii
UMNIKELO.....	iv
AMAZWI	
OKUBONGA.....	v
OKUQUKETHWE.....	vi
IZIFINYEZO.....	ix
IZELEKO.....	x
IGLOSARI YAMATEMU	
ANQALA.....	xi
IZINCAZELO ZAMATEMU	
ANQALA.....	xiii
IQQQA.....	xvii
<b>Isahluko 1</b> .....	Error! Bookmark not defined.
ISINGENISO SOCWANINGO.....	Error! Bookmark not defined.
1.2 UGQOZI NOFUQUFUQU LOMCWANINGO.....	Error! Bookmark not defined.
1.3 UMSUKA WOCWANINGO.....	Error! Bookmark not defined.
1.3.1 Ukubaluleka kokufundisa izibalo ngolimi olungolomdabu kubafundi bamabanga aphansi.....	Error! Bookmark not defined.
1.4 INHLOSO YOCWANINGO.....	Error! Bookmark not defined.
1.4.1 Izinhlosongqangi zocwaningo.....	Error! Bookmark not defined.
1.4.2 Imibuzongqangi yocwaningo.....	Error! Bookmark not defined.
1.5 UKUBHEKWA KOCWANINGO OLUMQOKA NGOKUPHUNYELELWA KWEZIBALO UMA ZIFUNDISWA NGEZILIMI ZOMDABU.....	Error! Bookmark not defined.
1.6 UKUBALULEKA KWALOLU CWANINGO.....	Error! Bookmark not defined.
1.7 IMINGCELE YOCWANINGO.....	Error! Bookmark not defined.2
1.8 UKUHLELEKA KWEZAHLUKO.....	Error! Bookmark not defined.
1.9 ISIPHETHO.....	Error! Bookmark not defined.
<b>Isahluko 2</b> .....	Error! Bookmark not defined.
2.1 ISINGENISO.....	Error! Bookmark not defined.
2.2 INSIZAKUHLAZIYA NOHLAKA LWEMICABANGO.....	Error! Bookmark not defined.
2.2.1 Uhlaka lwensizakuhlaziya.....	Error! Bookmark not defined.

2.2.2 Uhlaka lwemicabango ( <i>Conceptual framework</i> ) .....	Error! Bookmark not defined.
2.3 UKUBUYEKEZWA KWEMIBHALO .....	<b>28</b>
2.3.1 Ucwangingo olwenziwe eNingizimu-Afrika .....	<b>28</b>
2.3.2 Ucwangingo olwenziwe eTanzania .....	Error! Bookmark not defined.
2.3.3 Ucwangingo olwenziwe eNepal .....	Error! Bookmark not defined.7
2.3.4 Ucwangingo olwenziwe ePeru .....	Error! Bookmark not defined.
2.3.5 Ucwangingo olwenziwe ezweni laseTurkey .....	Error! Bookmark not defined.3
2.4 IQOQA LESAHLUKO .....	Error! Bookmark not defined.
<b>Isahluko 3</b> .....	Error! Bookmark not defined.
3.1 ISINGENISO .....	Error! Bookmark not defined.
3.2 IPHARADAYIMU YOCWANINGO.....	Error! Bookmark not defined.5
<b>3.3 UMUMO WOCWANINGO (<i>RESEARCH DESIGN</i>)</b> .....	Error! Bookmark not defined.
3.3.1 Ucwangingo lotho (noma lwesimo) .....	Error! Bookmark not defined.
3.4 IZINDLELA ZOKUQHUBA UCWANINGO .....	Error! Bookmark not defined.
3.4.1 Ucwangingo lobunjalo botho.....	Error! Bookmark not defined.
3.5 INDAWO YOCWANINGO .....	Error! Bookmark not defined.
3.6 UKUQOKWA KWABAHLANGANYELI BOCWANINGO .....	Error! Bookmark not defined.2
3.7 IZINDLELA ZOKUQOQA ULWAZI .....	Error! Bookmark not defined.
3.7.1 Indlela yenhlololwazi esakuhleleka.....	Error! Bookmark not defined.
3.7.2 Ukuhlaziywa kwamadokhumenti .....	Error! Bookmark not defined.
3.7.3 Ukubukela abahlanganyeli befundisa ( <i>observation of lessons</i> ). Error! Bookmark not defined.	
<b>3.8 UKUHLAZIYWA KOLWAZI OLUTHOLAKELE</b> .....	Error! Bookmark not defined.5
3.9 UKUKHOLAKALA KOCWANINGO .....	Error! Bookmark not defined.6
3.10 INKAMBISO ELUNGILEYO YOCWANINGO ( <i>RESEARCH ETHICS</i> ).....	Error! Bookmark not defined.
3.11 IMINGCELE NEZINGQINAMBA ZOCWANINGO ..	Error! Bookmark not defined.7
3.12 UKUVIVINYA AMATHULUZI OCWANINGO ( <i>PILOTING RESEARCH INSTRUMENTS</i> ) .....	Error! Bookmark not defined.8
3.14 IQOQA LESAHLUKO .....	Error! Bookmark not defined.
<b>Isahluko 4</b> .....	Error! Bookmark not defined.
4.1. ISINGENISO .....	Error! Bookmark not defined.
4.1.1 Indikimba yokuqala: Ukungaqondi kahle ukubaluleka kokuba abafundi bamabanga ayisisekelo bafundiswe izibalo ngolimi lwabo lwasekhaya . Error! Bookmark not defined.	

4.1.2 Indikimba yesibili: Ukungaqeqesheki ngokwanele kwabafundi bezibalo abasaqeqeshwa ukufundisa izibalo ngolimi lwesiZulu emabangeni ayisisekelo .....	70
4.1.3 Indikimba yesithathu: Ukushoda kwezinsizakufundisa kanjalo nezinsizakufunda ezibhalwe ngolimi lwesiZulu.....	Error! Bookmark not defined.8
4.1.4 Indikimba yesine: Ukusetshenziswa kwezinsizakufundisa kanye nezinsizakufunda ezibhalwe ngolimi lwesiNgisi. ....	Error! Bookmark not defined.8
4.1.5 Ulwazi lwamatemu ezibalo ngolimi lwesiZulu ( <i>metalanguage</i> ) olungekho sezingeni .....	Error! Bookmark not defined.2
4.4 IQOQA LESAHLUKO .....	Error! Bookmark not defined.5
<b>Isahluko 5</b> .....	Error! Bookmark not defined.6
5.1 UKUFINGQA NGOKUTHOLAKELE KULOLU CWANINGO ..	Error! Bookmark not defined.6
5.2 ISIPHETHO SOCWANINGO .....	89
5.3 IZINCOMO .....	90
<b>IMITHOMBO ESETSHENZISIWE .....</b>	<b>92</b>
<b>IZELEKO .....</b>	<b>111</b>

# IZIFINYEZO

---

CAPS	:	Curriculum and Assessment Policy Statement
LoLT	:	Language of Learning and Teaching
MoI	:	Medium of Instruction
TIMSS	:	Trends In Mathematics and Science Study
NCS	:	National Curriculum Statement
DBE	:	Department of Basic Education
SGB	:	School Governing Body
PEI	:	President Education Initiative
BBC	:	British Broadcasting Corporation
(TAHFUZWE)	:	IsiTatimende soHlelo lweziFundo lukaZwelonke

# IZELEKO

---

<b>ISELEKO</b>	<b>IKHASI</b>
Izithasiselo ezathathwa emagunjini okufundela	111
Incwadi egunyaza ukuqoqwa kocwaningo ( <i>ethical clearance letter</i> )	117
Incwadi yomgcinisango waseNyuvesi	118
<i>i-Turn-it-in Report</i>	119
Incwadi eyimvume yomfundi	120
Incwadi eyimvume yomzali	124
Okudinga ukwaziwa ngumhlanganyeli	130
Izincwadi zesicelo sokwenza ucwaningo ezikoleni	136
Izimpendulo zezincwadi zesicelo sokwenza ucwaningo ezikoleni	140
Imibuzo yenhlololwazi esakuhleleka	144
Uhlaka olwalusetshenziswa kubukelwa abahlanganyeli befundisa	146
Uhlaka olwalusetshenziswa ngesikhathi kuhlaziywa amadokhumenti	153
Ifomu lokuvuma nokusayina kwabahlanganyeli	155

# IGLOSARI YAMATEMU

---

Abafundi (*learners*): Izingane zesikole

Abafundi abasaqeqeshelwa ukuyofundisa (*pre-service teachers*): Abafundi abasaqeqeshelwa ukuyofundisa, abangakangeni ensimini.

Othisha abasaqeqeshwa (*pre-service teachers*): Othisha abasaqeqeshwa, noma abasengamathwasa, abangakangeni ensimini.

Abahlanganyeli (*participants*): abafundi abasaqeqeshwa okuqoqwe kubo ulwazi.

Inkambiso elungileyo (*ethical clearance*): Imigudu efanelekileyo, okudingeka ilandelwe umakwenziwa ucwaningo.

Inhlololwazi esakuhleleka (*semi-structured interview*): Ithuluzi lokuqoqa ulwazi ngenkulumo evulelekile phakathi kwababili okuwumcwaningi kanye nomhlanganyeli.

Inhlosongqangi (*aim*): Okuhloswe ngocwaningo

Umumo wocwaningo (*research design*): indlela ucwaningo olumiswe ngayo

Izinsizakufunda (*learning aids*): yizo zonke izinto ezelekelela ofundayo ukuthi aqonde kangcono, kungaba izincwadi noma amashadi.

Izinsizakufundisa (*teaching aids*): Yizo zonke izinto ezelekelela uthisha ekuchazeni nasekudluliseni ulwazi, kungaba incwadi kathisha, amashadi, inkombandlela kathisha nokunye.

Ucwaningo lobunjalo botho (*qualitative research*): Ucwaningo olubheka ubunjalo noma isimo sokuthile okucwaningwayo, hhayi izinombolo.

Ucwaningo lobungako botho (*quantitative research*): ucwaningo olubheka ubungako, noma izinombolo.

Ucwaningo lwesimo noma lotho (*case study*): Ucwaningo olubheka isimo esithile ngokugxilile.

Uhlaka lwemicabango (*conceptual framework*): amatemu athile aseke ucwaningo.

Uhlaka lwensizakuhlaziya (*theoretical framework*): ilensi esetshenziselwe ukweseka ucwaningo.

Ilensi (*lens*): iso elijulile, elisetshenziselwa ukubuka nokuhlaziya okutholakele.

Ukubukela abahlanganyeli befundisa (*observation*): Yilapho umcwaningi ehlala abukisise ukwenza kwabahlanganyeli.

Isifundo sokuzilolongela ukuyofundisa (*teaching practice*): isifundo esenziwa ngabafundi abasaqeqeshelwa ukuyofundisa lapho bezilolonga khona ngezindlela zokufundisa.

# IZINCAZELO ZAMATEMU ANQALA

---

## **Ulimi lomdabu (*Indigenous language*)**

Lolu wulimi umfundi alukhuluma ekhaya, futhi olungolwesizwe sakhe. Ulimi lomdabu ngokwalo mqulu lungaphinde luchazwe njengolimi lwase-Afrika, olukhulunywa ngabantu noma ngabafundi abangumsinsi wokuzimilela ezwenikazi lase-Afrika. Loluhlimi luhlukile olimini lwasentshonalanga. Ulimi lwasentshonalanga wulimi olufike nabamhlophe, obelungekho futhi lungakhulunywa ngaphambilini. Kodwa ulimi lomdabu alulona ulimi olufike lwafundiswa ngabamhlophe esizweni esingama-Afrika. Ulimi lomdabu (njengoba negama lizichaza nje) wulimi olungolwendabuko, olwabe lukhulunywa ngokhokho endulo, kungakafiki ngisho inguquko yobukoloni kanye nombuso wobandlululo. Okhokho abangama-Afrika balwedlulisela ezizukulwaneni ngezizukulwane, belwedlulisela ngezindlela ezahlukene, lwaze lwafika esizukulwaneni samanje (Madiba, 2010).

## **Ulimi lwaseKhaya (*Home Language*)**

Noma loluhlimi luyelusetshenziswe futhi luchazwe kube sengathi luyefana nolimi olungolomdabu, kodwa empeleni akunjalo. Umehluko omkhulu phakathi kolimi lwasekhaya nolimi lomdabu ukuthi ulimi lwasekhaya yilolu limi umfundi alukhuluma ekhaya. Kuyenzeka nokho ukuthi ulimi umfundi alukhuluma ekhaya kube wulimi olungelona olomdabu, ngenxa yezizathu eziningi okungabalwa kuzona ukuguquguquka kwezikhathi nokuqhakanjiswa kwezilimi zasentshonalanga njengezilimi zokuxhumana neningi esikhathini samanje. Kodwa ulimi okuyilona olukhulunywa ngumfundi uma esekhaya noma exhumana namalunga omndeni wakhe imini nobusuku, yilona limi lwasekhaya.

**Ulimi lokufunda nokufundisa/ ulimi lokufundisa nokufunda (*Language of Teaching and Learning*).**

Ulimi lokufunda nokufundisa yilolo limi olusetshenziswa lapho kufundwa, kufundiswa, kuhlolwa, noma kubhalwa izivivinyo. Lolu limi alusetshenziswa kuphela nguthisha, kodwa luphinde lusetshenziswa nangabafundi lapho bexhumana nothisha, okungaba ukuxhumana ngengxoxo, noma ukuxhumana ngemibhalo. Abanye abacwaningi abafana noCummins (2000) kanye no-Alexandra (2003) bathi ulimi lokufunda nokufundisa yiwona mgudu wokwedlulisa ulwazi, lususelwa kuthisha luya kumfundi. Kodwa-ke nabo abafundi bayalusebenzisa lolu limi lapho bexhumana ngengxoxo nothisha noma bebhalela uthisha.

### **Amabanga ayisisekelo kanye neSigaba esiyiSisekelo (*foundation grades and foundation phase*)**

Isigaba esiyisisekelo siyisigaba esiyisendlalelo nesisekelo semfundo yonke. Isigaba esiyisisekelo sakhiwe ngamabanga amathathu, ibanga lokuqala, elesibili kanye nelesithathu. Womathathu la mabanga abizwa ngokuthi angamabanga ayisisekelo, ngoba yiwona umfundi aqala ngawo futhi cishe yonke imfundo iqala ngesisekelo sala mabanga, bese iya ngokukhulake ngokwamazinga iye ifinyelele ezigabeni ezingaphezudlwana.

### **Isigaba sokuMukezela (*Intermediate phase*)**

Lesi yisigaba esilandela isigaba esiyisisekelo. Sibizwa ngokuthi singesokumukezela ngoba yisona esiye sisuse umfundi emabangeni ayisisekelo siye simumukezele emabangeni athe thuthu nabizwa ngokuthi phecelezi *i-senior phase*. Lesi sigaba sibandakanya ibanga lesine kanye nebanga lesihlanu. Emva kwebanga lesihlanu, umfundi ube eseqalisa ibanga lesithupha, elisesigabeni esithe thuthu. Abacwaningi abafana noFleisch (2008) kanye noSpaull (2015) bathi lesi sigaba sakha ukuxhumana phakathi kwamabanga ayisisekelo kanye namabanga athe thuthu. UDraper (2015) yena uthi lesi sigaba sicija umfundi simcijele amabanga athe thuthu.

### **Isigaba sokufunda okuQhubekayo nokuQeqesha (*Further Education and Training*)**

Lesi yisigaba eselama isigaba esithe thuthu. Kulesi sigaba, yilapho umfundi ekhetha khona izifundo eziyomsiza oqeqeshweni lwakhe nasekufundeleni umkhakha afuna ukungena kuwona womsebenzi. Isigaba sokuFunda okuQhubekayo nokuQeqesha yisona sigaba sokugcina emfundweni eyisisekelo (Basic Education), kanti sibandakanya ibanga leshumi, leshumi naye kanye neleshumi nambili (umatikuletsheni). Isizathu sokuthi lesi sigaba kuthiwe isigaba sokuqeqesha ukuthi amakolishi aqeqeshela amakhono aqalisa ukuqeqesha kulesi sigaba

(Taylor, 2014). Ngamanye amazwi, lesi sigaba singesokuqala emfundweni ephakeme bese siba ngesokugcina emfundweni eyisisekelo.

### **Uhlelo lwezifundo (*Curriculum*)**

Uhlelo lwezifundo luyisimiso esibekiwe, okumele silandelwe uma kufundwa noma kufundiswa isifundo, noma izifundo ezithile (Chisholm, 2000). Isifundo ngasinye sinendlela okumele ilandelwe lapho sifundiswa, sihlolwa, noma sifundwa. Ngokunjalo futhi, inhlanguanisela yezifundo ezithile nayo iyaye ibe nezimiso nohlelo olulandelwayo lapho ifundiswa noma ifundwa. Isibonelo, inhlanguanisela yezifundo zesayensi nezibalo iba nendlela nesimiso sayo esehlukile kwisimiso senhlanguanisela yezifundo zolimi. Uhlelo lwezifundo yinkombandlela elekelela uthisha kanye nomfundi ngendlela encono yokufunda noma yokufundisa leso sifundo, noma leyo nhlanguanisela yezifundo. Lolu hlelo luyaye lubunjwe nguhulumeni, osombusazwe, kanye neziphathimandla zezemfundo.

### **Indlela yokufundisa (*Pedagogy*)**

Indlela yokufundisa iwubuciko bokufundisa obusetshenziswa nguthisha ukwelekelela abafundi ukuthi baqonde kangcono isifundo leso asuke esifundisa. UDa Costa (2000) uthi le ndlela yokufundisa uthisha ufundiswa yona kusukela ngesikhathi esenza izifundo zokuqeqeshelwa ukufundisa. Indlela yokufundisa iyahluka ngokwesifundo nesifundo, ngoba isifundo ngasinye sinamagama asetshenziswa kusona kuphela, kanye nendlela esifundiswa ngayo engafani nendlela esinye isifundo esihlukile esifundiswa ngayo.

### **Ulwazi lokubala, inyumerasi (*Numeracy*)**

Ulwazi lokubala, inyumerasi, lungukufunda nokuqonda ikhono lokuqala neliyisisekelo ezibalweni. Ukufunda ikhono lokubala yisifundo esifundwa siphinde sifundiswe emabangeni asesigabeni esiyisisekelo (Alexandra, 2003). Uma kufundwa ulwazi lokubala yilapho umfundi esuke efundiswa futhi ecathuliswa khona ngezindlela zokubala eziyisisekelo. Kuye kuthi uma esedlulela emabangeni alandelayo, bese ulwazi olusha lokubala lwakhelwa phezu kwesisekelo solwazi lokubala alufunde esesesigabeni esiyisisekelo. Ngamafuphi, ulwazi lokubala lungulwazi oluyisisekelo sezibalo ezifundwa kuwona wona amabanga.

### **Izikole zakobelungu (*Former Model-C schools*)**

Izikole zakobelungu yilezo zikole ngaphambili ezazaziwa ngokuthi zingezabamhlophe kuphela. Iningi liye lididanise phakathi kwezikole ezizimele kanye nezikole zakobelungu. Izikole zakobelungu azizimele, kodwa zingaphansi kukahulumeni. Noma zingaphansi kukahulumeni, kodwa zithola usizo lwezimali kakhulukazi kubazali, ezigungwini eziseuke zilawula lezo zikole, kanye nakumalungu alezo zikole asaphothula (alumni members). Isikhathi esiningi lolu hlobo lwezikole luvame ukubiza kakhudlwana kunezikole ezincike kuphela osizweni lukahulumeni ngakwezezimali. Esikhathini esikusona, okungesentando yabantu, ngokuvamile lolu hlobo lwezikole seluba ngolunabafundi abaxube izinhlanga, futhi abavela emakhaya asezingeni elimaphakathi nendawo lokuphila (*middle class*). Njengoba isikole esiwulolu hlobo sincike nasosizweni lwezimali oluvela esigungwini esilawulayo nje, kuye kube yisona futhi isigungu esilawula isikole esiqoka ulimi okumele lusetshenziswe njengolokufundisa nokufunda.

### **INqubomgomo yoHlelo lweziFundo nokuHlola (*Curriculum and Assessment Policy Statement*)**

Le nqubomgomo iwumqingo oyidokhyumenti eyodwa, kodwa nokho oqukethe imininingwane ephelele mayelana nokufundisa, ukufunda, ukuhlola, kanye nenkambiso emiselwe ukulandelwa lapho kuphunyeleliswa abafundi. Lo mqulu wangena esikhundleni sesiTatimende soHlelo lweziFundo lukaZwelonke (uTAHFUZWE) ngowezi-2012. Isifundo nesifundo siba nomqulu waso wale nqubomgomo, okuyiwona oba yinkombandlela nomhlahlandela wokuthi isifundo lesa kufanele sifundiswe, sihlolwe, futhi siphunyelelwe kanjani. Le nqubomgomo ayigxilile kakhulu emiphumeleni, kodwa igcizelela ukuthi kufundiswe kuphinde kuhlolwe ngendlela evuna abafundi.

# IQQQA

---

Lolu cwaningo beluhlola ukulungela kwabafundi abasaqeqeshwa ukuyofundisa izibalo ngezilimi zomdabu, lugxile olimini lwesiZulu. Njengoba izibalo zingezinye zezifundo ezingaphunyelelwa ngokugculisayo ezweni laseNingizimu-Afrika, ukufundiswa kwazo ngolimi lwesiZulu kwenza ziqondwe futhi ziphunyelelwe, ikakhulu emabangeni aphansi. Uma izibalo zifundiswa ngolimi lwesiZulu, abafundi bayakhula ekwazini izibalo, kanye nasekwazini lona uqobo ulimi lwesiZulu.

Umbuzo onqala wocwaningo ububheka ukuthi ngabe abafundi abaqeqeshelwa ukufundisa isigaba esiyisisekelo bakulungele ngokwanele yini ukuyofundisa izibalo ngolimi lwesiZulu? Injongo yalo mbuzo bekuwukuhlola ukulungela kwabafundi abasaqeqeshwa bamabanga aphansi ukufundisa izibalo ngolimi lwesiZulu nokuqondisisa ukuthi kungani abafundi abasaqeqeshwa bekulungele noma bengakulungele ukuyofundisa izibalo ngolimi lwesiZulu. Kulolu cwaningo kukhethwe ngokunenhloso abafundi abahlanu, abaphothulayo oqeqeshweni lwabo lokuyofundisa isiGaba esiyisiSekelo. Ucwaningo lusebenzise insizakuhlaziya kaVygotsky yowe-1978, eyaziwa nge-*Socio-Cultural Learning Theory*.

Ngesikhathi kwenziwa imizamo yokuphendula umbuzo onqala walolu cwaningo, kutholakele ukuthi abafundi abaqeqeshelwa ukuyofundisa izibalo abakulungele ukufundisa ngolimi lwesiZulu ngoba: Abanawo kwamdlandla wokusebenzisa isiZulu njengolimi lokufunda nokufundisa izibalo, balubukela phansi ulimi lwesiZulu, basebenzisa ulimi oluxube kakhulu isiNgisi lapho befunda izibalo, nezinsizakufundisa abazisebenzisayo zibhalwe ngolimi lwesiNgisi. Kugqamile futhi nokuthi abafundi abasaqeqeshwa abanalo ulwazi-magama lwesiZulu, ngaleso sizathu bagcina befaka amagama olimi lwesiLenge uma bezama ukufundisa izibalo ngesiZulu.

Lolu cwaningo luncoma ukuthi izibalo zasemabangeni aphansi zibe nesichazamazwi esichaza amakhonsephtsi ezibalo ngolimi lwesiZulu, ukuze othisha babe nolwazi-magama lwezibalo

olungolimi lwesiZulu. Ucwango luphakamisa nokuthi uma kuqeqeshwa othisha bezibalo bamabanga phansi, kusetshenziswe ulimi lwesiZulu, yikhona bezozuza ulwazi lokusebenzisa isiZulu lapho befundisa izibalo kula mabanga

# Isahluko 1

---

## ISINGENISO SOCWANINGO

### 1.1 ISINGENISO

Umbuso wobandlululo owaba semandleleni eNingizimu-Afrika ngemumva kokuthi iqembu lezombusazwe i*National Party* lithathe izintambo zokubusa, waqala ngowe-1948 waphela ngowe1994. Ngesikhathi umbuso wobandlululo usabambe izintambo zokulawula izwe, kwakunokubandlululeka nokubukeleka phansi kwabantu bebala elimnyama ngokwamasiko, ngokwebala kanye nangokwezilimi zabo (Holtzhausen, 2005). Ngenxa yalolu bandlululo, izindlela zokufundisa kanye nezilimi zokufundisa zazimiswe ngendlela eyayiqokwe ngababesezintanjeni zombuso ngaleso sikhathi, okwakungabamhlophe. Abafundi bebala elimnyama, abangabomdabu eNingizimu-Afrika, babefundiswa baphinde baqeqeshelwe ukuthi babe nolwazi lwezilimi zabalawuli bombuso wengcindezelo, okwakungabamhlophe (Nkomo, 1990; Christie 1995). UChristie (1995) uqhubeka athi abantu bebala elimnyama babefundiselwa ukuthi baqeqesheke ekusebenzeleni abantu bebala elimhlophe. Uhlelo lwezifundo, kanye nolimi lokufunda nokufundisa kwakuqhakambisa usikompilo nezilimi zabamhlophe (Venkat, 2011). Ngakolunye uhlangothi, izilimi zomdabu zase-Afrika zazibukelwa phansi, zingasetshenziswa njengezilimi zokufunda nokufundisa (Christie, 1995). Konke lokhu kwakwenzelwa ukuthi abantu abamnyama bakwazi ukuxhumana nabamhlophe, ababefundiselwa ukubasebenzela nokubafukula (O' Campo, 2004). Ngakolunye uhlangothi, abamhlophe bona babefundiswa ngezilimi zabo abazincele ebeleni. Lokho kwakwenzelwa ukuthi abamhlophe baqonde kangcono lokho ababekufundiswa (Prah, 2005).

Abamhlophe babefundiswa izibalo nesayensi ngezilimi abazincele ebeleni ngoba kwakuhloswe ukuthi babe nolwazi lobuchwepheshe, lwezezimali kanye nolokulawula izwe (Olivier 2016). UGrage (2017) uthi inhloso-ngqangi yombuso wobandlululo kwakungukuthi kwehliswe isithunzi sabantu abamnyama, kwenze nezilimi zabo zibe ngaphansana kwezilimi zabamhlophe.

Imingcele eyayehlukanise indlela okufundiswa ngayo abamhlophe nabamnyama yashabalaliswa ukufika kombuso wentando yabantu ngowe-1994. Umthethosisekelo wentando

yeningi, owabunjwa ngowe-1996 ugqizelela ukuthi zonke izakhamuzi zaseNingizimu-Afrika ziphathwe ngokulingana, zinikezwe nesithunzi esifanelekile (Ntsebeza, 2004). USetati (2012) uthi, ngokomthethosisekelo waseNingizimu-Afrika, abamnyama abakhululekile kwezombusazwe nasekuvoteni kuphela, kodwa banelungelo futhi lokukhuluma, nokufundiswa ngezilimi zabo zomdabu. Ngakho-ke kusukela ngowe-1996, zaba yishumi nanye izilimi ezagunyazwa njengezisemthethweni eNingizimu-Afrika. Eziyisishiyagalolunye kulezo zilimi ngezomdabu. UFrith (2011) uveza ukuthi, emva kokutholwa kwenkululeko, kwagunyazwa ukuthi izilimi zomdabu zisetshenziswe njengezilimi zokufunda nokufundisa

INqubomgomo yoLimi KwezemFundo (*Language in Education Policy*) yamabanga aseSigabeni esiyiSisekelo yowe-1997 igcizelela ukuthi ezifundweni zesayensi nezezibalo, abafundi abangabomdabu kufanele bafundiswe ngezilimi abazincele ebeleni. Echaza kabanzi ngokushiwo yile Nqubomgomo, ungqongqoshe wemfundo eyisisekelo u-Angie Motshekga ephepheni elikhishwa minyaka yonke elichaza ngezindlela zokufundisa zasemabangeni aphansi langowe-2014; uthi inhloso yokusetshenziswa kwezilimi zomdabu lapho kufundwa noma kufundiswa izifundo zesayensi nezezibalo ukwandisa ochwepheshe bebala elimnyama, abanolwazi lokusebenzisa ubuxhakaxhaka besimanje, nabanamandla kwezomnotho, (Department of Basic Education, 2014). Izibalo ziwumgogodla wobuchwepheshe besimanje, ngakho-ke kubalulekile ukuthi zifundwe ziphinde zifundiswe ngezilimi zomdabu (Spaull noVenkat, 2013). Ukuze abafundi babe nolwazi lokubala, kanye nolwazi oluyisisekelo ngesifundo sezibalo, ukufundwa nokufundiswa kwezibalo ngezilimi zomdabu kufanele kwenziwe abafundi besesemabangeni ayisisekelo (Green, 2014).

Egcizelela ngobumqoka bokufundiswa kwezibalo ngezilimi zomdabu emabangeni ayisisekelo, uSpaull (2011) uthi izibalo zidinga ukuqondwa emabangeni aphansi, ukuze noma umfundi esesemabangeni alandelayo ezokwakhela ulwazi olusha, lwasemabangeni alandelayo, phezu kwesisekelo solwazi lwezibalo zasemabangeni aphansi. Eqhubeka uSpaull (2011) uthi ulwazi lwezibalo luhamba ngokwamazanga (*hieracical*), ngakho ukuze ulwazi oluyisisekelo lwezibalo lutshaleke, kudingeka ukuthi abafundi bafundiswe izibalo ngezilimi zomdabu besesemabangeni aphansi.

UCummins (2000) uthi uma abafundi befundiswa ngolimi lomdabu emabangeni aphansi, kuba lula ukuthi bafunde uLimi loKwengeza uma sebesemabangeni alandelayo, belususela olimini lwabo lomdabu. Ukuze-ke abafundi bezokwazi ukuqonda izibalo kanye nezinye iziLimi zoKwengeza, kudingeka baqale baqondisise ulimi lwabo lomdabu besesemabangeni aphansi

(Devies 2009; Hobden 2009; Spaul 2016). Uma bethole ulwazi ngolimi lomdabu besesemabangeni aphantsi, kuba lula ukuthi bafunde ezinye izilimi uma sebefika esigabeni sokuMukezela (*Intermediate Phase*).

Ukufundwa kwezibalo ngezilimi zomdabu kungumsebenzi obandakanya othisha kanye nabafundi. Ngakho-ke uqeqesho ngokufundiswa kwezibalo ngezilimi zomdabu kufanele luhlinzekwe abafundi abaqeqeshelwa ukufundisa la mabanga (Language in Education Policy in Higher Education Institutions, 2011). UKajoro (2003) uveza ukuthi njengoba ukufundisa izibalo ngezilimi zomdabu kudinga othisha abaqeqeshokile nje, kusemahlombe ezikhungo zemfundo eziqeqeshela abafundi abethwasela ukuba ngothisha bamabanga aphantsi ukuqinisekisa ukuthi bathola uqeqesho olwanele ngendlela yokufundisa izibalo ngezilimi zomdabu. Ecacisa kabanzi lokhu okushiwo nguKajoro (2003), USkuttnabb-Kangas (2004) uthi ukufundisa izibalo emabangeni aphantsi kudinga uthisha onentshisekelo, onesineke, onothando, nokulungele futhi ukufundisa la mabanga ngoba, yiwona ayisisekelo semfundo yonke yomfundi. Ngaleso sizathu-ke, ngikubone kubalulekile ukuphenya ukulungela kwabafundi abaqeqeshelwa ukufundisa la mabanga, ngihlole ukuthi bakulungele yini ukuyofundisa izibalo ngezilimi zomdabu.

Lesi sahluko sigxile ekucaciseni isisusa salo msebenzi, nasekungeniseni ucwaningo olwethulwa yilo mqingo. Okokuqala, isahluko sizodingida ngogqozi nofuqufuqu locwaningo. Isahluko sizonaba nangomsuka walolu cwaningo ngokuveza ukubaluleka kokusebenzisa izilimi zomdabu lapho kufundwa noma kufundiswa izibalo emabangeni aphantsi. Izinhloso zocwaningo nemibuzo yocwaningo kungezinye zezingxenye ezizodingidwa kulesi sahluko. Isahluko sizobuyekeza kafushane imibhalo ethinta ukuphuyelelwa kwezibalo uma zifundiswa ngezilimi zomdabu. Okwesithathu, lesi sahluko sizobheka imiklamo nemingcele yalolu cwaningo. Ngizophinde ngizoveza ukubalulela kocwaningo, imiklamo yocwaningo, kanye nokuhleleka kwezahluko zocwaningo.

## **1.2 UGQOZI NOFUQUFUQU LOCWANINGO**

Ngaphambi kokuthi umcwaningi aqhube ucwaningo, kuba nezenzeko azibonile, zamgqugquzela ukuthi athole ulwazi oludephile nolujulile ngomsuka wazo. Ucwaningo olwethulwa kulo mqingo lwesekwe kulokho engikuphawulile njengothisha wezibalo nolimi emabangeni asesigabeni sokuFunda okuQhubekayo nokuQeqesha. Njengothisha kulesi sigaba ngikuqaphelile ukuthi abafundi engibafundisayo banengqinamba ekuqondeni nasekuphumeleleni isifundo sezibalo. Ngikuqaphelile futhi ukuthi abafundi kulesi sigaba

banenkinga nasekuqondeni ulimi lwezibalo. Ekufundiseni kwami, ngithole ukuthi inkinga edala ukuthi bengaziqondi izibalo ngeyokuthi, abaluzondi ulimi lwesiNgisi (okuyilona olusebenza njengolimi lokufunda nokufundisa kulesi sigaba).

Abacwaningi abangoFrith (2000) kanye noSpaull (2009:13) baveza ukuthi abafundi banenkinga ekuqondeni ulimi izibalo ezifundiswa ngalo. Beqhubeka laba bacwaningi bathi ukungaqondi kwabafundi ulimi izibalo ezifundwa ziphinde zifundiswe ngalo yikho kanye okudala ukuthi bengaziqondi izibalo uqobo. Uma-ke bengaziqondi izibalo, imiphumela nolwazi lokubala eNingizimu-Afrika kuyafadabala. Ngibe sengilandelela, ngathola ukuthi kusukela emabangeni aphantsi, laba bafundi babefundiswa izibalo ngolimi abangaluzondi. Lokho kwadala ukuthi izibalo bangaziqondi futhi bangazithandisisi kusukela besesemabangeni aphantsi. Ukuze kugwemeke ukungaphunyelelwa nokungathandisiswa kwezibalo emabangeni athe thuthu, ngibone kubalulekile ukuhlola ukuthi ngabe othisha abasaqeqeshelwa ukufundisa izibalo emabangeni aphantsi bakulungele yini ukufundisa izibalo ngezilimi zomdabu.

Okunye okungiqhubile ukuthi ngenze lolu cwaningo ukuthi, njengoba mina ngaqeqeshelwa ukufundisa izibalo nezilimi emabangeni asesigabeni sokuFunda okuQhubekayo nokuQeqesha (*Further Education and Training*), ngikholwa ukuthi ngahlomiswa ngokwanele ngendlela yokufundisa izibalo nangolimi lokuzifundisa (okuwulimi lwesiNgisi kulesi sigaba). Emva koqeqesho, ngangikulungele ukuyokwenza njengalokhu ngiqeqeshiwe. Ngihlose ukubheka-ke ukuthi labo abagxile ekufundiseni izibalo emabangeni ayisiSekelo bona bakulungele yini ukuyofundisa izibalo ngezilimi zomdabu (njengoba izilimi zomdabu kuyizona okufanele kufundiswe ngazo emabangeni ayisisekelo) uma sebengena emkhakheni wokufundisa.

Njengoba bonke abafundi engibafundisayo bekhuluma ulimi lwesiZulu njengoLimi lwaseKhaya nanjengolimi lomdabu, ekubeni izibalo zifundwa ziphinde zihlolwe ngolimi lwesiNgisi (okuwulimi lwesibili kubafundi engibafundisayo) esigabeni engisifundisayo, ngike ngikuphawule ukuthi inkinga yokungaqondi izibalo ilele olimini, futhi okucacayo ukuthi le nkinga basuka nayo emabangeni aphantsi. UMkhwanazi enabanye (2014) bathi umgogodla wemfundo yonke ulele ekwazini nasekuqondeni izibalo nolimi lokuzifundisa kusukela emabangeni aphantsi, khona abafundi bezofika emabangeni aphezulu benesisekelo esiqinile sezibalo nesezilimi izibalo ezifundiswa ngazo. Ngaleso sizathu ngibone kungcono ukuzama ukuthola umnyombo nomsuka wobuthaka elwazini lwezibalo ngokuhlola ukuthi othisha abaqeqeshelwa ukuyofundisa amabanga ayisisekelo bakulungele yini ukuyofundisa izibalo ngezilimi zomdabu kula mabanga.

Njengoba abafundi abaqeqeshelwa ukufundisa amabanga aphantsi kuyibona abayikusasa lokufundisa kuleli, lolu cwaningo-ke luhlose ukuhlaziya ukuthi ngabe abafundi abaqeqeshelwa ukufundisa amabanga aphantsi sebekulungele yini ukuyofundisa izibalo besebenzisa izilimi zomdabu. Izilimi zomdabu angizibhekanga zonke, kodwa ngigxile olimini lwesiZulu kuphela.

Ngaphambi kokuthi ngiqhube lolu cwaningo, ngiqale ngabheka ucwaningo oluthinta ukubaluleka kokufundisa izibalo ngezilimi zomdabu. Ingxenye engezansi iveza ukubaluleka kokufundisa izibalo ngezilimi zomdabu njengomsuka walolu cwaningo.

### **1.3 UMSUKA WOCWANINGO**

Ngaphambi kokuqhuba ucwaningo, kuba khona umnyombo nesisusa okuyisona esigquguzela umcwaningi ukuthi acwaningi ngokuthile. Ngokuvamile, umsuka wocwaningo kuba wukubuyekeza imibhalo nocwaningo ngesenzeko esithile. Uma ucwaningo selubuyekeziwe, umcwaningi ube esekhetha ukugxila nokucwaninga ngengxenye noma ngezingxenye ezithile ezivele ocwaningweni alubuyekezile. Ukuthola ngokubaluleka kokufundisa izibalo ngezilimi zomdabu kube yiwona msuka walolu cwaningo.

#### **1.3.1 Ukubaluleka kokufundisa izibalo ngolimi olungolomdabu kubafundi bamabanga aphantsi**

Amabanga aphantsi ayisigaba esibalulekile semfundo, ngoba yilapho kuqala khona ukufunda nokuqonda konke. UMalimela (2013) uthi amabanga aphantsi ayinsika nesiqalo semfundo yonke, ngakho kubalulekile ukuthi kufundiswe ngendlela kula mabanga. UNkosi (2011) yena uqakulisa ngokuthi uma kwakhiwe isisekelo esiqinile solwazi lokufunda nokubhala emabangeni aphantsi, kuba lula ukuthi umfundi ekukhuleni kwakhe nasemabangeni athe thuthu akwazi ukubala, ukubhala, nokufunda ngendlela. Eqhubeka uNkosi (2011) uthi emabangeni aphantsi kubalulekile ukufundisa ngolimi abafundi abalazi nabaluqonda kangcono, lolu limi-ke wulimi olungolomdabu kubafundi. Ngibona sengathi ulimi oluqondwa ngabafundi lubenza ukuthi babe nogqozi, nothando kanye nentshisekelo yokufunda. Bakhula futhi bekhuthazekile, benothando lokufunda nokubala ngoba, bathe beqala nje ukufunda nokubala bafunda ngolimi lwabo lomdabu.

USetati (2008) ubalula ukuthi ukusetshenziswa kwezilimi zomdabu emkhakheni wezemfundo ngenye yezindlela zokubeka izwekazi lase-Afrika eqophelweni eliphezulu, likwazi ukuqhudelana namazwekazi anothile. ULebeloane (2018) yena uthi ukufundisa ngezilimi zomdabu yisinyathelo sokuqala phakathi kwezinyathelo okumele zithathwe ukuze

kufinyelelwe emgomweni wokwakha kabusha izwekazi i-Afrika (*African Renaissance*), nasekwenzeni uhlelo lwezifundo lube ngoluhambisana nosikompilo lwase-Africa (*africanisation of the curriculum*). Ngokwabacwaningi abangoSetati (2008), noLebeloane (2018), ukusetshenziswa kwezilimi zomdabu njengezilimi zokufunda nokufundisa akusizi kuphela emkhakheni wezemfundo, kodwa kulekelela nasekuthuthukiseni izwekazi lase-Afrika, lifinyelele ezingeni lamazwekazi anothile.

Izibalo zingezinye zezifundo ezifundwa kusukela emabangeni aphantsi, kuya emabangeni angaphezudlwana. Ngamafuphi, izibalo ziqala zifundwe emabangeni aphantsi, umfundi abe eseqhubeka futhi nokuzifunda, akhele ulwazi olusha phezu kwesisekelo solwazi alufunde emabangeni aphantsi. Kusemqoka-ke ukuthi umfundi aziqonde kahle izibalo zasemabangeni aphantsi. Ukuze kube nesiqiniseko sokuthi umfundi uqonda kahle izibalo esesemabangeni aphantsi, kubalulekile ukuthi azifunde ngolimi aluncele ebeleni. Uma ezifunde ngolimi aluncele ebeleni, uthi lapho esesemabangeni athe thuthu, abe nesisekelo esiqinile nesiyiso solwazi lwezibalo. Ngaphezu kwalokho, uyakwazi futhi nokumelana nezibalo zasemabangeni alandelayo.

USpaul (2008) uma eveza ukubaluleka kokufundisa izibalo ngezilimi zomdabu, uthi ukufundisa izibalo ngolimi olungolomdabu kumfundi akumsizi kuphela ekuqondeni izibalo, kodwa kuphinde kumlekelele ekutheni andise nolwazi lwakhe ngolimi lomdabu (akwazi ukulukhuluma kanye nokulubhala). Ukucacisa kabanzi okushiwo nguSpaul (2008), u-Alexander (2011) uthi uma ulimi lomdabu lusetshenziswa njengolimi lokufunda nokufundisa izibalo, akufanele neze kucatshangwe ukuthi umfundi ugcina ngokuqonda izibalo kuphela. Kufanele kuqondwe nokuthi umfundi uyakhula naselwazini lolimi lomdabu, akwazi futhi nokulusebenzisa ngendlela elindelekile.

Abacwaningi abafana noQorro (2004) kanye noMignolo (2016) bona bathi ukufundisa ngezilimi zomdabu, ikakhulu emabangeni ayisisekelo kungenye yezindlela zokuxebula usikompilo lwasentshonalanga ohlelweni lwezifundo lwaseNingizimu-Afrika (*decolonisation of the curriculum*). Abanye abacwaningi abakhuluma ngombono kaQorro (2004) kanye noMignolo (2016) ngokunabile yilaba: uDougherty noTunis (2005); uBobo, uYesuf kanye noWoldie (2017); uCostello kanye noSaville (2017). Bonke laba bacwaningi baveza ukuthi ukusetshenziswa kwezilimi zomdabu njengezilimi zokufunda nokufundisa kwenza ukuthi uhlelo lwezifundo luhambisane nendlela okuphilwa ngayo e-Afrika. Ukufunda, ikakhulu izibalo akugcini kubukeka njengohlelo olwafika nabamhlophe, olungenalo usizo olungako

kubantu abangama-Afrika. UGrage (2017) uqinisa okushiwo yilaba bacwaningi ababalwe ngenhla, kodwa yena uphinde aveze nokuthi ukufundiswa kwezibalo ngezilimi zomdabu kungenye yezindlela zokuthuthukisa ukusetshenziswa kwezilimi zomdabu lapho kufundwa noma kufundiswa (*intellectualisation of indigenous languages*). Okugqama kakhulu ngobumqoka bokufundisa izibalo ngezilimi zomdabu ukuthi kwelekelela ekwenzeni isifundo sezibalo singayamaniswa nendlela yasontshonalanga, kodwa sihambisane nosikompilo lwase-Afrika.

U-Alexander (2011:84) uthi isifundo nesifundo sinolimi lwaso, kanye namakhonsephti amqoka, asetshenziswa kuleso sifundo kuphela. UNaidu (2012) yena uthi izibalo zinolimi lwazo kuphela, oluqondene nazo futhi oluqondwa kangcono ngabafundi nothisha bezibalo. Kunzima ukuqonda ulimi lwezibalo ngoba lunamagama anezincazelo ezingafani nezincazelo zamagama ajwayelekile (Naidu, 2012). Ngibona ukuthi uma abafundi befundiswa izibalo ngolimi lomdabu, bayakhula, baze bafinyelele nasezingeni lokuqonda ulimi lwezibalo (*mathematical language*). Okwenza abafundi bakhule ekuqondeni ulimi lwezibalo ukuthi bafundiswa besuswa olimini abalwaziyo (lomdabu) basiwe olimini abangalwazi (ulimi lwezibalo). Ngakho ukufunda izibalo ngolimi lomdabu kusiza nasekuthuthukiseni ulwazi lolimi lwezibalo, njengoba kufakaza noSpaull (2008). Yingakho-ke kubalulekile ukuthi abafundi bafundiswe izibalo ngolimi olungolomdabu kubona besesemabangeni aphantsi.

Noma ucwaningo luveza ukubaluleka kokufundiswa kwezibalo ngezilimi zomdabu, kodwa iNqubomgomo yoLimi kwezeMfundo yesigaba esiyisisekelo (*i-Language in Education Policy*) yowe-1997 ithi abafundi bamabanga aphantsi abangafundiswa ngolimi lomdabu kuphela, kodwa kufanele futhi baphinde bafundiswe nolwazi lolimi lwesibili. Kodwa-ke lolo Limi lwesibili abalufundiswa besesemabangeni aphantsi balusebenzisa njengolimi lokufunda uma sebefika esiGabeni sokuMukezela (*intermediate phase*) kuphela. Uma besesemabangeni aphantsi, ulimi lwesibili luba yisifundo lona ngokuzimele, alusetshenziswa lapho kufundwa noma kufundiswa. Ukufundiswa kwabafundi ulimi lwesibili emabangeni aphantsi (okungaba isiNgisi noma olunye nje ulimi olungelona olomdabu kubafundi) kubasiza ekutheni babe nolwazi lwalolo limi, bengaqhamuki nje sebeqala ukulufunda sebesesiGabeni sokuMukezela. Uma abafundi benaso isisekelo solwazi lolimi lwesibili, abahlangabezani nengqinamba lapho sebefika emabangeni asesiGabeni sokuMukezela, ngoba kulesi sigaba yilapho beqala khona ukufunda ngolimi lwesibili. INqubomgomo yoLimi kwezeMfundo yesigaba esiyisisekelo (*Language in Education Policy*) yowe-1997 ithi isiphakamiso sokuthi kufundiswe (zonke

izifundo, kubandakanya nezibalo) ngezilimi zomdabu asisho ukuthi ulimi lwesibili lungabe lusanakwa nhlobo, kodwa alufundwe njengesifundo, luzimele. U-Alexander (2011) uthi okubalulwa yinqubomgomo i-*Language in Education Policy* yowe-1997 kungukutshala nokuthuthukisa ubulimimbili kusukela abafundi besesemabangeni aphansi, ngoba baba nolwazi lolimi lwebele kanye nololimi lwesibili (okungaba yisiNgisi noma isiBhunu).

#### **1.4 INHLOSO YOCWANINGO**

Ucwaningo nocwaningo oluqhutshwayo lusuke lwezinhloso-ngqangi nemibuzo okulindeleke ukuthi luyiphendule. Ngezansi ngiveze izinhlosongqangi nemibuzo obekuphokophelwe ukuthi iphendulwe yilolu cwaningo.

NgokweNqubomgomo yoLimi kwezeMfundo yesigaba esiyisisekelo yowe-1997 (*Language in Education Policy*), izilimi zomdabu kufanele zisetshenziswe lapho kufundwa noma kufundiswa zonke izifundo, kumbandakanya nesifundo sezibalo, emabangeni ayisiSekelo. Lo msebenzi ubuhlose ukucwaninga ukuthi abafundi asebesesigabeni sokuphuthula oqeqeshweni lwabo lokufundisa amabanga aphansi bakulungele yini ukufundisa izibalo ngezilimi zomdabu. Lolu cwaningo aluhlosile ukucwaninga ukufundiswa kwezibalo kusetshenziswa zonke izilimi zomdabu, kodwa lugxile olimini lwesiZulu kuphela. Lolu cwaningo lugxile kubafundi abaqeqeshelwa ubuthisha enyuvesi esesufundazweni saKwaZulu-Nataliesikhungweni esisesifundazweni saKwaZulu-Natali.

UWatson (2009) uveza ukuthi abafundi basemazingeni aphansi abaphumeleli kahle esifundweni sezibalo. Lo mcwaningi uthi indlela okufundiswa ngayo izibalo yiyona mbangela enkulu edala ukuthi abafundi bangenzi kahle ezibalweni. Lolu cwaningo-ke luphokophele ukuthola ukuthi ngabe indlela okufundiswa ngayo, kanye nolimi olusetshenziswa lapho kufundwa noma kufundiswa izibalo akuzona yini ezinye zezizathu nezimbangela zokuthi izibalo zingaphunyelelwa kahle kuleli.

Uhlelo lwesifundo sezibalo, ikharikhulamu, ngaphambilini belumiswe ngendlela yokuthi luvune usikompilo nendlela yokuphila yabamhlophe (Odora-Hoppers, 2001). Ngaleso sizathu, izibalo bezigcina ziphunyelelwa ngabamhlophe kakhulu. kuphela, abamnyama bebonakala njengohlanga olungenzi kahle ezibalweni (Spaull, 2016). Phakathi kwalokho ebengihlose ukuthi lolu cwaningo lube namagalelo kukhona ukuxebula uhlelo lwesifundo sezibalo esimisweni sasentshonalanga. Lolu cwaningo futhi bengihlose ukuthi luthole izithelo

ekuthuthukisweni kwendlela yokufundisa izibalo eNingizimu-Afrika, ngokuqikelela ukuthi othisha bamabanga aphansi bangabakulungele ukufundisa izibalo ngezilimi zomdabu.

UWatson (2009) uveza ukuthi ikhona imizamo eyenziwa yizikhungo zemfundo ephakeme ukucija abafundi abaqeqeshelwa ukufundisa izibalo esiGabeni esiyiSisekelo ukuthi bafundise ngezilimi zomdabu. UWatson (2009) uthi bambalwa kakhulu nokho abacwaningi abathinta ukuthi uma sekwenziwe imizamo leyo, ngabe abafundi abaqeqeshelwa ukufundisa lesi sigaba baba ngabakulungele yini ukwenza njengoba beqeqeshiwe uma sebesensimini, sebefundisa. Ngaleso sizathu ngibone kufanelekile ukwenza ucwaningo ngokulungela kwabafundi abaqeqeshelwa ukuyofundisa izibalo emabangeni aphansi, ngigxile ekutheni, emva kwemizamo yokuqeqeshwa kwabo, bakulungele yini ukufundisa izibalo ngezilimi zomdabu. Lolu cwaningo luhlose ukufezekisa lezi zinhlosongqangi ezilandelayo.

#### **1.4.1 Izinhlolongqangi zocwaningo (*research objectives*)**

Ngalolu cwaningo bengihlose ukufezekisa lezi zinhlosongqangi ezilandelayo:

- Ukucwaninga indlela abafundi abasaqeqeshelwa ukuyofundisa izibalo emabangeni ayisisekelo abakuqonda ngayo ukubaluleka kokusebenzisa ulimi lwesiZulu njengolimi lokufunda nokufundisa emabangeni ayisisekelo.
- Ukuhlola ukulungela kwabafundi abasaqeqeshwa bamabanga aphansi ukufundisa izibalo ngolimi lwesiZulu emabangeni ayisisekelo.
- Ukuqondisa ukuthi kungani abafundi abasaqeqeshwa bekulungele/bengakulungele ukuyofundisa izibalo ngolimi lwesiZulu emabangeni ayisisekelo.

Njengoba sekwendlalelwe ngezinhlosongqangi zalolu cwaningo, ukuze lezi zinhlosongqangi ezibalulwe ngenhla zifezekiseke, kube sekubunjwa umbuzo osemqoka okuhloswe ukuthi uphenduleke ngokuqhutshwa kwalolu cwaningo. Umbuzo osemqoka walolu cwaningo yilona:

**Ngabe abafundi abaqeqeshelwa ukufundisa emabangeni ayisisekelo bakulungele yini ukuyofundisa izibalo ngolimi lwesiZulu?**

Lo mbuzo osemqoka uphendulwe ngokubheka le mibuzongqangi yocwaningo elandelayo:

#### **1.4.2 Imibuzongqangi yocwaningo**

- Ngabe abafundi abaqeqeshelwa ukuyofundisa bakuqonda kanjani ukubaluleka kokufundiswa kwezibalo ngolimi lwesiZulu emabangeni ayisisekelo?
- Ngabe abafundi abasaqeqeshelwa ukuyofundisa amabanga ayisisekelo bakulungele kangakanani ukuyofundisa izibalo besebenzisa isiZulu njengolimi lokufundisa?

- Kungani laba bafundi bekulungele/bengakulungele ukufundisa izibalo besebenzisa ulimi lwesiZulu?

Le mibuzongqangi yocwaningo ebalulwe ngenhla iphendulwe ngokuthi kwenziwe inhlololwazi esakuhleleka kubahlanganyeli kulolu cwaningo. Abahlanganyeli baphinde bavakashelwe lapho benza izifundo zokuzilolongela ukufundisa (*teaching practice*), nokuyilapho kube sekubhekwa indlela abafundisa ngayo. Nokuhlaziywa kwamadokhumenti kube ngenye yezindlela zokuqoqa ulwazi. Ulwazi olutholakale lapho lube seluhlelwa ngokwezindikimba ngenhloso yokuphendula imibuzongqangi yocwaningo ebalulwe ngenhla.

### **1.5 UKUBHEKWA KOCWANINGO OLUMQOKA NGOKUPHUNYELELWA KWEZIBALO UMA ZIFUNDISWA NGEZILIMI ZOMDABU**

Ukubuyekezwa kwemibhalo yingxenywe emqoka, elekelela ekuvezeni amagebe nobuthaka ocwaningweni oseluke lwenziwa ngesihloko esicwaningwayo. Kule ngxenywe yomsebenzi ngizodingida ucwaningo olumqoka ngokuphunyelelwa kwezibalo uma zifundiswa ngezilimi zomdabu emabangeni aphantsi. Ngizobuyekeza kafushane ucwaningo olwenziwe eNingizimu-Afrika, eTanzania, eNepal, ePeru kanye naseTurkey. Angizukungena ngokugxilile ocwaningweni olwenziwe kula mazwe, kodwa ucwaningo luzobuyekezwa ngokujulile esahlukweni sesibili.

Abacwaningi baseNingizimu-Afrika abangoSpaull (2013) noVenkat (2009) bathi izinga lokuphunyelelwa kwezibalo kuleli zwe liphansi kakhulu. Ngokwalaba bacwaningi, iningi labafundi lithola amamaki angaphansi kwamaphesenti angamashumi amathathu ezibalweni. O-Elgbe (1990); uBunyi (1999); kanye no-Oprah (2003) bona baqakulisa ngokuthi isizathu sokungaphunyelelwa kwezibalo kuleli zwe ukuthi zifundiswa ngolimi olungaqondwa ngabafundi, okuwulimi lwesiNgisi. Inhlangothi *Third International Mathematics and Science Study* yowe-2011 iveza ukuthi, bancane kakhulu abafundi bamabanga aphantsi abanolwazi lokubala kuleli zwe. Lokho kudalwa ukuthi izibalo zethulwa ngolimi abafundi abangaluncelanga ebeleni.

Ezweni laseTanzania, ukufundwa nokufundiswa kwezibalo ngezilimi zomdabu kwaqala ngeminyaka ye-1950. O-Ogg (2003), noRubagumnya (2014) abacwaninga ngezinga lokuphunyelelwa kwezibalo kuleliya lizwe bathi, izinga lokuphunyelelwa kwezibalo kuleliya lizwe lingcono kakhulu njengoba kufundiswa izibalo ngezilimi zomdabu.

Izwe laseNepal linezilimi zomdabu ezingamashumi ayisishiyagalolunye nanye, kodwa ulimi iNepali lusetshenziswa njengolimi lokufunda nokufundisa kuleliya lizwe (Bista, 2009). Izinga lokuphunyelwa kwezibalo ezweni laseNepal lisezingeni eligculisayo njengoba zifundiswa ngolimi olungolomdabu kuleliya lizwe.

Ezweni lasePeru, ulimi lweSipenishi lusetshenziswa njengolimi lokufunda nokufundisa izibalo. Njengoba ulimi lweSipenishi okuwulimi olungelona olomdabu kuleliya lizwe, izibalo aziphunyelwa ngendlela egculisayo (Minedu 2015; Davilla 2016).

Ezweni laseTurkey, izibalo zifundiswa ngolimi lwesiTurkey. Njengoba izibalo zifundiswa ngolimi lomdabu kuleliya lizwe, imiphumela ezibalweni ingegculisayo (Kaplan noBaldauf, 2003; Tsui noTollefson, 2007).

Njengoba kucaca ukuthi ukuze izibalo ziphunyelwe, kufanele zifundiswe ngezilimi zomdabu nje, esigabeni esilandelayo ngizodingida ukubaluleka kokwenza ucwaningo oluthinta izibalo nolimi olusetshenziswa lapho zifundiswa.

## **1.6 UKUBALULEKA KWALOLU CWANINGO**

Ucwaningo lwenziwa ngenhloso yokuthi lube namagalelo, futhi lulekelele ngandlela thize ezihlokwani ezifuze leso esisuke sicwaningiwe. Ngezansi ngizodingida ngokubaluleka kwalolu cwanningo.

Ucwaningo oluningi olukhuluma ngolimi lokufundisa nezibalo emabangeni aphansi luveza ukubaluleka kokuthi izibalo zifundiswe ngezilimi zomdabu. Izinqubomgomo zezemfundo ezike zabalulwa ngenhla, okuyi-*Language in Education Policy* yamabanga aphansi, *Language in Education Policy of Higher Education* kanye ne-*Incremental policy* zonke ziveza ukuthi labo abangabafundi abaqeqeshelwa ukuyofundisa amabanga ayisisekelo kufanele banikezwe uqeqesho lokuthi bafundise izibalo ngolimi olungolomdabu kubafundi. Ngithemba ukuthi ulwazi oluzotholakala kulolu cwanningo luzoqinisa okushiwo yilezi zinqubomgomo.

Baningi abacwaningi abacwaninge ngokufundiswa kwezibalo ngezilimi zomdabu. Ngikholwa ukuthi okutholakele kuyokwandisa ocwaningweni oseluke lwenziwa ngalesi sihloko, kuphinde kuvale namagebe ocwaningweni. Ulwazi olutholakale kulolu cwanningo ngithemba nokuthi

luyovulela abanye abacwaningi ithuba lokucwaninga baqhubekela phambili ngokufundiswa kwezibalo ngezilimi zomdabu, kanye nasendleleni yokufundisa izibalo, iphedagoji.

### **1.7 IMINGCELE YOCWANINGO**

Lolu cwaningo lugxile esikhungweni esikhethiwe esiqeqesha abafundi abethwasela ukuyofundisa amabanga aphantsi esisesifundazweni saKwaZulu-Natali. Ngaphezu kwalokho, lolu cwaningo belugxile kubafundi abaqeqeshelwa ukufundisa emabangeni aphantsi kuphela, angifakanga bonke abafundi abaqeqeshwa kulesi sikhungo esikhethiwe, angifakanga zonke izifundazwe futhi angifakanga zonke izikhungo eziqeqesha abafundi ukuyofundisa amabanga aphantsi eziseNingizimu-Afrika. Lolu cwaningo lugcine luphelela kubafundi abakulesi sikhungo esikhethiwe futhi esifundazweni esibalulwe ngenhla kuphela. Ngiphinde ngaqikelela ukuthi labo abakhethelwe ukuthi babe ngabahlanganyeli kulolu cwaningo bathola amalungelo afanelekile ngokwenkambiso elungileyo, angeqelanga ngale kwalokho okubalulwe kwinkambiso elungileyo.

### **1.8 UKUHLELEKA KWEZAHLUKO**

**Esahlukweni sokuqala**, ngicacise ngesisusa salo msebenzi, ngaphinde ngangenisa ucwaningo olwethulwa kulo mqingo. Okokuqala engikwenze kulesi sahluko ukuveza umsuka walolu cwaningo ngokudingida ukubaluleka kokusebenzisa ulimi lomdabu njengolimi lokufundisa lapho kufundiswa izibalo emabangeni aphantsi. Okwesibili, ngikhulume ngogqozi nofuqufuqu olungiqhubile ukuthi ngenze lolu cwaningo. Ngibe sengilandelisa ngezinhloso zocwaningo kanye nemibuzo lolu cwaningo oluhlose ukuthi iphenduleke. Okwesithathu lesi sahluko esikwenzile ukuchaza ngemingcele yalolu cwaningo.

**Esahlukweni sesibili** ngidingide injulalwazi esetshenziswe njengelensi kulolu cwaningo, okuyinsizakuhlaziya kaVygotsky yowe-1978 kanye nohlaka lwemicabango olwelekelele le njulalwazi. Isahluko sesibili siphinde sabuyekeza ucwaningo oseluke lwenziwa eNingizimu-Afrika, eTanzania, eTurkey, ePeru kanye naseNepal ngokufundiswa kwezibalo ngezilimi zomdabu. Ucwaningo olwenziwe kula mazwe lucutshunguliwe, kwavezwa amagebe nobuthaka obugqamayo.

**Isahluko sesithathu** sona sikhuluma ngezindlela zokuqhuba ucwaningo ezisetshenziswe kulolu cwaningo. Kulesi sahluko ngigagule indlela yocwaningo elandelwe kulolu cwaningo, okuyindlela yobunjalo botho. Ngibheke nokuthi mina njengomcwaningi, ngabe yiliphi iso lokubuka umhlaba (ipharadayimu) ebengilisebenzisa kulolu cwaningo. Kusona lesi sahluko

ngiphinde ngabheka nezindlela ukuqoqa ulwazi, umumo wocwaningo, indawo yocwaningo, ukuqokwa kwabahlanganyeli, kanye nezindlela zokuhlaziya kokutholakele. Ngithinte nezingqinamba zocwaningo, inkambiso elungileyo kanye nokuthi ulwazi lugcinwe kanjani, futhi luzoshabalaliswa kanjani.

**Esahlukweni sesine** ngethule ngaphinde ngadingida ulwazi olutholakele. Injulalwazi kaVygotsky yowe-1978, kanye nohlaka lwemicabango kusetshenziswe ukweseka nokuhlaziya okutholakele.

**Isahluko sesihlanu** sona sibe sesifingqa okutholakele. Kusona lesi sahluko, ngiphinde ngenza izincomo, ngase ngiphetha lo msebenzi.

## **1.9 ISIPHETHO**

Kulesi sahluko ngicacise ngesisusa salo msebenzi, ngaphinde ngangenisa lolu cwaningo. Ngibheke ukubaluleka kokusebenzisa ulimi olungolomdabu kubafundi njengolimi lokufundisa lapho kufundiswa izibalo emabangeni aphansi. Ngiphinde ngakhuluma nangogqozi nofuqufuqu olungiqhubile ukuthi ngenze lolu cwaningo, izinhlosongqangi zocwaningo kanye nemibuzongqangi lolu cwaningo oluhlose ukuthi iphenduleke. Ngiphinde ngagagula imingcele yalolu cwaningo. Ngasekugcineni ngiveze ukuthi izahluko ezikulo mqingo zihleleke kanjani.

# Isahluko 2

---

## UHLAKA LWENJULALWAZI, UHLAKA LWEMICABANGO KANYE NOKUBUYEKEZWA KWEMIBHALO

### 2.1 ISINGENISO

Kulesi sahluko ngidingide ngenjulalwazi esetshenziswe njengelensi kulolu cwaningo, okuyinjulalwazi kaVygotsky yowe-1978. Uhlaka lwemicabango olwelekelele le njulalwazi nalo luchaziwe kulesi sahluko. Ngihlole nocwaningo oseluke lwenziwa eNingizimu-Afrika, kwamanye amazwe ase-Afrika kanye nasemazweni apheya ngokufundiswa kwezibalo ngezilimi zomdabu. Isahluko sihlaziye nocwaningo oluveza ukuphunyelwa kwezibalo uma zifundiswa ngezilimi zomdabu. Angigcinanga ocwaningweni oluthinta ukufundiswa kwezibalo ngezilimi zomdabu kuphela, ngiphinde ngaphenya nangocwaningo oluthinta uqeqesho lothisha bezibalo basemabangeni ayisisekelo. Ngibuyekeze ucwaningo olwenziwe emazweni asezingxenyeni ezikhethiwe zebalazwe lomhlaba wonke. Ezwenikazi lase-Afrika ngihlaziye ucwaningo olwenziwe eNingizimu-Afrika kanye naseTanzania. Emazweni angaphandle kwezwekazi lase-Afrika ngibuyekeze ucwaningo olwenziwe ezweni laseNepal, Peru, kanye naseTurkey. Ngikhethe ukugxila ocwaningweni olwenziwe kula mazwe ngoba ngithole ukuthi anohlelo lokufundisa izibalo ngezilimi zomdabu.

### 2.2 UHLAKA LWENJULALWAZI NOHLAKA LWEMICABANGO

#### 2.2.1 Uhlaka lwenjulalwazi

Umsebenzi wocwaningo usuke ungaphelele uma ungasekelwe ngohlaka lwenjulalwazi oluthile (Mhlongo 2017:57). Eqhubeka uMhlongo (2017), uthi uhlaka lwenjulalwazi lusebenza njengomgogodla wocwaningo ngoba yilona oluyithuluzi lokuhlaziya nokucubungula okutholakele. NgokukaNkosi (2011) uhlaka lwenjulalwazi luchaza izinto okuyizona ezizohlolwa wocwaningo luphinde futhi luveze nokuthi kuyohlaziywa kanjani lokho okutholwe wocwaningo. UBalfour (2016) yena uthi injulalwazi inomsebenzi omkhulu wokucacisa nokweseka okutholakele ocwaningweni. Abanye ongoti bathi uhlaka lwenjulalwazi lusebenza njengelensi yokucubungula kabanzi ngesimo esidingidwa

wucwaningo. Ngamanye amazwi, injulalwazi isetshenziswa ukubukela eduzane nokusondela isenzeko noma isimo esithile esicwaningwayo, ukuze kuvele ngokugqamile izingxenye ebezicashile (Balfour, 2016).

Kulolu cwaningo ngisebenzise injulalwazi kaVygotsky yowe-1978 eyaziwa nge-*Socio-Cultural Theory of Learning Construction*. Le njulalwazi yabunjwa ngusonjulalwazi nomhlaziyi-mcabango ongumRashiya, uLev Vygotsky (1896-1934). Kuletha ukudideka nokho ukuthi le njulalwazi ibizwa ngokuthi iyinjulalwazi yowe-1978, ekubeni ngalo nyaka wayengasekho emhlabeni umsunguli wayo. ULev Vygotsky wabhala incwadi ngale njulalwazi, kodwa waze wadlula emhlabeni engakashicilelwa. Kuthe ngonyaka we-1978, usonjulalwazi onguJean Piaget, (1896-1980) wacubungula le njulalwazi, wafundisisa ngayo, wahlola nokuthi ingathuthukiswa kanjani ukuze isebenze kwezemfundo (*Educational implications*). Emva kokuthi le njulalwazi isithuthukisiwe, kwafakwa namagalelo ayo kwezemfundo, yabe isishicilelwa, yabizwa ngenjulalwazi kaVygotsky yowe-1978.

UVygotsky (1978) kule njulalwazi uveza ukuthi uma umntwana ekhula, ikakhulu ngokomqondo, ukhula ngokuba sesigabeni esiphakathi kwalokho akwaziyo nalokhu angakafinyeleli ekukwazini (*Zone of Proximal Development*). Abacwaningi abangoMarshall (1987); uLantolf (2000); kanye noLin benoMackay (2004) bathi isigaba sokuthuthuka kwengqondo yomntwana esiphakathi kwalokho akwaziyo nalokhu angakafinyeleli ekukwazini yisigaba lapho, kunomehluko negebe phakathi kwalokho umntwana akwaziyo nangakwazi. Leli gebe ligqama ngendlela umntwana aveza ngayo lokho akwazi ukuzenzela khona nangakwazi ukuzenzela khona.

Ecacisa ngesigaba sokuthuthuka kwengqondo yomntwana esiphakathi kwalokho akwaziyo nalokhu angakafinyeleli ekukwazini, uParrilla (1995) uthi siyisigaba lapho umntwana edinga khona usizo nokwelekelelwa ngabazali, ngamalungu omphakathi, noma ngontanga bakhe (kodwa abakhanyiselekile ngolwazi umntwana asuke engakhanyiseleki ngalo). Kanjalo futhi no-Ohta (2000) uyakugcizelela ukuthi ngokwenjulalwazi kaVygotsky yowe-1978, ukuze umntwana asuke esigabeni sokungazi aye esigabeni lapho eqonda khona, kumele:

1. Alekelelwe ngontanga abakhanyiselekile ngalokho angakwazi yena, aphinde futhi,
2. Athole ukwelekelelwa nokucathuliswa ngabazali namalungu omphakathi anolwazi oludephile nakhanyiselekile.
3. Uma enikezelwa ngolwazi nokwelekelelwa, kufanele kusetshenziswe ingxoxo nolimi njengomgudu wokwedlulisa ulwazi, ukuze umntwana asuke kulokho angakwazi,

afinyelele kulokho aphokophele ukukwazi. Lokhu kuchaza ukuthi ulimi luyisikhali esibalulekile ekukhuliseni ulwazi lomntwana. Ngaphandle kokuthi kube nengxoxo phakathi komntwana nalowo okhanyiselekile omtotobisayo, ngeke kwenzeke ukuthi asuke kulokhu angakwazi afinyelele kulokho aphokophele ukukwazi.

Njengoba ngike ngasho ngenhla, ngokuhamba kwesikhathi, usonjulalwazi onguJean Piaget (1896-1980) ngowe-1978 wacwaningisisa le njulalwazi, wahlola ukuthi ingasetshenziswa kanjani kwezemfundo. UJean Piaget, (1896-1980) wabe eseqhamuka nomcabango wokungenziwa ukwakha ulwazi oluyisikhafula sokuthuthukisa umntwana (*scaffolding*). Ngokwalo sonjulalwazi, ulimi luyisikhali nomgudu obalulekile ekudluliseni ulwazi oluyisikhafula sokuthuthukisa umfundi. Lokhu kuchaza ukuthi ulimi olusetshenziswa lapho kufundwa noma kufundiswa yilona olwenza umfundi aqonde okufundwayo, ngakho-ke:

- Uhlelo lwezifundo kufanele lumiswe ngendlela yokuthi luqikelele ukuthi kuba nokuxhumana ngengxoxo phakathi komfundi nothisha, kanye nomfundi nomunye umfundi. Lokho kuxhumana ngengxoxo kufanele kube ngolimi umfundi aluqondayo. Nothisha naye kufanele abe nolwazi lolimi alusebenzisayo lapho efundisa ukuze akwazi ukuxhumana nabafundi bakhe.
- Ulimi olusetshenziswayo ukuhlola nalo makube wulimi oluqondwa kahle ngumfundi, akwazi ukunikeza nokubhala kahle izimpendulo ezilindelekile.
- Naye uthisha, unesibophezelo sokuthi ngaso sonke isikhathi azihluphe, afune ulwazi kwabangaphezu kwakhe. Lokho kufanele akwenze ukuze uma esethula isifundo, asethule ngendlela umfundi azoyizwa.

### **2.2.1.1 Ukufaneleka kwale njulalwazi nalolu cwaningo**

NgokukaLantolf kanye noThorne (2007), injulalwazi kaVygotsky (1978) njengoba ivezwa ngu-Lantolf kanye noThorne (2007) igcizelela ukuthi umfundi ufunda ngokuthi azibandakanye kwingxoxo (*interaction*) futhi abukele indlela abaseduzane naye (okungaba abazali, amalunga omndeni wakhe, umphakathi kanye nothisha bakhe) abenza ngayo. Ngamanye amagama ukufunda nokuqonda komfundi kuncike ekutheni axoxe futhi abukele okwenziwa ngothisha bakhe (Bell, 2002; Bantwini, 2009).

Bechaza ngokubaluleka kwenjulalwazi kaVygotsky yowe-1978, oLeach noScott (2000:44) bathi: *Interaction and dialogue (in the constructivist approach) is a tool for knowledge construction if such interaction is in a language well understood by those that engage in*

*interaction*. Kafushane, laba bacwaningi bathi ingxoxo iyithuluzi elisizayo neliholela ekuqondeni, kuphela uma ingxoxo leyo iqondwa yilabo abazibandakanya kuyona (okungabafundi kanye nothisha). NgokukaLeach noScott (2000), ulimi luyithuluzi elibaluleke kakhulu lapho kufundwa noma kufundiswa noma yisiphi isifundo. UPinnock (2009) echaza injulalwazi i-*Socio-Cultural Theory of Learning Construction* neqhaza layo kwezemfundo, uveza ukuthi uma abafundi sebezibandakanye engxoxweni nothisha ngolimi abaluzwayo nabaluqondayo, abafundi bayakhula olwazini lwesifundo, bagcine sebengabazimele futhi sebenokuzethemba nogqozi ngendlela abaqonda ngayo isifundo lesi. Kodwa ukuze umfundi afinyelele esigabeni sokuthi akwazi ukuzimela, kubalulekile ukuthi ukuxhumana (*interaction*) kanye nengxoxo kube ngolimi aluqondayo.

Le njulalwazi ifanelekile kulolu cwaningo ngoba ucwaningo luveza ukuthi, uma isifundo sezibalo sifundiswa ngolimi umfundi aluqonda kangcono (okuwulimi aluncele ebeleni) uyaye asiqonde kangcono naso isifundo sezibalo (Spaull noVenkat 2008b). OChaille noBrian (1997) bona baveza ukubaluleka kokuthi abafundi baqonde kahle izibalo ukuze babe yizakhamuzi ezivulelekile nezinolwazi kwezobuchwepheshe besimanje. Beqhubeka OChaille noBrian (1997) bathi, ukuze kuqinisekise ukuthi abafundi baba ngabazi kangcono izibalo, kufanele bafundiswe izibalo ngolimi abaluqondayo. Laba bacwaningi bathi isizathu sokuthi kuqikelelwe ukuthi abafundi bafundiswa izibalo ngolimi abaluqondayo ukuthi, ulimi oluqondwa ngabafundi luyaye lusebenze njengesisekelo okwakhelwa phezu kwaso ulwazi olusha. OChaille noBrian (1997) lokho bakubeka kanje:

It is imperative that learners acquire mathematical literacy and understanding of mathematics to enable them to function effectively in the world of science. Learner home language facilitates effective and sound acquisition of scientific and mathematical literacy. Moreover, learner's home language is the resource upon which new knowledge is built. In simple terms, learner home language serves as the preliminary knowledge for to anticipated learning process.

(Chaille noBrian, 1997, pp.48)

Kafushane, laba bacwaningi bathi kusemqoka ukuthi abafundi bazuze ulwazi lwezibalo futhi babe nokuqonda ngezibalo ukuze bakwazi ukuba yingxenywe futhi babambe iqhaza kwezesayensi. Nokho, ngaphambi kokuthi abafundi bazuze ulwazi lwezibalo, kufanele baqale bazuze ulwazi loLimi laseKhaya ngoba ulwazi loLimi lwasekhaya luyisisekelo sokufunda konke. Injulalwazi i-*Socio-Cultural Theory of Learning Construction* ngiyibone ihambisana nalolu cwaningo ngoba igcizelela ukuthi ingxoxo nokufundiswa kwabafundi kube ngolimi

abaluqondayo ukuze bezoqonda kangcono futhi babe nolwazi oluyisisekelo ngesifundo abasifundiswayo, (okungaba ulwazi lwezibalo, noma ulwazi lwasiphi isifundo) kusukela besesemabangeni aphansi. UNomlomo (2014) ongungoti wokufundisa emabangeni aphansi yena uthi ukufundiswa kwezibalo kanye nesayensi ngoLimi lwaseKhaya kubafundi kwenza ukuthi isifundo sezibalo sibe yisifundo esiqondwa kangcono kula mabanga. Eqhubeka uNomlomo (2014) uthi uma abafundi bezuze kahle ulwazi lwezibalo oluyisisekelo, kuba lula kubona (abafundi) ukumelana nolwazi olukhulayo lwezibalo emabangeni alandelayo. UNomlomo (2014) lokho ukubeka kanje:

Home language instruction implicated in the Vygotskian Theory facilitates learners' meaningful knowledge construction from a very tender age. If mathematical knowledge is well constructed from the foundational phase, it becomes easier for learners to build new knowledge upon the existing one on subsequent grades.

(Nomlomo, 2014, pp.22)

Kafushane, uNomlomo (2014) uthi ukufundisa ngoLimi lwaseKhaya, okuphakanyiswa yinjulalwazi kaVygotsky kukhuthaza ukuqonda kubafundi, kusukela besebancane. Eqhubeka uNomlomo (2014) uthi uma ulwazi lwezibalo lufundiswe kahle esiGabeni esiyisiSekelo, kuba lula ukuthi abafundi bazakhele ulwazi olusha, lwamabanga alandelayo, belwakhela phezu kwesisekelo solwazo lwamabanga aphansi.

Ngakolunye uhlangothi u-Alexander (2000) yena uthi injulalwazi i-*Socio-Cultural Learning Theory* iveza ukubaluleka kokuthi uthisha noma ofundisayo abe ngoqonda kahle ulimi (*well-interacted*) futhi abe nolwazi oluseqophelweni lwesifundo asifundisayo ukuze aphumelele ukwedlulisela lolo lwazi kubafundi. Le njulalwazi, ngokusho kuka-Alexander (2000) igcizelela ukuthi ukufunda kufanele kuqale kuthisha kuqala. Uthisha-ke ufunda ngokuzibandakanya ekutholeni ulwazi kulabo abangaphezulu kwakhe, abanolwazi oluthe xaxa endleleni yokufundisa kanye nasolimini lokufundisa isifundo lesi. Labo abanolwazi oluthe xaxa kunolwakhe bayamkhanyisela, bameluleke baphinde futhi bamfundise ngendlela efanelekile yokufundisa isifundo sakhe, nangolimi okufanele isifundo lesi sifundiswe ngalo. Uma-ke esekhanyiselekile ngolimi okufanele lusetshenziswe uma kufundiswa isifundo lesi nangendlela yokufundisa lesi sifundo, ulwazi lolo akhanyiseleke kulona usengalwedlulisela kubafundi. Ngaleyo ndlela abafundi baqonda kangcono ngoba basuke befundiswa nguthisha kwayena okhanyiselekile ngesifundo asifundisayo.

Ukukhanyisa kabanzi kulokhu okushiwo ngu-Alexander (2000), ngibona sengathi incazelo kaMufanechiya (2011) iyanemba lapho ethi injulalwazi i-*Socio-Cultural Learning Theory* ingavezwa ngomugqa onemicibisholo macala onke. Ngaphakathi kwalo mugqa kukhona

uthisha. Ngenhla kukathisha kukhona umcibisholo okhomba phansi, osuka kwabanolwazi oluthe xaxa ngesifundo. Lokhu kuchaza ukuthi naye uthisha uncela ulwazi kwabanolwazi oluthe xaxa ngesifundo (*initiators*). Ngenhla kwabanolwazi oluthe xaxa ngesifundo, kukhona umcibisholo okhombe phansi, osuka kwabanolwazi olubanzi ngesifundo. Lo mcibisholo uchaza ukuthi abanolwazi oluthe xaxa ngesifundo nabo bancela ulwazi kulabo abanolwazi olubanzi ngesifundo. Kulo mdwebo, umfundi usezansi ekugcineni komcibisholo okhombe phansi. Lokhu kuchaza ukuthi lonke ulwazi kusuke kuhloswe ukuthi lwedluliselwe kumfundi. Enaba ngalo mdwebo uMufanechiya (2011) uthi usiko lokufunda okusha lungoluqhubekayo, futhi alunasiqalo, ngoba abangenhla bafunda kwabangaphambi kwabo njalo njalo. Kodwa umuntu ogcina ezuzile kulokhu ngumfundi. Lo mugqa oshiwo nguMufanechiya (2011) umi kanje:

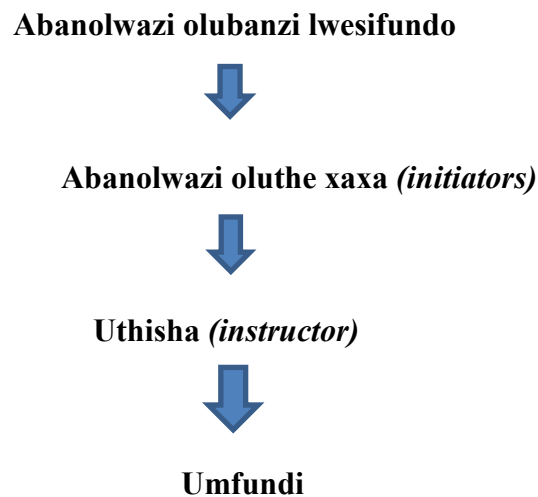


Figure 1: Umdwebu oyinkomba yamagalelo enjulalwazi i-*Socio-Cultural Learning Theory* kwezemfundo (Mufanechiya, 2011, p. 199)

Ngokwale njulalwazi nangokwalo mdwebo ongenhla, ulimi lokufundisa nolwazi lwesifundo (*content*) kufanele kuqale kuqondwe kangcono yilowo ozokufundisa, ngaphambi kokuba kuqondwe ngabafundi. UVygotsky (1978) ecashunwa ngu- Adler (2009) ubeka kanje: *The language and concept (to be taught) is to be at the best interest of the initiator, before it is soundly received by learners.* Lokhu kuchaza ukuthi ulwazi kanye nolimi kufanele kuqale kuqondakale kuthisha kuqala, uma nothisha ekuqonda, nabafundi baba nokukuqonda. Ngamanye amazwi, uthisha kufanele aqale afunde kwabanolwazi olunzulu kunolwakhe ngaphambi kokuba akwazi ukwedlulisa ulwazi ngendlela kubafundi.

U-Adler (2009) ongungoti emkhakheni wezokufundiswa kwezibalo uthi ulimi lungasho izibalo (njengoba nazo ziwulimi ngokwazo ngoba zinamagama ancazelo yazo ayifani neyamagama

ajwayelekile) kanye nolimi olusetshenziswayo ukufundisa izibalo. Eqhubeka u-Adler (2009) uthi njengoba izibalo nazo ziwulimi ngokwazo nje, kuba wumqansa kubafundi ukuzifunda ngolimi abangaluqondi kwalona. Ngamafuphi, umfundi uyaye alindeleke ukuthi afunde ulimi lwezibalo aphinde futhi azame ukuqonda nolimi izibalo ezifundiswa ngalo (*Language of Instruction*). Lokho-ke kuba umqansa kumfundi ngoba ngokusho kukaVenkat (2009) izibalo ziwulimi ngokwazo, ngoba zinamasimboli adinga ukufundwa, aqondisiswe emabangeni aphantsi. Ulwazi nokuqondwa kwezibalo kungaqinisekiswa ngokuba kufundiswe abafundi ngolimi abaluqondayo. Inselelo yokufundisa izibalo ngolimi oluqondwa kangcono ngabafundi iphonselwa othisha bamabanga aphantsi ngoba ukufundiswa ngolimi abafundi abaluqonda kangcono kuyabalekelela ukuba basheshe balubambe ulimi lwezibalo kanye namasimboli nezinombolo ezisetshenziswa esifundweni sezibalo (Spaull, 2016).

NgokwesiTatimende soHlelo lweziFundo sikaZwelonke sesifundo sezibalo zamabanga aphantsi (National Curriculum Statement, 2008), amakhono okulindeleke ukuba azuzwe ngabafundi abandakanya lawa: a). Ikhono lokuqonda ulimi njengalokhu lusetshenziswa ezibalweni. b). Ikhono lokwazi ukuxazulula izinkinga. c). Ikhono lokusebenzisa izibalo njengengxenye yempilo yemihla ngemihla. d). Ikhono lokuthuthukisa ulimi lwezibalo. e). Ikhono lokulalela, lokuxhumana nelokucabanga okuphusile. f). Ikhono lokusebenzisa ulwazi lwezibalo empilweni yemihla ngemihla. g). Ikhono lokuxazulula izinkinga ezibalweni.

Mina njengothisha wolimi nezibalo ngibona ukuthi uma uthisha enolwazi lokusebenzisa ulimi lwezibalo, uba nentshisekelo yokufundisa nokuqinisekisa ukuthi abafundi bayawazuza la makhono njengalokhu ephakanyiswa yisiTatimende soHlelo lweziFundo sikaZwelonke. Njengoba nenhlangano ebhekelele ukuphunyelelwa kwezibalo i-*Trends in Mathematics and Science Study (TIMSS)* yowe-2003 ikuveza ukubaluleka kokuba isifundo sezibalo sibe ngesiqondwayo nesithokozelwa ngabafundi basemabangeni aphantsi, ngibona ukuthi ukuqondwa nokuthakaselwa kwesifundo sezibalo kulele emahlombe othisha balesi sifundo. i-*TIMSS* yowe-2003 iqhubeka ithi:

Our statistics show that the worst performing learners in mathematics were black learners merely because they were taught in their second language. Better mathematical and science acquisition is to be ensured at the foundation phase wherein learners are taught in their mother tongue. That will help them grow and be able to have a sound and cemented epistemological understanding of Mathematics. That challenge is bestowed upon educators of the foundation phase.

(Trends In Mathematics and Science Study, 2003a, p.72)

Lesi sicaphuno esingenhla sichaza ukuthi, ngokwezibalo ezikhishwe yile nhlango, abafundi bebala elimnyama abasiphumeleli kahle isifundo sezibalo ngoba bafundiswa ngolimi okungelona uLimi lwabo lwaseKhaya. Lesi sicaphuno siqhubeka sithi kufanele kuqinisekise ukuthi isifundo sezibalo siqondwa kahle emabangeni ayisisekelo, ngoba kula mabanga yilapho abafundi befundiswa ngoLimi waseKhaya. Ukufundiswa kwezibalo ngoLimi lwaseKhaya kubafundi kusiza ngokuthi baziqonde kahle izibalo. Inselelo nokho iphonselwa othisha bala mabanga. Yibona okufanele baqinisekise ukuthi bafundisa izibalo ngolimi oluqondwa ngabafundi

UMalimela (2013) yena uthi injulalwazi kaVygotsky (1978) ingavuselela intshisekelo yokuzuzisa ulwazi kothisha ngoba le njulalwazi ivulela uthisha ithuba lokufunda nokuqondisa lokho azokufundisa. Ulwazi ngesifundo uthisha uluthola ngokuxhumana nalabo asebenkantsha ubomvu ngaleso sifundo. Labo asebenkantsha ubomvu bayamcija, bamfundise nangendlela efanelekile yokufundisa isifundo lesi. Baphinde futhi bamqeqeshe ngolimi olufanelekile lokufundisa. Ngaphezu kokuthi uthisha acijwe yilabo abanolwazi oluthe thuthu kunolwakhe, uphinde futhi aqeqesheke ngokusebenzisa indlela yokudlulisa ulwazi efanelekile (*interaction*) kanye nefanayo naleyo eqondwa kangcono ngabafundi (*common interaction*). Uma kusetshenziswe indlela efanelekile yokwedlulisa ulwazi abafundi bayelekeleleka (ikakhulu esigabeni samabanga aphantsi) ukuthi baqonde isifundo lesi, futhi bakwazi ukuba ngabazicabangela ngokuzimele ngesifundo lesi njengoba ebeka uGray (2013) lapho ethi:

Vygotskian theory is imperative in enlightening teachers to soundly interact with learners so as to shape their (learners) ability to be independent and understand the subject concerned independently and with confidence.

(Gray, 2013b, pp. 14)

Lesi sicaphuno esingenhla sichaza ukuthi, injulalwazi kaVygotsky isemqoka futhi idlala indima enkulu ekukhanyiseleni othisha ngendlela yokuxhumana nabafundi ukuze babe nenkuthalo yokuqondisa izibalo, noma sebengabodwana.

Kulolu cwaningo, abaqeqeshi babafundi abaqeqeshelwa ukuyofundisa emabangeni ayisisekelo ngibabuke njengabantu abanolwazi oluthe xaxa kwezemfundo, abenza umsebenzi wokukhanyisela labo thisha abasaqeqeshwa (noma abafundi abasaqeqeshwa) ngendlela eyiyona yokufundisa. Kanjalo futhi bangaba ababonisi bezindlela eziyizo zokuxoxisana nabafundi ngokusebenzisa ulimi olufanele lokufundisa. Ngokwenjulalwazi kaVygotsky yowe-1978, othisha, ikakhulu bamabanga aphantsi, kufanele babe ngabacijwe ekwazini ukuxoxisana

nabafundi ngolimi abalufundayo futhi abalwejwayele. Ngaphezu kwalokho, le njulalwazi igcizelela ukubaluleka kokufundisa nokusebenzisa ulimi lokufundisa nendlela yokufundisa efanelekile kothisha abaqeqeshelwa ukuyofundisa. Ngaleyo ndlela ngibone ilulungele lolu cwaningo ngoba ngibheke ukuthi ngabe othisha abasaqeqeshelwa ukufundisa emabangeni aphansi bakulungele yini ukufundisa izibalo ngezilimi zomdabu.

Okunye okugqamayo ngale njulalwazi ukuthi iveza ubudlelwano phakathi kolimi lokufundisa namasu okufundisa. NoSkuttnabb-Kangas (2009) uthi umcwaningi ohlola ulimi lokufundisa kufanele aqikelele ukuthi ubheka namasu okufundisa, ngoba kokubili kunobuhlobo futhi kuvame ukuhambisana. Nakuba kulolu cwaningo bengihlola ukuthi abafundi abaqeqeshelwa ukuyofundisa izibalo emabangeni aphansi bakulungele yini ukufundisa izibalo ngolimi lwesiZulu, ngiphinde ngahlola namasu abawasebenzisayo ukufundisa izibalo ngolimi lwesiZulu.

### **2.2.2 Uhlaka lwemicabango (*Conceptual framework*)**

Bechaza uhlaka lwemicabango, oVithal noJansen (2004) bathi:

While a theory is a perspective or events and always exist in the context of competing or rival theories, a conceptual framework is a “less well-developed explanation for concepts or events in which key concepts or principles are linked. A conceptual framework assists in making the theoretical framework applicable in the study.

(Vithan noJansen, 2004, p. 19)

Ngokwalesi sicaphuno esingenhla, uhlaka lwemicabango lungamakhonsephti kodwa angaphansana kwenjulalwazi ngezinga lokuthuthuka. Ngamanye amazwi, uhlaka lwemicabango wuhlaka lwamakhonsephti, nawo asebenza ukuphasa nokweseka ucwaningo. Umehluko lawo makhonsephti asuke engathuthukile ngezinga injulalwazi ethuthuke ngayo. Ngaleyo ndlela-ke, ayaye akhonze ngaphansi kwenjulalwazi ethize. ODe Vos nabanye (2005:29) bona bachaza umcabango (ikhonsephti) ngokuthi ukusetshenziswa kwegama noma kwamagama angeqile kwamabili ukuchaza isimo noma umqondo othile. Ngibona ukuthi umcabango uyaye usetshenziselwe ukuletha incazelo edephile nejulile ngesihloko esicwaningwayo. Uma-ke sekunikezwe incazelo edephile ngesihloko esicwaningwayo, umcwaningi uyaye angabi navalo lokusebenzisa umcabango lowo ocwaningweni ngoba incazelo yalowo mcabango isuke inikeziwe ohlakeni lwemicabango. Kulesi sigaba ngigxile ekubhekeni uhlaka lwemicabango, okungamakhonsephti asebenze ukweseka lolu cwaningo.

Amakhonsepthe azochazwa yilawa: iphedagoji yezibalo, ulimi lokufunda nokufundisa, kanye nolwazi lokubala (inyumerasi).

### 2.2.2.1 Indlela yokufundisa izibalo (iphedagoji)

UDa Costa (2000:13) uchaza iphedagoji njengendlela nobuciko bokufundisa obusetshenziswa nguthisha ukwelekelela abafundi ukuthi baqonde kangcono isifundo leso uthisha asifundisayo. Eqhubeka uDa Costa (2000) uthi le ndlela yokufundisa uthisha ufundiswa yona esaqeqeshelwa ukufundisa. UDa Costa (2000) uqhubeka ethi iphedagoji iyahluka ngokwesifundo nesifundo, ngoba isifundo ngasinye sinamagama asetshenziswa kusona kuphela, kanye nendlela esifundiswa ngayo engafani nendlela esinye isifundo esingafundiswa ngayo. Lokho kuchaza ukuthi iphedagoji yezibalo ayifani neyesinye isifundo. USkutnabb-Kangas (2008) uthi:

The pedagogy of Mathematics in acceptable terms implies the approach at which Mathematical content is delivered. Equally, pedagogy of mathematics also refers to the art of effectively transmitting mathematical content knowledge. It is pivotal to acquire mathematics inversely from the way other subjects are acquired because mathematics is different from other subjects as it mostly entail of numbers as well as rules and working with numbers parallel to daily life experiences. Therefore, the pedagogy of mathematics is completely diverse from any other pedagogy.

(Skutnabb-kangas, 2008, pp. 38)

Okushiwo nguSkutnabb-Kangas (2008) kuchaza ukuthi, indlela yokufundisa zibalo ingamasu emukelekile okwedlulisa ulwazi lwezibalo. Ngokwalesi sicaphuno, kusemqoka ukuqonda izibalo ngendlela ehlukile endleleni ezinye izifundo eziqondwa ngayo, ngoba izibalo zona zisebenza ngezinombolo ukuxazulula izinkinga zempilo yemihla ngemihla. Ngakho-ke indlela yokufundisa izibalo yehluka kakhulu endleleni ezinye izifundo ezifundiswa ngayo. Njengoba iphedagoji yezibalo yehlukile kwiphedagoji yezinye izifundo nje, lokhu kuchaza ukuthi ukufundisa izibalo kudinga ukwenziwa ngendlela efanelekile nezoqondwa ngabafundi kangcono. Ngokuchaza kukaSkutnabb-Kangas (2008), ukufundiswa kwezibalo okuyimpumelelo kudinga uthisha abe nolwazi ngesifundo sezibalo (*mathematical content knowledge*) kanye nolwazi lolimi olusetshenziswa esifundweni sezibalo (*mathematical language knowledge*). U-Oke (1999) uveza ukuthi ulwazi lwezibalo lufundeka kalula uma olwedlulisayo eqeqesheke kahle ngokuthi kufanele alwedlulise kanjani kubafundi. Eqhubeka u-Oke uthi ukuqeqesheka ngokwedlulisa ulwazi lwezibalo kusho ukuthi uthisha unolwazi oluseqophelweni eliphezulu ngendlela yokufundisa izibalo (*mathematical pedagogical knowledge*).

Okuphawulekayo ngendlela yokufundisa izibalo, iphedagoji, ngukuthi kufanele kuqinisekiswa ukuthi izibalo zedluliselwa kubafundi ngolimi abaluyonda kangcono ukuze nazo izibalo beziziqonda kangcono (Morgan, Craig, Schuette, and Wagner 2014). Laba bacwaningi benza umzekeliso ngokufundiswa kwezibalo ngolimi lwe*Sipenishi*. Bathi indlela ephusile nefanelekile yokufundisa izibalo ukuze zizoqondwa ngabafundi abakhuluma ulimi lwe*Sipenishi* ukuthi izibalo zifundiswe ngolimi lwe*Sipenishi*. Noma laba bacwaningi benza umzekeliso ngolimi lwe*Sipenishi*, kodwa uNomlomo (2014) ongungoti wezokufundiswa kwamabanga aphansi kusetshenziswa uLimi lwabafundi lwaseKhaya, ekhuluma ngokubaluleka kokufundisa ngezilimi zomdabu uthi ukufundisa izibalo ngolimi oluqondwa kangcono ngabafundi, ikakhulu esimweni lapho iningi labafundi likhuluma ulimi olungolomdabu e-Afrika, yiyona ndlela efanelekile nephusile yokwedlulisela ulwazi lwezibalo kubafundi. UNomlomo (2014) lokho ukubeka kanje:

An educator with a sound pedagogical knowledge is the one who employs an African language as a medium to transmit mathematical knowledge to his or her learners, most explicitly if the classroom context is mostly dominated by African language speaking learners. Such educator is professed as the one with a sound and relevant pedagogical content knowledge of mathematics.

(Nomlomo, 2014, p.27)

Okushiwo nguNomlomo (2014) kulesi sicaphuno esingenhla kuchaza uthisha onobuciko ngendlela yokufundisa yilowo osebenzisa izilimi zomdabu lapho edlulisa ulwazi lwezibalo. Kodwa angasebenzisa izilimi zomdabu uma efundisa abafundi abakhuluma lezo zilimi. Ngakho-ke kubalulekile ukuthi uma uthisha efundisa abafundi abakhuluma izilimi zomdabu, aqikelele ukuthi indlela yokufundisa izibalo ayisebenzisa ukudlulisa ulwazi ibandakanya nolimi lomdabu.

Indlela yokufundisa izibalo iyinhlanganisela yokuqondwa kahle kwezibalo kanye nolimi (izibalo) ezifundiswa ngalo. Uma ulimi izibalo ezifundiswa ngalo luqondwa kangcono ngabafundi, lokho kuyaye kwenze abafundi bakwazi ukubona ukuhlobana kwezibalo nempilo yabo yemihla ngemihla (McCroskey, 2002). UDe Villiers (2007) uphawula ukuthi abafundi abaziqondi kahle izibalo futhi abakwazi ukuyamanisa ulwazi lwezibalo nempilo yabo yemihla ngemihla ngoba kusenegebe nobuthaka ekuqeqeshweni kothisha bezibalo ezikhungweni zemfundo ephakeme. UDjite (2008) yena uthi:

Negative language attitudes, mostly inherited from colonial legacy in Africa, contribute significantly to the marginalisation of indigenous African languages in the higher education institutions. This implicates greatly on the adverse pedagogical knowledge in a sense that sound pedagogical knowledge is often measured by the teachers' fluency

in English or Afrikaans during the process of content delivery. It is often neglected that pedagogy is more about having learners to understand the content, as opposed to the teacher fluency in English.

(Djite, 2008, p. 64)

UDjite (2008) ngamafuphi uthi ukubukelwa phansi kwezilimi zomdabu okudalwa ingqondo yobukoloni yikho kanye okunomthelela nokwenza izilimi zomdabu zibandlululwe ezikhungweni zemfundo ephakeme. Ngokwengqondo yobukoloni, uthisha ofundisa akhulume isiNgisi noma isiBhunu ngendlela egelezayo uvame ukuthathwa njengothisha onolwazi ngesifundo asifundisayo. Eqinisweni, ukuba nolwazi lokufundisa kuchaza kubonakala ngokuthi abafundi obafundisayo baqonde isifundo leso. Ngokubona kwami, abafundi (uma kukhulunywa ngendlela yokufundisa) yibona abasemqoka kakhulu. Kufanele kuqinisekiswa ukuthi bayaqonda. Uma abafundi bengakuqondi okufundiswayo, kungenzeka ukuthi ulimi abafundiswa ngalo kwalona abaluyiqondi. Ngakho-ke kubaluleke kakhulu ukuqinisekisa ukuthi uma kukhulunywa ngendlela yokufundisa iphedagoji, nolimi lokufundisa nalo lungashiywa ngaphandle. Njengoba ngike ngacaphuna uNomlomo (2014) lapho ebona khona umzekeliso ngokufundisa ngolimi lomdabu njengendlela eyiyo yokufundisa, ngibona kubalulekile ukuthi othisha, ikakhulu bezibalo bahlolisise ukuthi ngabe indlela abafundisa ngayo izibalo, ebandakanya ulimi olungaqondwa ngabafundi ayiyona yini imbangela yokuthi abafundi bangakhiphi imiphumela egculisayo. Ngamafuphi nje, indlela yokufundisa eyiyonayona yileyo esebenzisa ulimi oluqondwa ngabafundi njengolimi lokufunda nokufundisa. Esigabeni esilandelayo salo msebenzi sengizogxila ekuchazeni kabanzi ukuthi ngabe luyini ulimi lokufunda nokufundisa, futhi abacwaningi balubuka ludlala yiphi indima ekuqondweni kwesifundo leso esifundiswayo.

### **2.2.2.2 Ulimi lokufunda nokufundisa**

Ulimi lokufunda nokufundisa ngokusho kukaGoba (2014), wulimi olusetshenziswa lapho kufundwa, kufundiswa noma futhi sekuhlolwa. Ngokwenqubomgomo *i-Language In Education Policy* yowe-1997 yamabanga ayisisekelo njengalokhu kuchaza uJones (2009), ulimi lokufunda nokufundisa kufanele kube wulimi oluqondwa kahle ngumfundi kanye nothisha. Esicaphunweni esingezansi, uJones (2009) uchaza uthi ukuqonda ulimi lokufunda nokufundisa akusho ulwazi lokukhuluma kahle lolo limi nje kuphela, kodwa kuchaza ukuthi uthisha nomfundi bayakwazi ukuhumusha umqondo walokho okwethulwa ngolimi olusetshenzisiwe lapho kufundiswa. UJones lokho ukubeka kanje:

Language of Teaching and Learning (LoT) has to be a language that is not limited to communication, but extends to the ability of the learner and the educator to interpret meaning presented through the medium of that language.

(Jones, 2009, pp. 3)

Ngibona ukuthi ulimi lokufunda nokufundisa uma luqondwa ngumfundi, lokho kuyaye kumlekelele umfundi ekutheni aqonde imibuzo ebuzwa ngalolo limi afundiswe ngalo, ngoba usuke eluqonda kwalona lolo limi abuzwa ngalo. Ngakho-ke, kubalulekile ukuqinisekisa ukuthi lapho kukhulunywa ngolimi lokufunda nokufundisa kubhekwe ukuthi ngabe lolo limi lungoluqondwa ngumfundi yini? Njengoba ngike ngakubalula ngenhla, ukuqonda nokuphumelela kwabafundi yikhona okuchaza umsebenzi nendlela uthisha afundise ngayo ukuthi ngabe ingefanelekile yini noma cha.

Ulimi olusetshenziswayo ukufeza ukufunda nokufundisa lusekwa futhi lususelwa kwinqubomgomo yezemfundo ethinta isifundo leso. Ngamanye amagama uthisha akazicabangeli nje yena ukuthi yiluphi ulimi okufanele alusebenzise, kodwa ukhalinywa aphinde alekelelwe yinqubomgomo. OMkhwanazi noBansilal (2013) bona bathi iNqubomgomo yoLimi lokuFunda nokuFundisa (*Language of Teaching and Learning Policy*) yiyona evame ukuba umhlahlandlela, ekhanyisela uthisha ngolimi okufanele alusebenzise lapho efundisa noma ehlola. Ngakho, uma kukhulunywa ngolimi lokufunda nokufundisa akufanele kushiye ngaphandle izinqubomgomo, ngoba yizona ezicacisayo ukuthi ngabe yiluphi ulimi lokufunda nokufundisa okufanele lusetshenziswe esifundweni nesifundo. U-Alexander (2011) yena ubuka ulimi lokufunda nokufundisa njengomgudu oxhumanisa abafundi nothisha egunjini lokufunda, futhi ube esebuka izinqubomgomo njengomlawuli olawula ukuthi ulimi lokufunda nokufundisa lusetshenziswa ngendlela eyiyona yini. Yingakho kulo msebenzi bengivame ukukhuluma ngolimi lokufunda nokufundisa kanye namapholisi. Kokubili kunokuthwaxana.

### **2.2.2.3 Ulwazi lokubala (inyumerasi)**

Ulwazi lokubala lumqoka lapho kukhulunywa ngokufundiswa kwezibalo. Yingakho nginqume ukulusebenzisa njengenye yezinhlaka zomcabango eziwumgogodla wocwaningo lwami. Kulesi sigaba ngizobheka incazelo edephile yolwazi lokubala, inyumerasi. Ngizophinde ngibheke nokuthi abacwaningi abehlukene bayihumusha ngokuthini inyumerasi. Ngasekugcineni, ngizoveza ukuthi ngabe ingena kanjani ekwesekeni lolu cwano.

Umcwaningi ongungoti wenyumerasi, uBarwell (2004) uchaza inyumerasi ngokuthi iyisinyathelo sokuqala nesiyisisekelo solwazi lwezibalo. Lo mcwaningi uthi, izibalo zijiyile,

futhi ukujiya kwazo kuya kukhula ngokwamazinga, kusukela ebangeni lokuqala kuze kufinyelele emfundweni ephakeme. Njengoba zijiyile nje, uBarwell (2004) uthi zidinga ukuthi umfundi abe nesisekelo solwazi lwazo. Lolo lwazi oluyisisekelo lwaziwa ngokuthi inyumerasi. Inyumerasi umfundi wakhela phezu kwayo ulwazi olusha lwezibalo ahlangebezana nalo emabangeni alandelayo (Barwell, 2004). Beqinisa okushiwo nguBarwell (2004), oBrown nabanye (2002) bona bathi inyumerasi ingukufunda nokuthola ulwazi lokubala. Ngokwalaba bacwaningi, izibalo ziyaye zidinge ukuthi uma uzifunda ungaziqali phezulu, Kodwa ukufundwa kwezibalo kudinga ukuthi uqale uthole izimpande nomongo wazo. Lezo zimpane futhi zisebenza noma usukuliphi izinga lemfundo. Abacwaningi engibabale ngenhla, abangoBarwell (2004) noBrown nabanye (2002) kafushane banikeza incazelo yenyumerasi ngokwala maphuzu alandelayo:

- Inyumerasi ingulwazi lokufunda ukubala olutholakala emabangeni ayisisekelo semfundo,
- Inyumerasi izona zisekelo nezimpande zezibalo zonke.
- Kuyaye kuqinisekiswa ukuthi inyumerasi ifundiswa ngendlela ezokwenza umfundi abe nogqozi nothando lwezibalo, noma esesemazingeni aphezulu emfundo, ngalokho kufanele kuqikelelwe ukuthi;
- Inyumerasi ifundiswa ngolimi oluqondwa ngabafundi.

Ulwazi lokubala, inyumerasi, kufanele lwandulelwe ulwazi lolimi ngoba nayo inyumerasi ifundiswa iphinde ifundwe ngolimi oluthile (Fargerlin, 2007). Ngamanye amagama, uFargerlin (2007) uthi ulimi luyingxenye ebalulekile ekufundweni kolwazi lokubala, ngoba inyumerasi idluliselwa kumfundi kusetshenziswa ulimi oluthile. Ngikubone kubalulekile ukubheka inyumerasi ngiyilumbanise nolimi ngoba ngokucacile, kokubili kuyadingana futhi kubalulekile. Njengoba lolu cwaningo luhlola ulimi olusetshenziswa ngothisha abasaqeqeshwa lapho befundisa izibalo ngolimi lwesiZulu nje, kuyacaca ukuthi lufaka kokubili, ulimi kanye nenyumerasi. Noma abanye abacwaningi (Steen, 1990; Ehrenberg, 1977) bayaye bayamanise kakhulu ulimi nolwazi lokufunda nokubhala, ilitherasi, kodwa ulimi luyingxenye ebalulekile noma kufundwa sifundo sini. Isifundo esifundwayo singeqondwe uma kungaqalwanga kwaqondwa kuqala ulimi esifundwa ngalo. Ngaleso sizathu, inyumerasi (njengoba iyinhlanganisela yolimi nezibalo nje), ngibona iyikhonsepthe edidiyela izingxenye ezimbili zalolu cwaningo, izibalo nolimi. Ngakho-ke njengoba iyinhlanganisela yalezi zingxenye ezimbili nje, ingelekelela ekwesekeni lolu cwaningo.

## 2.3 UKUBUYEKEZWA KWEMIBHALO

### 2.3.1 Ucwangingo olwenziwe eNingizimu-Afrika

Izibalo zingezinye zezifundo ezingaphunyelelwa ngendlela elindelekile ezweni laseNingizimu-Afrika. Umfundi kulindeleke ukuthi aphumelele izibalo ngamaphesenti angamashumi amathathu kuya phezulu (Department of Basic Education, 2009). Kodwa umbiko owakhishwa yinhlangano *iThird International Mathematics and Science Study (TIMSS)* ngonyaka wezi-2011 waveza ukuthi, ngonyaka wezi-2010 ngabafundi abangamaphesenti angama-52,6 abathola amamaki angaphansi kwamaphesenti angama-30 ezibalweni. Lokhu kuchaza ukuthi ngalo nyaka abafundi abaningi abaziphumelelanga izibalo. Kuwo lo nyaka wezi-2010 bangamaphesenti angama-69.1 abafundi abathola amamaki angaphansi kwamaphesenti angama-40 ezibalweni (Department of Basic Education, 2011). Lezi zibalo zikhombisa ngokusobala ukuthi bambalwa kakhulu abafundi abaphumelela izibalo eNingizimu-Afrika. Kodwa lolu cwangingo lwe-TIMSS lowe-2011 olukhanyisa ngokuphunyelelwa kwezibalo wucwangingo lobungako botho. Echaza umehluko phakathi kocwangingo lobungako botho nolobunjalo botho, uCresswell (2012) uthi ucwangingo lobungako botho alunakho ukujula ngesizathu nomsuka wesenzeko esithile, kuphela nje lugxila ezinombolweni. Ucwangingo olwenziwa yi-TIMSS ngowezi-2011 aluvezanga ukuthi kwakucwangingwa imiphumela yaziphi izikole, futhi ezinabafundi abakhuluma luphi ulimi. Lolu cwangingo aluvezanga futhi ukuthi lezo zikole okwakwenziwa ucwangingo kuzona ngabe zinezinsizakufundisa ezanele yini, futhi ngabe zisezindaweni ezinjani. Lolu cwangingo olwethulwa lapha kuzoba ngolobunjalo botho ngoba luzobheka imiphumela nokutholakele ngeso elijulile, aluzukugxila ezinombolweni kuphela.

ULewin (2007) uveza ukuthi ulwazi lokubala luphansi kakhulu kubafundi abasemabangeni ayisisekelo. Lokho uLewin (2007) ukusho ekususela ocwangingweni alwenza esifundazweni sase-Eastern Cape. Kodwa ocwangingweni lukaLewin (2007), abahlanganyeli bocwangingo ababeqokiwe babeqokwe kusetshenziswa indlela yokuqoka abahlanganyeli *i-random sampling*. Lokho kusho ukuthi wayengakhethi ngokunenhloso, kodwa wayebuka nje imiphumela yabafundi bakunoma yiziphi izikole kulesiya sifundazwe. Ngaphezu kwalokho, uLewin (2007) wayengacwangingi isimo esithile ngokujulile (*case study*), kodwa wayebheka imiphumela esifundazweni sonkana. Kungenzeka-ke ukuthi kwezinye izingxenywe zesifundazwe, kanye nakwezinye izimo (*cases*) imiphumela yabafundi yayingcono kakhulu kulo nyaka. Ucwangingo olwenziwa nguLewin (2007) lwehlukile kulolu olwethulwa kulo

mqingo. Kulo msebenzi ubucwaninga ngokulungela kothisha ukufundisa izibalo ngezilimi zomdabu kugxiliswe kulabo abaqeqeshelwa esikhungweni esithile esiqeqesha othisha (ngamanye amazwi belugxile esimweni sasesikhungweni esikhethiwe, esifundazweni sakwaZulu-Natal kanye nasemabangeni aphansi kuphela).

ULewin (2007) uveza ukuthi balinganiselwa kumaphesenti angama-81,4 abafundi abangena ebangeni lokuqala unyaka nonyaka. Kodwa, bebaningi benjalo abafundi abangena ebangeni lokuqala, uVenkat (2009) uthi bangamaphesenti angamashumi amathathu nane kuphela abafundi abanolwazi lokubala kuzwelonke. Nakhona lapha, ngibona kubalulekile ukuveza ukuthi uVenkat (2009) wayebheka isimo sezikole lapho iningi labafundi lixube izinhlanga, okusho ukuthi ulimi lokufunda nokufundisa kulezo zikole kwabe kuwulimi olukhethwe isigungu esilawula isikole, okuwulimi lwesiNgisi. UVenkat (2009) akabhekanga izikole lapho kufundiswa khona ngezilimi zomdabu. UHobden (2011) yena uthi akukho ukuhambisana okufanelekile (*balance*) phakathi kwenani lonkana labafundi abasebangeni lokuqala kanye nenani lalabo abanolwazi lokubala kanye nolwelitherasi. UHobden (2011) yena ugxila kakhulu olwazini lokufunda nokubhala (*literacy*), akagxili kakhulu olwazini lokubala (*numeracy*). Futhi uHobden (2011) akavezanga ukuthi ngabe lokhu kuhambisana okungafanelekile (*imbalance*) kudalwa yini, futhi kungalungiseka kanjani. Kuphela nje yena ubalule ukuthi kukhona ukuhambisana okungafanelekile phakathi kwenani labafundi abangena okokuqala esikoleni, nenani labafundi abanolwazi lokubala. Okushiwo nguVenkat (2009) kanye noHobden (2011) ngenhla, ngokwami ukubona, kuyiqiniso ngoba ngike ngaba nengxoxo nothisha bamabanga aphansi asebesensimini. Kuleyo ngxoxo ngakuphawula ukuthi othisha bala mabanga bafundisa abafundi abayinani elikhulu, kodwa imiphumela abayikhiqizayo ikhombisa ukuthi yingcosana kubafundi bala mabanga enolwazi lokubala. Ngalolu-ke ngalolu cwanningo bengihlose ukubheka ukuthi ngabe yini ebangela ukuthi babe yidlanzana abafundi abaqonda nabaphumelela izibalo emabangeni aphansi. USpaull (2013) ukhanyisa lokho engike ngakudingida ngocwanningo lukaLewin (2007) ngenhla ngokuthi aveze igrafu ekhombisa inani labafundi abangena okokuqala esikoleni, kanye nenani labafundi abakwazi ukuthi badlulele ebangeni lesibili (kulolo quqaba olungena isikole). Okushiwo nguSpaull (2013) kuvezwe kulo mdwebo olandelayo:

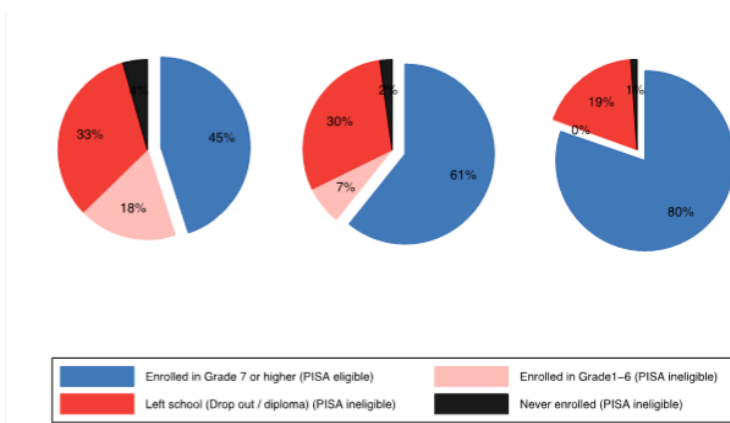


Figure 2: Inani labafundi abasemabangeni asesiGabeni esiyisiSekelo in Foundation Phase (Spaull, 2012, p.124)

Ngokwalo mdwebo ongenhla, kuyavela ukuthi iningi labafundi liyanga ebangeni lokuqala, njengoba beyiphesenti elilodwa nje vo abafundi abaseminyakeni yokungena ebangeni lokuqala kodwa abangafundi. Ingqinamaba isekutheni noma bebaningi abafundi abangena ebangeni lokuqala, kodwa bayingcosana abaphumelela izibalo. Nakulona lolu cwaningo oluvezwe nguSpaull (2013) kubhekwe imiphumela kazwelonke. Lo mcwaningi akaphindanga wabheka ngokwezifundazwe, futhi uSpaull (2013) akabange esacwaninga ngesizathu esiyimbangela yokuthi abafundi abaningi bangaziphumeleli izibalo. UFleisch (2007) uqakulisa ngokuthi umgomo wokungenisa bonke abafundi esikoleni uwodwa awanele, kodwa kufanele uma sebengeniswe esikoleni bathole ukufundiseka ezibalweni, kanye nasezifundweni zesayensi. Ngiyavumelana nokushiwo nguFleisch (2007) ngoba ngikholelwa ekutheni uma abafundi sebengenile esikoleni, kufanele kuphinde kuqikelelwe nokuthi bayaphumelela ezibalweni. Lokho kungenziwa ngokuqinisekisa ukuthi abafundi bafundiswa izibalo ngolimi abaluqondayo, yikhona nazo izibalo bezoziqonda futhi baziphumelele. Ngicabanga ukuthi nendlela abafundi bamabanga aphansi abafundiswa ngayo izibalo kufanele ibhekisiwe, kuqikelelwe ukuthi iyabalekelela ekutheni baqonde futhi baphumelele izibalo. Ngibona ukuthi uhulumeni akenzi okwenele uma egcizelela nje ukuthi abafundi bangeniswe esikoleni, kodwa kungathi uma sebengeniswe esikoleni, kuqikelelwe ukuthi bafundiswa izibalo ngendlela abazoyiqonda.

UNaidoo (2010) uthi kufanele kuqikelelwe ukuthi ukufunda nokufundisa kumbandakanya abafundi (*learner centered*), abafundi bangacini nje beyizethameli, banganikezwa ithuba lokuthi nabo babe yingxenye yesifunjwana. NgokukaNaidoo (2010) ukungalandeli imigomo

yokufundisa ebalulwa yisiTatimende semFundo sikaZwelonke yikhona okuyimbangela nomsuka wokungaqondwa kwezibalo emabangeni aphantsi. Kodwa kufanele ngikuphawule ukuthi uNaidoo (2010) ukhuluma ngesiTatimende semFundo sikaZwelonke, esesingasetshenziswa nokho njengenkombandlela esikhathini samanje. Kungenzeka ukuthi othisha bayayilandela imigomo yeNqubomgomo yoHlelo lweziFundo nokuHlola. Yingakho lolu cwaningo luhlose ukubheka okwenzeka esikhathini samanje, sekunohlelo lwezifundo olwehlukile kulolo obelusetshenziswa eminyakeni elishumi eyedlule.

UHanushek (2012) uthi ukungafundiswa ngendlela kwezibalo ngenye yezimbangela zokuthi lesi sifundo singaphunyelelwa. Eqhubeka uHanushek (2012) uthi, indlela efanelekile yokufundisa izibalo emabangeni aphantsi yileyo eqikelela ukuthi kufundiswe izibalo ngezilimi ezingezomdabu kubafundi. UFleisch (2010) naye uqinisa okushiwo nguHanushek (2012) ngokuveza ukuthi indlela yokufundiswa kwezibalo ibandakanya ulimi olusetshenziswa lapho zifundiswa. Isizathu esingenze ngaba nomdlandla wokucwaninga ngokulungela kwabafundi abaqeqeshelwa ukufundisa izibalo emabangeni aphantsi, ngixile kakhulu ekusetshenzisweni kolimi lokufunda nokufundisa wukuthi ulimi luyisikhali sokufunda nokufundisa izibalo. Ngethemba ukuthi lolu cwaningo luyolekelela ekutholeni ikhambi ngezingqinamba ezibhekene nokuphunyelelwa kwesifundo sezibalo.

UPretorius benoSpaull (2016) bayakuphawula ukuthi ukungaphunyelelwa kwezibalo ebangeni leshumi nambili kudalwa ukuthi abafundi abanikezwa ulwazi oluyisisekelo besesemabangeni aphantsi. Laba bacwaningi nokho abacacisi ukuthi ngabe yini ebangela ukuthi othisha bamabanga ayisisekelo benganikezi abafundi ulwazi oluyisisekelo olwanele. Kuzokhumbuleka ukuthi ukufundwa kwezibalo kwakhiwe ulimi, ukuqeqesheka kothisha, ulwazi lothisha ngesifundo sezibalo (*content knowledge*) kanye nendlela yokufundisa izibalo. (Elugbe, 1990; Hameso, 1997; Bunyi, 1999; Oprah, 2003). OTaylor noHowie (2008) bona bathi inkinga yabafundi yokungaqondi izibalo iqala besesemabangeni aphantsi. Leyo nkinga iba yimbangela enkulu yokungaphumeleli kwabo ezibalo lapho sebesemabangeni athe thuthu. Nokho, oTaylor noHowie (2008) ababaluli ukuthi ngabe le nkinga yokungaqondwa kwezibalo emabangeni aphantsi, egcina iba nomthelela ekungaphunyelelweni kwezibalo emabangeni aphezulu, idalwa yini. Yilesi sizathu esenze ngaxila kubafundi abaqeqeshelwa ukufundisa amabanga aphantsi, nasolimini abalusebenzisa lapho befundisa. Bengiqonde ukuphenya ukuthi ngabe ingwadla yokungaphunyelelwa kwezibalo okusempeleni idalwa yini.

Abacwaningi abafana noSpaull (2016), Venkat (2016a), Alexander (2017) bathi ukunganikezwa kahle kwabafundi ulwazi lokubala kubavimbela ukuthi baqonde izibalo ezifundwa emabangeni alandelayo (amabanga aqala kwelesine aye phezulu). Laba bacwaningi bathi ukufundwa kwezibalo kuhamba kuthuthuka ngokwamazinga (*hierarchical*). Ngokwalaba bacwaningi ulwazi lwezibalo kufanele luqale ebangeni lokuqala, bese kuthi ebangeni lesibili izibalo ezifundiswa khona ziba ngezisekelwe olwazini lokubala lwasebangeni lokuqala. Kanjalo noGlewwe (2002) uthi izibalo zebanga nebanga zisekelwa ngolwazi lwezibalo umfundi aluthole ebangeni elandulele lelo akulona. Lokhu kungesinye sezizathu ezingenze ngakhetha ukugxila emabangeni aphantsi, ukuze uma kubonakala kunenkinga (engavela endleleni yokufundisa esetshenziswayo, noma olimini olusetshenziswa lapho kufundiswa izibalo) ilungiswe yikhona abafundi bezokhula olwazini lokuqonda izibalo zamabanga alandelayo.

Ukufundiswa kwezibalo ngolimi oluqondwa ngabafundi kwenza ukuthi ulwazi lwabo lokubala luthuthuke (Vinjevoold, 2017). Eqhubeka uVinjevoold (2017) uthi igebe eliphakathi kolwazi lokubala (*numeracy*) lwabafundi basezikoleni ezifunda abafundi abame kahle kanye nalezo ezinabafundi abaswele lidalwa ukuthi, labo abaswele bafundiswa ngolimi okungelona olwabo (*alien language*), kanti labo abacebile bafundiswa ngolimi abaluncele ebeleni nabaluqonda kangcono. Kodwa angikuveze ukuthi okushiwo nguVinjevoold (2017) kususelwe ocwaningweni lobungako botho, lapho wayeqhathanisa khona (ngokwezibalo) imfundo yabafundi abaswele neyabacebile. Lolu cwaningo lona beluhlose ukubheka ubunjalo botho, ngakho kungenzeka ukuthi okutholakele kulolu cwaningo kwehluke kokushiwo ngu-Vinjevoold (2017). Ngaphezu kwalokho, uVinjevoold (2017) usebenzise ipharadayimu ebheka ukucindezeleka kwedlanzana labantu, nokungalingani kwabantu ngokwamazinga omnotho (*critical paradigm*). Lo mcwaningi wayecwaninga ngeqhaza elibanjwa amandla omnotho kwezemfundo. Lolu cwaningo lona lusebenzise ipharadayimu yomhumusho. Iningi labafundi abaswele eNingizimu-Afrika ngabebala elimnyama, kanti abacebile ngabebala elimhlophe. OHayden noLee (2009) bona bathi isizathu sokuthi abebala elimhlophe (eNingizimu-Afrika) babe nolwazi lokubala (*numeracy*) oluseqophelweni ukuthi, bona bafundiswa ezikoleni ezinezinsiza ezanele, kanti futhi bafundiswa ngolimi abaluqondayo. Kufanele-ke nabafundi abaswele bafundiswe ngolimi abaluqondayo. Konke-ke lokhu kuncike ekutheni abafundi abaqeqeshelwa ukufundisa la mabanga babe ngabakulungele ukuyofundisa izibalo ngezilimi zomdabu. Kungakho-ke umbuzo omqoka walolu cwaningo uthi: **Ngabe abafundi abaqeqeshelwa ukufundisa emabangeni ayisisekelo bakulungele yini ukuyofundisa**

**izibalo ngolimi lwesiZulu?** Ngikhethe ukugxila olimini okufundiswa ngalo izibalo emabangeni aphantsi ngoba ngokusho kuka-Aubrey enabanye (2006) ukuqondwa nokungaqondwa kwezibalo kuncike olimini izibalo ezifundwa ziphinde zifundiswe ngalo.

Inqubomgomo i-*Language in Education Policy* yowe-1997 esigabeni semfundo esiyisisekelo ithi ezikoleni ezinabafundi abangabomdabu akufundiswe ngezilimi zomdabu, ulimi lwesiNgisi lufundwe njengesifundo esizimele. Kodwa le nqubomgomo ayibaluli ukuthi yiziphi izikole okufanele kuxutshwe izilimi kuzona. USetati (2008) yena uthi ukuxuba izilimi lapho kufundiswa izibalo emabangeni ayisisekelo kungenziwa kuphela uma isikole lesi sixube izinhlanga. Ngakolunye uhlangothi, inqubomgomo i-*Language in Education Policy* yowe-1997 yona ithi uma isikole sixube izinhlanga, ulimi lokufunda nokufundisa kufanele kube yilolo olukhethwe ngamalungu esigungu esilawula isikole. Ngokwale nqubomgomo, amalungu esigungu esilawula isikole kufanele abheke ukuthi abafundi abaningi kuleso sikole bakhuluma luphi ulimi, lolo limi-ke bese kuba yilona olusetshenziswa ukufunda nokufundisa emabangeni ayisisekelo kuleso sikole. Ngokubona kwami, akukacaci kahle ukuthi empeleni ukushintsha izilimi lapho kufundiswa kufanele kwenziwe ezikoleni ezikanjani. Ngethemba ukuthi, njengoba lolu cwaningo lubheka ulimi lokufundisa emabangeni aphantsi nje, mhlawumbe okutholakele kuyogcina kulethe isixazululo ngokushintshwa kwezilimi lapho kufundiswa kula mabanga.

Ukufundiswa kwezibalo ngezilimi zomdabu emabangeni aphantsi kusiza abafundi ekutheni baqonde kangcono lokho abakufundiswayo (Venkat, 2016a). Ukusetshenziswa kwezilimi zomdabu njengezilimi zokufunda nokufundisa kula mabanga kuphinde kwelekelele ekutheni kutshaleke ezingqondweni zabafundi ukuthi isifundo sezibalo akusona esabantu bebala elimhlophe kuphela (Department of Basic Education, 2010). Enye inhloso yokufundiswa kwezibalo ngezilimi zomdabu ukuthi abafundi bakwazi ukuxazulula izinkinga izwe elibhekene nazo futhi babe izakhamuzi ezibamba iqhaza ekuthuthukisweni kobuchwepheshe nolwazi lwesimanje (Department of Education, 2003). NoMalimela (2012) naye ubalula ukuthi ukufundiswa kwabafundi ngoLimi lwabo lwaseKhaya emabangeni ayisisekelo kubahlomulisa ngolwazi lolimi lwabo, kuphinde kubasize lapho sebefunda uLimi lokweNgeza njengalokhu bekwazi ukuqonda uLimi lokweNgeza belususela olimini abaluncele ebeleni. Ukufundisa izibalo ngolimi oluqondwa ngabafundi kuyabasiza ekutheni bazuze kahle ulwazi oluyisisekelo lwezibalo besesemabangeni aphantsi (Devies, 2009; Hobden 2009; Spaul 2016). Uma ukufundiswa kwezibalo kuyamaniswa nemvelaphi nempilo yemihla ngemihla yabafundi, kuba lula kubona ukukuqonda lokho abakufundiswayo (Setati, 2008).

Njengoba kuvela ukubaluleka kokufundisa izibalo ngezilimi zomdabu, ngibona kusemahlombe othisha bamabanga aphansi ukuqinisekisa ukuthi bafundisa izibalo ngezilimi zomdabu. Ngaphezu kwalokho, othisha kufanele babe ngabakulungele futhi ukufundisa izibalo ngezilimi zomdabu. Nomqulu oshicilelwa yinhlangano *i-President Education Initiative* yowe-1998 ugqizelela embonweni wokufundisa izibalo ngezilimi zomdabu ngokuphawula ukuthi:

Teaching and learning is to be parallel to the background and society pupils come from. Nevertheless, teachers ought to be willing to instruct using indigenous languages.

(President Education Initiative, 1998, pp. 24)

Lokhu kuchaza ukuthi ukufundisa kufanele kweyamane nemvelaphi yabafundi, kodwa othisha bamabanga aphansi kufanele babe ngabakulungele ukufundisa ngezilimi zomdabu. Ngibona ukuthi, ukulungela kothisha kufanele kuqale lapho besaqeqeshelwa ukufundisa.

Ngenxa yokungenzi kahle kwabafundi ezibalweni, uNgqongqoshe wemFundo eyisiSekelo u-Angelina Motsekga ngowe-2013 wethule umkhankaso owaziwa nge-*Action Plan 2014: Towards the realisation of schooling 2025*. Lo mkhankaso uhlose ukuqinisekisa ukuthi othisha abasesezikhungweni zemfundo ephakeme bathola ukuqeqesheka okwanele, futhi babanolwazi lokufundisa izibalo ngezilimi zomdabu (Moodle 2014:32). Kodwa uMoodle (2014) akasho lutho nge-*University Language Policy*. Ngicabanga ukuthi ukuqeqesha abafundi ukuthi bafundise izibalo ngezilimi zomdabu kuncika ekutheni, izilimi noma ulimi lolo lomdabu abaqeqeshelwa ukuthi bafundise ngalo ngabe luwulimi olugunyazwe kwi-*University language Policy* yini. Kuzokhumbuleka ukuthi uqeqesho lonke ezikhungweni zemfundo ephakeme lulawulwa yinqubomgomo i-*University Language Policy* yesikhungo nesikhungo (Boughey, 2007).

Izwe laseNingizimu-Afrika akusilona lodwa elibhekene nengqinamba yemiphumela engagculisi ezibalweni, kodwa ngokusho kukaPritchett ekanye noBeaty (2012), amazwe amaningi asathuthuka e-Afrika abhekene nale ngqinamba

### **2.3.2 Ucwangingo olwenziwe eTanzania**

Ukufundiswa kwezibalo ngezilimi zomdabu ezwenikazi lase-Afrika akwenziwa eNingizimu-Afrika kuphela, kodwa amazwe afana noTanzania nawo anohlelo lokufundisa izibalo ngezilimi zomdabu emabangeni aphansi. Izwe laseTanzania lingelinye lamazwe ase-Afrika asenesikhathi eside esebenzisa izilimi zomdabu njengezilimi zokufunda nokufundisa. Kuleli

zwe, ulimi lomdabu olusetshenziswa ukufunda nokufundisa wulimi lwesiSwahili. Ngokusho kukaTibategeza (2010), ukufundwa nokufundiswa kwezibalo (kanye nezinye izifundo) ngolimi lwesiSwahili eTanzania kwaqalwa ngeminyaka ye-1950. Kodwa ngeminyaka ye-1958, kwaba nezinguquko, ulimi lwesiNgesi lwabuyele lwasetshenziswa njengolimi lokufunda nokufundisa kuleliya lizwe.

O-Ipara noMbori (2009) baveza ukuthi ngeminyaka ye-1958 umnyango wezemfundo kuleliya lizwe waphasisa umthetho owawungaphansi kwenqubomgomo i-*Arusha Declaration*. Lo mthetho wawuthi isiNgesi kufanele sisetshenziswe njengolimi lokufunda nokufundisa ezikoleni lapho kunenani labafundi abaningi abakhuluma isiNgesi njengoLimi lwaseKhaya. Kodwa okuvezwa yilaba bacwaningi abango-Ipara noMbori (2009) akusivezi isigatshana kanye negama lalo mthetho. Ngicabanga ukuthi ukungavezwa kwesigatshana salo mthetho owawukwinqubomgomo i-*Arusha Declaration* kungenxa yokuthi ucwaningo luka-Ipara noMbori (2009) alugxilile kakhulu olimini lokufunda nokufundisa, kodwa laba bacwaningi bangongoti bokuhlaziya uhlelo lwezifundo ezweni laseTanzania. Ngaleso sizathu imithetho ekhuluma ngezilimi zokufunda nokufundisa abagxili kuyona kakhulu. Abanye abacwaningi abakhulume ngenqubomgomo i-*Arusha Declaration* ngoSibayan noGanzalez (1995). Bona bathi ngokuphasiswa kwale nqubomgomo kwakuqondwe ukuthi kuthuthukiswe abanothile kuleliya lizwe. Lokho bakusho ngoba izingane zalabo abanothile yilezo vele ezaziqonda ulimi lwesiNgesi. Uma-ke labo bafundi abazalwa ngabazali abanothile babefundiswa vele ngolimi abaluqondayo, babezoba semathubeni okuqonda kangcono isayensi kanye nezibalo. Uma beqonda izifundo zesayensi nezibalo babesuke besemathubeni okuba ngabakhanyiselekile kwezomnotho nakwezohwebo. Ehlahiya lo mthetho, uRwabantabagu (2011) uthi lo mthetho wawuqonde ukucindezela labo abangaluqondi ulimi lwesiNgesi.

Umthetho owawungaphansi kwenqubomgomo i- *Arusha Declaration* wabuyele washintsha ngowe-1959. Ngalo nyaka kwaphakanyiswa ukuthi ezikoleni ezixube izinhlanga kube yisigungu esilawula isikole esikhetha ulimi lokufunda nokufundisa okufanele lusetshenziswe kuleso sikole (Wolff, 2002a). Umthetho ovezwa nguWolff (2002a) ucishe ufane nokushiwo yi-*Language in Education Policy* yowe-1997 yalapha eNingizimu-Afrika. I-*Language in Education Policy* yowe-1997 ithi ezikoleni ezixube izinhlanga ulimi lokufunda nokufundisa kufanele kube yilolo olukhethwe yisigungu esilawula isikole. Isigungu esilawula isikole sibheka ulimi olukhulunywa iningi labafundi esikoleni (Ramani, 2011). Kuze kube yinamuhla okushiwo yinqubomgomo i-*Language in Education Policy* yowe-1997 kusenziwa ezweni

laseNingizimu-Afrika. Kodwa ezweni laseTanzania lo mthetho wabuye waguqulwa. UTibategeza (2010) uthi ngonyaka we-1959 kwaphinde kwahlongozwa ukuthi kufundiswe ngolimi isiSwahili. Nokho okushiwo nguTibategeza ngokufundiswa ngolimi lwesiSwahili akucacisi ukuthi ngabe abafundi abangaluqondi lolu limi bona kwakuthiwa abafundiswe ngaluphi ulimi.

Unyaka we-1959 kwaba unyaka owaba nokudonsisana kwezombusazwe ezweni laseTanzania. Lokho kwadalwa ukuthi izakhamuzi zakuleliya lizwe zazibona sengathi zibukeleka phansi ngokwezinga lazo lempilo nelomnotho uma kuthiwa akufundiswe ngolimi lwesiSwahili (Crowley-Henry, 2009).

Ukungqubuzana nokudonsisana ngokwemibono ezweni laseTanzania, okubalulwe nguTibategeza (2010) ngenhla, kwaze kwanqamuka ngowe-1964, lapho sekubonakala ukuthi izinga lokuphumelela kwabafundi liyakhula uma befundiswa ngolimi lwesiSwahili, ikakhulu esifundweni sezibalo (Nakpan, 1993; Zeleza, 2006; Galabawa, 2008; Allen, 2008). Emva kokuthi kube nebohlololo ekungqubuzaneni kwemibono kwizakhamuzi zakuleliya lizwe, Abacwaningi abangoNdabakurane (2002); Webb (2002); Qorro (2004); Rugemalina (2005); Terry no-Irving (2010); bathi yonke imfundo yamabanga aphantsi yabe isiqala ukwethulwa ngolimi lwesiSwahili. Kulokhu-ke izwe laseTanzania lithi aliveze isimo esifanayo nesimo saseNingizimu-Afrika ngoba oBarret, uMtana, u-Osaki kanye noRubagumya (2014) abangabacwaningi baseTanzania bathi ulimi lwesiNgisi kuleliya lizwe luyafundwa nalo, kodwa umehluko ukuthi alusetshenziswa njengolimi lokufunda nokufundisa kuzona zonke izikole. Kodwa lufundiswa lube yisifundo esizimele ezikoleni ezinabafundi abakhuluma ulimi lwesiSwahili njengoLimi lwaseKhaya. Lesi simo sithi asifane nesimo saseNingizimu-Afrika. ENingizimu-Afrika isiNgisi sifundwa njengesifundo esizimele, bese kuthi ulimi lomdabu lusetshenziswa njengolimi lokufunda nokufundisa emabangeni ayisisekelo (Nakasa, 2000). Bayaqhubeka oBarret, uMtana, u-Osaki noRubagumya (2014) bathi eTanzania, ulimi lwesiNgisi luqala ukusetshenziswa njengolimi lokufunda nokufundisa emabangeni asesigabeni sokufunda esithe thuthu (*secondary school level*). Okushiwo yilaba bacwaningi ngezwe laseThanzaniya kuthi akufane nokwenzeka ezweni laseNingizimu-Afrika. Umehluko ukuthi ezweni laseNingizimu-Afrika, isiNgisi siqala ukusetshenziswa njengolimi lokufunda nokufundisa esiGabeni sokuMukezela (Spaull noVinkat, 2009). U-Ogg (2003) uthi, nakuba ukuphunyelelwa kwezibalo ezweni laseTanzania kungaculisi, kodwa izinga lokuqondwa kwezibalo lingcono kakhulu uma liqhathaniswa nezinga lokuqondwa kwezibalo ngesikhathi zisafundiswa ngolimi lwesiNgisi. Lokhu ngikubona kusafakazela ukuthi kusemqoka

ukufundisa izibalo ngezilimi zomdabu emabangeni aphansi, ngoba abafundi baziqonda kangcono njengoba zisuke zifundiswa ngezilimi abaziqonda kangcono.

### 2.3.3 Ucwaningo olwenziwe eNepal

UBista (2011) uthi izwe laseNepal liyizwe elilimingxube, njengoba izilimi zomdabu ezikhulunywa kuleliya lizwe zicela kwezingamashumi ayisishiyagalolunye nanye. Kodwa, ngokusho kwakhe uBista (2011) ulimi lwesiNepali yilona lulimi olukhulunywa isibalo esikhulu sezakhamuzi zakuleliya lizwe. Echaza kabanzi ngalokhu, uShrestha (2009) uthi ulimi lwesiNepali lukhulunywa ngabantu abangamaphesenti angama-48,61, bese kuthi ulimi lwesiMaithili (nalo okulinganiswa ukuthi baningana abalukhulumayo) lukhulunywe ngabantu abangamaphesenti angama-23,3. Eqhubeka eveza inani labantu njengokukhuluma kwabo izilimi zomdabu kuleliya lizwe, uShrestha (2009) uthi ulimi lweTamang lona lukhulunywa ngamaphesenti angama-5,19, iNewar ikhulunywa ngamaphesenti angama-3,63 bese kuthi ulimi iMagar lona lukhulunywe ngamaphesenti angama-3,39 esibalo sabantu bonke. Lezi zibalo ezishiwo yilaba bacwaningi ngenhla zisuselwe kulokho okwashicilelwa phansi ngesikhathi kubalwa abantu ezweni laseNepal, i-*Nepal Population Statistics* yowe-2008. Alukho ucwaningo lwakamumva engilutholile oluveza inani labantu njengokukhuluma kwabo izilimi ezweni laseNepal.

Engikuphawulile ngezwe laseNepal ukuthi lithi alihluke ezweni laseNingizimu-Afrika ngoba, njengoba izwe laseNingizimu-Afrika lisebenzisa ulimi lwesiNgisi njengolimi oluxhumanisa abantu abakhuluma izilimi ezehlukene nje, izwe laseNepal lona lisebenzisa ulimi iNepali njengolimi oluxhumanisa abantu abakhuluma izilimi ezehlukene (Kansakar, 2004). Uma eqhubeka uKansakar (2004) uthi ulimi lwesiNepali luwulimi olukhulunywa ezweni lonkana (*national language*) kuleliya lizwe. Uma-ke ulimi lwesiNepali kuwulimi olukhulunywa isibalo esikhulu sezakhamuzi zakuleliya lizwe, lokho kuchaza ukuthi izikole eziningi (ikakhulu izikole ezingaphansi kukahulumeni) zifunda izibalo (kanye nezinye izifundo) emabangeni aphansi ngolimi lwesiNepali (Tobin, 2011).

Ngakolunye uhlangothi, uMalla (2000) uthi, uma kuqhathaniswa izwe laseNingizimu-Afrika nelaseNepal, izwe laseNingizimu-Afrika linakho ukucishe lifane nezwe laseNepal/ ngoba ulimi lwesiNgisi kuleliya lizwe luqondwa yingcosana yezakhamuzi, futhi lusetshenziswa kakhulu ezikoleni ezizimele, emakolishi kanye nasemanyuvesi. Nomcwaningi onguTobin (2011) naye ubeka kanje:

English in Nepal is not a second language or the language of wider communication, or group identification. It has, however, been used as the medium of instruction in private schools, colleges and universities.

(Tobin, 2011, p.24)

Okushiwo nguTobin esicaphunweni esingenhla kuchaza ukuthi, isiNgisi asikhulunywa uwonkewonke ezweni laseNepal, kuphela nje sisetshenziswa njengolimi lokufunda nokufundisa ezikhungweni zemfundo ephakeme, emakolishi kanye nasezikoleni ezizimele. Njengoba eNingizimu-Afrika ulimi lwesiNgisi lusetshenziswa ukufunda nokufundisa izibalo ikakhulukazi ezikoleni ezizimele nakulezo ezixube izinhlanga nje, kanjalo nasezweni laseNepal isiNgisi sisetshenziswa njengolimi lokufunda nokufundisa ezikoleni ezizimele. Umehluko-ke phakathi kweNingizimu-Afrika neNepal yilowo ochazwa nguBhattarai ekanye noGautam (2005) uma bethi:

The main distinction between South Africa and Nepal is that, in Nepal indigenous languages are prioritised and given due statue as compared to English. English in Nepal has not received the same statue as Nepal languages in public institutions of higher learning. It (English) is considered as a foreign language by the speakers of Nepali, and it is only taught as the subject.

(Bhattarai noGautam, 2011, p.32)

Lesi sicaphuno esingenhla sichaza ukuthi ezweni laseNepal izilimi ezingezendabuko zinikezwa inhlonipho futhi zibekwa eqophelweni eliphezulu. Ngakolunye uhlangothi, ulimi lwesiNgisi alubekwa ezingeni elilingana nezinga okukulo izilimi zomdabu. Kunokuthi ulimi lwesiNgisi lubekwe ezingeni eliphezulu kuleliya lizwe, luthathwa njengolimi lokufika, futhi lufundiswa njengesifundo ngokuzimele. Ngokubona kwami, iNingizimu-Afrika isabhekene nengwadla yokuthi izilimi zomdabu zibukelwa phansi, bese kuthi ulimi lwesiNgisi kube yilona oluhlonishwayo nolubekwa eqophelweni eliphezulu (Madziba, 2010). Ngaphezu kwalokho okushiwo nguBhattarai benoGautam (2011) ngenhla, inhlangano ebhekelele ukuthuthukiswa kohlelo lwezifundo ezweni laseNepal ebizwa nge-*Curriculum Development Center* esitatimendeni sayo esakhishwa ngowezi-2013 iveza ukuthi ngokocwaningo olwenziwa yile nhlangano kothisha abafundisa izibalo emabangeni aphantsi, ulimi lwesiNepali yilona limi olusemthethweni futhi oluthakaselwa noluthandwa kakhulu ngabafundi kanye nothisha bala mabanga. Kodwa lolu cwaningo lwalugxile ezikoleni eziseningizimu nezwe laseNepal (*southern Nepal*) kuphela. Lwalungaxilile ekubhekeni imiphumela yezibalo ezweni laseNepal lonkana. Ngokwe-*Curriculum Development Center*, kuvela ukuthi abafundi abaphumeleli ngokugculisayo uma befundiswa izibalo (kanye nezinye izifundo ezifundwa emabangeni aphantsi) ngolimi lwesiNgisi kuleliya lizwe. Lokhu kusafakazela engike ngakusho ngenhla

ukuthi uma abafundi befundiswa ngolimi olungolomdabu nabaluoqonda kangcono, bayaye baphumelele kangconywa kulesi sifundo.

UBista (2009) uveza ukuthi izwe laseNepal liqale ukufundisa izibalo ngolimi lwesiNgisi eminyakeni ethi mayibe yishumi eyedlule. Lokhu kuchaza ukuthi ngaphambi kokuthi kufundiswe izibalo ngolimi lwesiNgisi, leliya lizwe belifundisa izibalo (kanye nezinye izifundo) ngolimi olungolomdabu eNepal, ulimi lwesiNepali. Eqhubeka uBista (2009) uthi izibalo ezweni laseNepal zihunyushwa, zisuselwa olimini iNepali zisiwe olimini lwesiNgisi. INingizimu-Afrika ithi ayehluka nezwe laseNepali kulokhu. Ezweni laseNingizimu-Afrika uma kufundiswa izibalo ngezilimi zomdabu emabangeni aphantsi, amakhonsephti ayaye ahunyushwe esuselwa esiNgisini esiwa ezilimini zomdabu. Ezweni laseNepal ukhunyushwa kolimi lomdabu luguqulelwa olimini lwesiNgisi kwaba yinselelo enkulu, ikakhulu kubafundi ababe sebejwayele ukufundiswa nokuhlolwa ngolimi iNepali (Fleck, 2000).

UPraddhan (2012) uthi ukufundiswa kwezibalo ngezilimi zomdabu kunconywa kakhulu, ngoba abafundi abafundiswa ngolimi iNepali benza kahle kakhulu ezibalweni, kunabafundi abafunda izibalo ngolimi lwesiNgisi eqhubeka lo mwaningi uthi, kungaba yingqinamba kakhulu ukufundiswa kwezibalo ngolimi lwesiNgisi kuleliya lizwe ngoba, kungafanele abafundi baqale bafundiswe ulimi lwesiNgisi kuqala. Ngivumelana nombono kaPraddhan (2012) ngoba ukufundwa kolimi lwesiNgisi akunamkhawulo, akekho ofinyelela ezingeni lokuluqonda kangcono lolu limi. Njengoba uBuzzan (1988) ethi ukufundwa nokufundiswa kolimi lwesiNgisi kungumugqa ongenamkhawuko (*continuum*), lokho kusho ukuthi alikho izinga lapho umfundi afinyelela khona bese ezibona esenolwazi olwanele noluseqophelweni lolimi lwesiNgisi. Uma lo mugqa ungenamkhawuko, abafundi bayobe befunde nini ukubala uma besashikisha ekufundeni isiNgisi, naso abangeke bafinyelele ezingeni lokusiqonda kangcono?

### **2.3.4 Ucwaningo olwenziwe ePeru**

Izwe lasePeru lingelinye lamazwe anezilimi eziningi ezingezomdabu. *iPeru Census* yowe-2006 iveza ukuthi zingama-47 izilimi zomdabu ezikhulunywa kuleliya lizwe. *IPeru Census* iveza nokuthi ulimi olusetshenziswa njengolimi lokuxhumanisa abantu abakhuluma izilimi ezehlukahlukene kuleliya lizwe wulimi lweSipenishi. UPaulston (1994) uthi:

Peru is a country of enormous richness in indigineos languages and culture, as different geographical areas are home to ethnically distinct indigenous groups. Nonetheless, the *lingua franca* and the language of communication in Peru is a Spanish language  
(Paulston, 1994, pp. 64)

Lesi sicaphuno esingenhla sichaza ukuthi izwe lasePeru licebile kakhulu ngezilimi zomdabu, njengoba indawo nendawo ikhuluma ulimi lomdabu oluhlukile kolukhulunywa kwenye indawo. Noma kunjalo, ulimi olusetshenziswa njengolimi lokuxhumanisa abantu abakhuluma izilimi ezehlukile kuleliya lizwe ulimi lweSipenishi. Ulimi lweSipenishi alusetshenziswa njengolimi lokuxhumana nje kuphela kuleliya lizwe, kodwa luphinde lusebenze njengolimi lokufunda nokufundisa (Valdiviezo, 2013). Ukusetshenziswa kolimi lweSipenishi njengolimi lokufunda nokufundisa ezweni lasePeru kwaqhamuka ngokwethulwa kwenkolo yobuKristu (Rojas, 2009). UPaulston (1994) uthi inkolo yobuKristu yasetshenziswa njengehlobo eliqikelela ukuthi kunokungalingani kwizakhamuzi ezikhuluma ulimi lweSipenishi kanye nalezo ezikhuluma izilimi zomdabu. UPaulston (1994) uthi:

It is due to Christianisation that Spanish language graduated to be the language of teaching and learning in Peru. It is for this reason that the Peru Language Policy demands the use of Spanish language in all formal domains

(Paulston, 1994, pp.67)

Lesi sicaphuno esingenhla siveza ukuthi ukufika kwenkolo yobuKristu ezweni lasePeru kwenza ukuthi izilimi zomdabu zibukeleke phansi, bese ulimi lweSipenishi lusetshenziswa njengolimi lokufunda nokufundisa. Ngaleso sizathu, i-*Peru Language Policy* ifuna kusetshenziswe ulimi lweSipenishi kuzona zonke izikhungo. Lesi simo ngisibona sicishe sifane nesimo sasezweni laseNingizimu-Afrika. Kuzokhumbuleka ukuthi ukusetshenziswa kolimi lwesiNgisi eNingizimu-Afrika kwadalwa ukufika kombuso wobukoloni (*colonisation*), owatshala ezingqondweni zezakhamuzi zakuleli zwe ukuthi izilimi zazo kazibalulekile, futhi kazikulungele ukuthi zingaba yizilimi okufundwa kuphinde kufundiswe ngazo. Umbuso wobukoloni waqhakambisa ulimi lwesiNgisi njengolimi olungcono nokufanele kufundwe, kufundiswe, kuphinde kuhlolwe ngalo (Giliomee & Mbenga 2007:19).

Noma okushiwo nguPaulston (1994) ngenhla kuthi akuveze isimo esifanayo nesaseNingizimu-Afrika, kodwa kubalulekile ukuveza ukuthi ucwaningo lukaPaulston (1994) lwalungolubheka ukungalingani kwamazinga abantu ngakwezomnotho. Ngaleso sizathu, lo mcwaningi wayesebenzisa ipharadayimu ebheka ukungalingani kwabantu ngokwamazinga (*critical paradigm*). Lolu cwano lona lusebenzise ipharadayimu yomhumusho. Ucwaningo oluningi olwenziwe ezweni lasePeru lusebenzisa ipharadayimu ebheka ukungalingani kwabantu ngokwamazinga. Nabacwaningi abaningi, abagxile kakhulu ezilimini zokufundisa, abafana noFreeland (2010), Zavala (2007) kanye noValdiviezo (2013) basebenzisa lolu hlobo lwepharadayimu. Lokhu kudalwa ukuthi selokhu ulimi lweSipenishi lwethulwa njengolimi

lokufunda nokufundisa ngowe-1993, abacwaningi abaningi babuka lesi senzo njengesibhebhethekisa ukungalingani ngokwamazinga abantu ikakhulu kwezomnotho kuleliya lizwe. Noma ucwaningo olusebenzisa ipharadayimu ebheka ukungalingani kwabantu ngokwamazinga luyaye lube ngoluzwakalisa izwi labantu ngokucindezelwa kweqeqebana elithile lezakhamuzi, kodwa luyehluka ocwaningweni olusebenzisa ipharadayimu yomhumusho (Cresswell, 2012). Ucwaningo olusebenzisa ipharadayimu yomhumusho luyaye luhumushe izenzeko kanye nendlela iqeqebana elithile labantu elenza ngayo uma lingaphansi kwezimo ezithile (Oke, 2009). Ngakho-ke ucwaningo olwenziwe ezweni lasePeru luthi alwehluke kulolu olwethulwa kulo mqingo ngokwamapharadayimu.

Njengoba ngike ngabalula ngenhla, izwe lasePeru liyizwe elinezilimi ezingama-47 ezingezomdabu. Kodwa okuvezwa yi-*Peru Population* yowe-2016 ukuthi noma ziziningi kangaka izilimi ezingezomdabu kuleliya lizwe, kodwa iningi lezakhamuzi zakuleliya lizwe selikhuluma ulimi lweSipenishi. Ngokwe*Peru Population* yowe-2016, zingaphezu kwamaphesenti anga-84 izakhamuzi zasePeru ezikhuluma ulimi lweSipenishi. Ulimi lweQuenchua (okuwulimi lomdabu kuleliya lizwe) lukhulunywa cishe ngamaphesenti angama-18 kuphela ezakhamuzi zasePeru. Ezinye izilimi zomdabu ezikhulunywa kuleliya lizwe yi-Aymara, ekhulunywa ngamaphesenti amabili nje vo ezakhamuzi, kanye nolimi i-Amazonia lona olukhulunywa ngamaphesenti angama-1.1 kuphela ezakhamuzi zakuleliya lizwe. Ngicabanga ukuthi isizathu sokuthi izakhamuzi eziningi zakuleliya lizwe zibe ngezikhuluma ulimi lweSipenishi isimo-mqondo esafika nenkolo yobuKristu, esashintsha indlela yokucabanga, satshala ezingqondweni zezakhamuzi ukuthi izilimi zazo azibalulekile kangako, kodwa ulimi lweSipenishi yilona oluzozivulela amathuba kwezomnotho nakwezohwebo. Lesi simo sithi asifane nesimo saseNingizimu-Afrika. Kuzokhumbuleka ukuthi izwe laseNingizimu-Afrika linezilimi eziyishumi nanye ezisemthethweni, kodwa ulimi olusetshenziswa njengoluxhumanisa abantu abakhuluma izilimi ezehlukene wulimi lwesiNgisi.

Abacwaningi abafana noCampad'ónico, Caselli kanye noMesones (2014) bathi selokhu ulimi lweSipenishi lwethulwa njengolimi lokufunda nokufundisa ezweni lasePeru, leliya lizwe libalwa kanye namanye abhekene nezingqinamba kwezemfundo. Nombiko we-*International Student Assessment (PISA) Ranking* (okuyinhlango ehlaziya imiphumela yezibalo emazweni angama-117 emhlabeni wonkana) wowe-2012, uveza ukuthi izwe lasePeru laba ngelama-65 ngokwemiphumela yezibalo emabangeni ayisisekelo. UZavala (2007) uveza ukuthi izakhamuzi zasePeru ezingancelanga ulimi lweSipenishi ebeleni aziziphumeleli izibalo.

Eqhubeka lo mcwaningi uthi imbangeli yokungaphunyelelwa kwezibalo kuleliya lizwe ukuthi abafundi abalufundi ulimi lweSipenishi izibalo ezifundiswa ngalo. Ngakolunye uhlangothi, abacwaningi abangoGarcia (2005); uCampad'ónico, uCaselli kanye noMesones (2014) bona bathi abafundi abakhuluma ulimi lweSipenishi njengolimi lwasekhaya bebe futhi befundiswa ngalo ezikoleni, baba sethubeni elingcono lokuqonda izibalo kunabafundi abakhuluma ulimi iQuechua (okuwulimi lomdabu) kodwa bebe befundiswa izibalo ngolimi lweSipenishi, okuwulimi abangalufundi. Abafundi abakhuluma izilimi zomdabu kuba umqansa ukuthi baphumelele izibalo uma lezo zibalo zifundiswa ngolimi abangalufundi kwalona.

Njengoba ngike ngakuveza ukuthi iningi labacwaningi basePeru ligxile kakhulu ekubhekeni ukungalingani kwezakhamuzi zakuleliya lizwe ngokwamazinga, kubalulekile ukuthi ngiveze ukuthi ukungalingani ngokwamazinga kuphinde kudale ukuthi iningi labafundi abangena ezikhungweni zemfundo ephakeme kuleliya lizwe kube yilabo abaqonda ulimi lweSipenishi. Isizathu salokho ukuthi bafundiswa ngolimi abalufundayo kusukela emabangeni aphantsi emfundo (Minedu noDavilla 2016). Laba bacwaningi bathi:

Since Maths is a gateway subject, Spanish native speakers are at the entry advantage to the Higher Education Institutions compared to indigenous language speakers. An enrolment in Higher Education Institutions in Peru hence shows greater imbalance. Only 44,1% indigenous language speakers are enrolled in Higher Education institutions, whereas 72,1% Spanish native speakers are enrolled

(Minedu noDavilla, 2016, p. 14)

Okuvezwa kulesi sicaphuno esingenhla ukuthi abafundi abaqonda ulimi lweSipenishi yibo abagcwele ezikhungweni zemfundo ephakeme. Lokho kudalwa ukuthi baphumelela kahle ezibalweni (ngoba vele bazifunda ngolimi abalufundayo). Uma imiphumela yabo ezibalweni imihle, baba semathubeni amahle okungena ezikhungweni zemfundo ephakeme. Kuzokhumbuleka ukuthi izibalo yisifundo esibalulekile nesiwukhiye ovulela umfundi amathuba okungena esikhungweni zemfundo ephakeme. Noma ucwaningo oluvezwa nguMinedu (2015) benoDavilla (2016) kungolobungako botho, kodwa isimo esisezweni lasePeru sithi asifane nesimo saseNingizimu-Afrika. UVinjevold (2013) uthi eNingizimu-Afrika iningi labafundi abaphumelela izibalo nabasezikhungweni zemfundo ephakeme yilabo abafunde ezikoleni ezilimingxube, lapho kufundiswa khona ngolimi lwesiNgisi. Eqhubeka uVinjevold (2013) uthi amakhwantali ezikole (*school quantiles*) adlala indima enkulu emiphumeleni yezibalo. Abafundi abafunda ezikoleni ezikukhwantali yokuqala baphumelela kangcono ezibalweni ngenxa yokuthi bafundiswa izibalo ngolimi abalufundayo. Nasezweni lasePeru oMinedu (2015) kanye noDavilla (2016) bathi abafundi abaqhamuka ezindaweni

zasemadolobheni baba nemiphumela egculisayo ezibalweni uma beqhathaniswa nalabo basezindaweni zasemahlathini (*jungles*) kuleliya lizwe. Imbangela yalokho ukuthi abasemadolobheni bafundiswa ngolimi lweSipenishi, okuwulimi abalufundayo, bese kuthi labo abakhuluma izilimi zomdabu bona befundiswe ngolimi lweSipenishi, okuwulimi abangalufundi.

### **2.3.5 Ucwango olwenziwe ezweni laseTurkey**

OKaplan noBaldauf (2003) bathi izwe laseTurkey yizwe elinezilimi ezine ezingezokudabuka kuleliya lizwe, okuyilezi: yiKurmanji, Arabic, Zazaki kanye nolimi lwesiTurkey (*Turkish language*). Kodwa-ke noma zizine izilimi zomdabu ezikhulunywa ezweni laseTurkey, ingxenye enkulu yezakhamuzi zakuleliya lizwe ikhuluma ulimi lwesiTurkey. USarıçoban (2012) uthi bangaphezu kwezigidi ezingamashumi ayizithupha abantu abakhele leliya zwe abakhuluma ulimi lwesiTurkey.

Izwe laseTurkey linokungqubuzana kwemibono uma kuziwa olimini lokufunda nokufundisa (Tsui noTollefson, 2007). Beqhubeka oTsui noTollefson (2007) bathi lokho kudalwa ukuthi njengoba izilimi zomdabu ezikhulunywa kuleliya lizwe zizine nje, uhulumeni wakuleliya lizwe, ngonyaka we-1997 waphakamisa ukuthi ukufunda nokufundisa (kuwona wonke amazanga emfundo) akube ngesiNgisi. Lokho kwakwenzelwa ukuthi izwe laseTurkey libe sezingeni lokuqhudelana nokuhwebelana namanye amazwe, (Tsui noTollefson, 2007; Kirkpatrick, 2013)

Ulimi lwesiTurkey lusetshenziselwa ukufunda nokufundisa emabangeni aphantsi kanye nasesiqalweni samabanga athe thuthu (*lower secondary school*) ezweni laseTurkey (Sözbilir noCanpolat, 2006; Sztajn, 1995). Kodwa izikole ezizimele kuleliya lizwe ziqala ukufundisa izibalo ngolimi lwesiNgisi emumva kweminyaka emine yamabanga aphantsi (okuyisigaba se-*middle primary school*). Isizathu salokhu ukuthi ulimi lwesiNgisi kuleliya lizwe luthathwa njengolimi olwelekelela ekunikezeni ulwazi lwesayensi, izibalo kanye nohwebo. Izikole ezizimele ziyaye ziqhakambise ulimi lwesiNgisi njengolimi lokufunda nokufundisa izibalo. Kunomehluko nokho emiphumeleni yezibalo ezikoleni ezizimele kanye nasezikoleni ezincike kuhulumeni. Lo mehluko uvezwa nguSelvi (1996) kule grafu elandelayo:

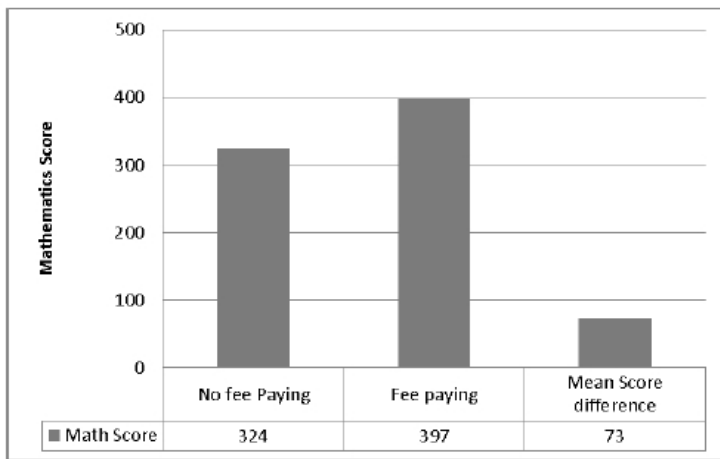


Figure 3: Amamaki ezibalo ezikoleni ezikumakhwantali ahlukeni. (Selvi, 1996, p.171)

Le grafu iveza ukuthi izikole ezizimele zinemiphumela emihle kakhulu ezibalweni uma ziqhathaniswa nalezo zikahulumeni. Lesi simo sifana nesimo salapha eNingizimu-Afrika. Izikole ezizimele zinemiphumela emihle kakhulu olwazini lokubala uma ziqhathaniswa nezikole zikahulumeni (Vinjevold, 2017). UVinjevold (2017) uthi imbangela yalokhu ukuthi iningi labafundi abafunda ezikoleni ezizimele liqonda ulimi lwesiNgisi. Lokho kudala ukuthi nezibalo baziqonde kangcono ngoba izibalo kulezi zikole, kusukela emabangeni aphantsi kuya kwaphezulu zifundiswa ngolimi lwesiNgisi.

## 2.4 IQOQA LESAHLUKO

Kulesi sahluko ngidingide uhlaka lwenjulalwazi nohlaka lwemicabango olusetshenziswe kulolu cwaningo. Ngiphinde ngabuyekeza ucwaningo oseluke lwenziwa eNingizimu-Afrika, eTanzania, eNepal, ePeru, kanye naseTurkey ngokufundiswa kwezibalo ngoLimi lwaseKhaya kubafundi. Isahluko siphinde sabuyekeza nemiphumela ezibalweni lapho kufundiswa khona ngeziLimi zaseKhaya

# Isahluko 3

---

## UMUMO WOCWANINGO NEZINDLELA ZOKUQHUBA UCWANINGO

### 3.1 ISINGENISO

Izindlela zokuqhuba ucwaningo ziwumgudu olandelwa ngumcwaningi lapho eqhuba ucwaningo lwakhe (Lee noOrmrod, 2005). Abacwaningi abangoHenning, van Rensburg kanye noSmith (2005) bona bathi izindlela zokuqhuba ucwaningo ziyinkombandlela elandelwa ngumcwaningi, emholela esiphethweni socwaningo. Beqhubeka bechaza oHenning, van Rensburg kanye noSmith (2005) bathi, izindlela zokuqhuba ucwaningo zakhiwe izingxenywe ezehlukene, kodwa nokho ezinokuxhumana, futhi ezihambisana nohlobo locwaningo olusuke luqhutshwa. Umumo wocwaningo wona uyindlela ucwaningo oluhlelwe, lwaphinde lwamiswa ngayo (Cresswell, 2014).

Kulesi sahluko ngidingide ipharadayimu esetshenziswe kulolu cwaningo. Ngokunjalo, ngibuyele ngachaza ngomumo wocwaningo. Ngichaze kabanzi ngokuthi lolu cwaningo lulandele ziphi izindlela zokuqhuba ucwaningo ngokuveza indlela yobunjalo botho njengendlela esemqoka yokuqoqa ulwazi olucutshungulwe kulo msebenzi. Isahluko siphinde senaba kabanzi ngendawo esetshenziswe ukuqhuba ucwaningo. Indlela abahlanganyeli kulolu cwaningo abakhethwe ngayo nayo ichaziwe kulesi sahluko. Ngidingide nezindlela ezisetshenzisiwe ukuqoqa ulwazi; okuyilezi: indlela yenhlolelwazi esakuhleleka, ukuhlaziywa kwamadokhumenti, kanye nokubukela abahlanganyeli befundisa. Ngibheke ukufaneleka kwalezi zindlela kulolu cwaningo. Ukugcinwa nokushabalaliswa kolwazi oluqoqiwe nakho ngenye yezihlokwana okuxoxwe ngazo. Ngenabe nangenkambiso elungileyo elandelwe ngesikhathi kuqhutshwa ucwaningo. Ngiphinde ngaxoxa kafushane ngemingcele yocwaningo. Isahluko ngisiphethe ngokuxoxa ngemizamo engiyenzile ukuvivinya amathuluzi okuqoqa ulwazi asetshenzisiwe kulolu cwaningo.

### 3.2 IPHARADAYIMU YOCWANINGO

Abacwaningi abafana noCrotty (1998) kanye noNeuman (2008) bathi ipharadayimu ocwaningweni ingachazwa kangcono ngokuthi iyiliso lokubuka umhlaba eliwujikelele (*worldview*), elisetshenziswa ngumcwaningi ukubuka nokuhlaziya isimo esithile. Ipharadayimu esetshenziswe kulolu cwaningo ngeyomhumusho. Abacwaningi abafana

noCresswell (2014); Merten (2014) kanye noMcTaggart (2015) babiza le pharadayimu ngokuthi ingeyokwakha ulwazi (*constructivist paradigm*). Laba bacwaningi bathi kulolu hlobo lwepharadayimu, umcwaningi usuke akha ulwazi ngokuzibandakanya nabahlanganyeli. Ngokwale pharadayimu, umcwaningi usuke ephokophele ekuqondeni nasekutholeni ulwazi olujulile ngalokho asuke ekucwaninga (Riley, 2009). Inhloso yepharadayimu yomhumusho wukuhlaziya izenzo, inqubo nokuziphatha kwabantu abathile, bese ikuyamanisa nokadebona (*experiences*) babo, ukuze izophuma nomnyombo wesenzeko. Lo mcwaningi uthi ukuhlaziywa kokutholakele kube sekuba yimpendulo yombuzo omqoka wocwaningo. Lokho uRiley (2009) ukusho kanje:

Interpretivist paradigm of research is concerned with deriving peoples' behaviours and analysing what informs their behaviours. Most often, people behave in a certain manner because of the circumstances and experiences they had come across with. Most importantly, the interpretivist paradigm is concerned with collected data, analysing and interpreting it to derive findings.

(Riley, 2009, p. 47)

Lesi sicaphuno esingenhla sichaza ukuthi, ipharadayimu yomhumusho isuke ihlose ukuthola nokuhumusha ukwenza kwabantu ngaphansi kwesimo esithile, nokuhlaziya ukuthi ngabe yini imbangela yokuthi benze ngaleyo ndlela abenza ngayo. Izimo abantu asebeke bahlangabezana nazo kanye nokadekubona wabo kunomthelela endleleni yabo yokuziphatha. Okubalulekile ngepharadayimu yomhumusho wukuthi le pharadayimu igxile olwazini olusuke luqoqwe ocwaningweni, ekuhlaziyweni kwalo kanye nasekahunyushweni kwalo ukuze kufinyelelwe olwazini olutholakalayo.

Ngenxa yezizathu ezibekwa nguRiley (2009), le pharadayimu ngiyibone ihambisana nalolu cwanningo ngoba bengihlose ukuhlola ukulungela kwabafundi abasaqeqeshwa bamabanga aphantsi ukufundisa izibalo ngezilimi zomdabu ngokubheka futhi ngihumushe ukwenza kwabo lapho besemagunjini okufundisa ngesikhathi abasinikezwa yiNyuvesi sokuba bayozilolonga ngokuchitha inyanga befundisa emagunjini okufundisa ezikoleni. Ngaphezu kwalokho, ngihlole nokuthi yini edala bazibone njengabakulungele noma babe abangabangakulungele ukufundisa izibalo ngezilimi zomdabu. Ulwazi olutholakale ngokuqoqa ulwazi kusetshenziswa lezi zindlela ezahlukene zokuqoqa ulwazi luhunyushiwe, lwacutshungulwa ngenjalokhu lolu cwanningo lulandele ipharadayimu yomhumusho. Lolu lwazi lucutshungulwe lwahlaziywa kusetshenziswa ilensi kaVygotsky, eyaziwa nge-*Socio-Cultural Learning Theory*, ngibe sengiyeseke ngohlaka lwemicabango oluthinta la makhonsephthi; indlela yokufundisa, ulwazi lokubala, kanye nolimi lokufunda nokufundisa.

### 3.3 UMUMO WOCWANINGO (*RESEARCH DESIGN*)

#### 3.3.1 Ucwangingo lotho (noma lwesimo)

Lolu wuhlobo locwaningo oluhlola utho noma isimo esithile esikhethiwe. URiley (2009) uthi lolu hlobo locwaningo lugxile ekucwangingeni ngohlobo oluthile lwesenzeko ngokujulile. Eqhubeka uRiley (2009) uthi umcwangingi ocwaninga ngesimo esithile ugxilisa iso lakhe kuleso simo asikhethile kuphela. Umcwangingi usuke enethemba lokuthi imiphumela yocwaningo azoyithola kuleso simo acwaninga ngaso iyafana nemiphumela abengayithola nakwezinye izimo, ezithi azifane naleso simo agxilise amehlo akhe kusona. URiley (2009) ubeka kanje:

Case study (which simply implies studying of a particular case indepth) is conducting the research and study of the particular case, having a confined study in depth.

(Riley, 2009, pp. 46)

Ngamafuphi, lesi sicaphuno esingenhla sichaza ukuthi, ucwaningo lwesimo luwukucubungula isimo esithile ngokujulile, ungeqeli ngale kwaleso simo. Lolu cwangingo belugxile kubafundi abasaqeqeshelwa ukuyofundisa esiGabeni esiyiSisekelo. Lolu cwangingo alweqelanga ngale kwalo mngcele. UYin noRobson (2000) bathi ucwaningo lwesimo lugxila esenzekweni esisodwa noma ezimbili ezisemqoka. Ngokwalaba bacwangingi, isizathu sokuthi ucwaningo lugxile esenzekweni esithile esisodwa ukuthi lusuke luhlose ukuqonda kahle ngaleso senzeko esisuke sicutshungulwa. OYin noRobson (2009) babeka nokuthi, isenzeko esicwangingwayo kuyenzeka singabi sinye, kodwa zibe mbili noma ngaphezulu. Lokhu okushiwo ngoYin benoRobson (2000) kuqiniswa nanguNiewenhuis (2008, p.75) lapho ethi: *the term case study describes an exploration of a particular behaviour, or human conduct. However, such behaviour (or human conduct) can be intergrated with one or two other distinct, yet related behaviours.* Okushiwo nguNiewenhuis (2008) kuchaza ukuthi ucwaningo lwesimo lucwaninga isenzeko noma indlela ethile yokwenza kwabantu kodwa lo mcwangingi uthi, leso senzeko kuyenzeka sididiyelwe nezinye izenzeko, ezehlukile kusona, kodwa futhi ezithi azibe nokuhlobana naso. Kulolu cwangingo, ngibheke ukulungela kothisha abasaqeqeshwa ukufundisa izibalo besebenzisa ulimi lwesiZulu. Ngamanye amazwi lolu cwangingo ludidiyela ukufundiswa kwezibalo ngesiZulu kanye namasu noma izindlela zokufundisa izibalo. Lezi yizenzeko ezehlukene, kodwa ngizididiyelile, ngacwanninga ngazo ngoba zinokuhlobana.

UTellis (1997) uthi ucwaningo lwesimo lungasetshenziswa uma kwenziwa uphenyo ngendlela uhlobo oluthile lwabantu olwenza ngayo ngaphansi kwesimo esithile. Lolu cwano lona luphenya ukuthi ngabe othisha abasaqeqeshwa bakulungele yini ukuyofundisa izibalo besebenzisa ulimi lwesiZulu. UTellis (1997) uqhubeka ethi, ucwaningo lwesimo lungenziwa nangaphambi kokuthi kwakhiwe imibuzongqangi okufanele iphendulwe wucwaningo. Okushiwo nguTellis (1997) kuchaza ukuthi umcwaningi ocwaninga ngesimo esithile angaqala ngokuhlola isimo lesi, nendlela abahlanganyeli abenza ngayo uma bebhekene naleso simo. Ngemumva kokucwaninga kabanzi ngesimo lesi, umcwaningi ubumba imibuzongqangi yocwaningo, eyisusela olwazini alutholile. Kodwa kulolu cwano, ngiqale ngemibuzongqangi, nokuthe sengiyibumbile, ngase ngiya ezikoleni eziqokiwe ukuyoqoqa ulwazi ukuze iphenduleke.

### **3.4 IZINDLELA ZOKUQHUBA UCWANINGO**

#### **3.4.1 Ucwaningo lobunjalo botho**

Lolu cwano lusebenzise izindlela zokuqhuba ucwaningo zobunjalo botho (*qualitative research approach*). Inhloso yocwaningo lobunjalo botho ukuthi kuqondakale ulwazi oluyiwona msuka nomnyombo wokuthi abantu bacabange noma benze ngendlela ethile (Crotty, 1998). Ngokusho kukaPolkinghorne (1989) umehluko omkhulu phakathi kocwaningo lobunjalo botho nocwaningo lobungako botho ukuthi ucwaningo lobunjalo botho luncike kakhulu ekuhlaziyeni amagama kanye nezenzo zabahlanganyeli. Eqhubeka lo mcwaningi uthi abahlanganyeli ocwaningweni lobunjalo botho kuba ngabantu, ngoba lolu hlobo locwaningo lusuke luphokophele ekutholeni umsuka wokwenza kohlobo oluthile lwabantu abasuke bengabahlanganyeli ocwaningweni. Lolu hlobo locwaningo lubheka izenzo, izimvo, imicabango, kanye nokadebona wabahlanganyeli njengezingxenye ezibalulekile ekuvezeni imiphumela yocwaningo.

OHesse-Biber benoLeavy (2011) bona bachaza ucwaningo lobunjalo botho njengocwaningo oluhlose ukuveza umqondo kanye nomsuka wesenzeko esithile esithinta abantu abathile noma umphakathi othile. Ngamanye amazwi lolu hlobo locwaningo lubheka umsuka nezimpande zesenzeko, kanye nezizathu zokuthi kungani uhlobo oluthile lwesenzeko lwenzeka ngendlela olwenzeka ngayo (Van Manen, 2007). Lolu cwano belungaxilile ekubuyekezeni imiphumela etholakale lapho kwenziwa ama-eksperimenti emkhakheni wezesayensi. Futhi

belungaxilile ekucubunguleni ubudlelwano phakathi kwezinto ezimbili ezingafani (*variables*) njengoba lwenza njalo ucwaningo lobungako botho. Kodwa imiphumela yalolu cwaningo iqhamuke emibonweni yabafundi abasaqeqeshwa kanye nakulokho engikuphawulile ngesikhathi ngibukela laba bafundi befundisa.

Ucwaningo lobunjalo botho lufanelekile kulolu cwaningo ngoba ulwazi okutholakele lube seluhlaziywa, kwabhekwa nomsuka nembangela yemiphumela etholakele ngokulungela kwabafundi abasaqeqeshwa (noma kothisha abasaqeqeshwa) ukuyofundisa izibalo ngezilimi zomdabu. UCresswell (2009) uthi cwaningo lobunjalo botho wucwaningo oluhlose kakhulukazi ukuthola isizathu sokwenzeka kwesenzeko esithile. Eqhubeka uCresswell (2009) uthi inhloso yalolu hlobo locwaningo ukusiza ekutholeni isisombululo enkingeni ethile kusetshenziswa abantu ababandakanyekayo kuleso senzeko noma kuleyo nkinga ebhekwa wucwaningo. UCresswell (2009) lokho ukubeka kanje:

Qualitative Research is primarily exploratory research. It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research.

(Cresswell, 2009, p.25)

Ngamafuphi, uCresswell (2009) uthi ucwaningo lobunjalo botho lusetshenziselwa ukuthola umnyombo, izizathu kanye nemibono ecashile. Eqhubeka uCresswell (2009) uthi lolu hlobo locwaningo lwelekelela ngokuthuthukisa imibono, okungenzeka mhlawumbe isetshenziswe ocwaningweni lobungako botho.

UCresswell (2009) ubuye aveze ukuthi abanye abacwaningi abagxile ocwaningweni lobunjalo botho bathi lolu hlobo locwaningo lukwazi ukusiza ocwaningayo ngalokho akucwaningayo, luphinde futhi lulekelele, ngandlela thize, abahlanganyeli ocwaningweni. Inhloso yomcwaningi kusuke kuwukubheka ukuthi abahlanganyeli ocwaningweni bakubuka futhi bakuhumusha kanjani lokho okubazungezile, nokwenzeka kubona. Ngakolunye uhlangothi, imiphumela yalolu hlobo locwaningo iyaye isize ekunikezeni isisombululo ngenhlalo yabantu. Ngakho-ke lolu hlobo locwaningo lusiza nxazombili. Eqhubeka enaba kabanzi ngocwaningo lobunjalo botho, uCresswell (2009) uthi:

People often describe qualitative research as the attempt to collect rich descriptive data in respect of a particular phenomenon or context with the intention of developing an understanding of what is being observed or studied. It therefore focuses on how

individuals and groups and understand the world and construct meaning out of their experiences.

(Creswell, 2009, p.50)

Okushiwo nguCresswell (2009) esicaphunweni esingenhla kuchaza ukuthi isikhathi esiningi ucwaningo lobunjalo botho luvame ukuchazwa njengomzamo wokuqoqa ulwazi olujiyile ngesenzeko, noma ngesimo esithile. Ngakho-ke, lolu hlobo locwaningo lugxila kakhulu ekuhloleni ukuthi ngabe abantu abathile bakuqonda kanjani okwenzeka emhlabeni abawakhele. Futhi lolu hlobo locwaningo inhloso yalo enqala ukulekelela abahlanganyeli ukuthi bahumushe baphinde bahlaziye okwenzekalayo, bekususela ezimweni abadlule kuzona. Okushiwo uCresswell (2009) esicaphunweni esingenhla kuyahambisana nalolu cwaningo. Kulolu cwaningo bengihlose ukuthola ulwazi olujiyile ngokulungela kwabafundi abasaqeqeshelwa ukuyofundisa izibalo ngolimi lwesiZulu. Ngakolunye uhlangothi, lolu cwaningo beluhlose nokubheka ukuthi ngabe abahlanganyeli bakuqonda kanjani ukubaluleka kokusebenzisa ulimi lwesiZulu lapho befundisa izibalo. Kuye kwafuneka nokuthi ngibabuze imibuzo futhi ngibheke nendlela abaphendula ngayo ukuze ngizothola ulwazi olujiyile ngendlela abakuqonda ngayo ukubaluleka kokufundisa izibalo ngolimi lwesiZulu.

OLincoln benoGuba (1985) baveza ukuthi ocwaningweni lobunjalo botho ayikho into eyenzekayo eyaye ithathwe njengengasho lutho, nengenamsebenzi. Ngaleso sizathu, oLincoln noGuba (1985) bathi ucwaningo lobunjalo botho kufanele luthathwe njengolubalulekile, noluletha inguquko ebantwini ngandlela thize. Laba bacwaningi baphinde bagcizelele ukuthi ocwaningweni lobunjalo botho akufanele neze umcwaningi achaze okuthile engakakucwaningi. Noma kulolu cwaningo izingxoxo nabahlanganyeli bocwaningo kanye nokubukela abafundi abasaqeqeshelwa ukufundisa befundisa (*observations*) kube izindlela ezibalulekile ekuqoqeni ulwazi, nokho akuzange kubekhona ukwengeza nokunciphisa engikwenzile ngoba lonke ulwazi oluzuzwa kulolu hlobo locwaningo luthathwa njengolusemqoka. Konke okuwulwazi oluqoqwe kubahlanganyeli kuye kwabekwa eqhulwini, kwathathwa njengolwazi oluchaza into ethile.

Kubalulekile ukuveza ukuthi ngokukaTerreblanche enabanye (2006, p.47), ucwaningo lobunjalo botho luyamvumela umcwaningi ukuthi akhethe indikimba eyodwa azocwaninga ngayo, ayicwaninge ngokujulile, bese akha ezinye izindikimba eziwumxhantela. Okuyiyona ndikimba engiyicwaninge ngokujulile wumbuzo omqoka walolu cwaningo othi: **Ngabe abafundi abaqeqeshelwa ukufundisa emabangeni ayisisekelo bakulungele yini**

**ukuyofundisa izibalo ngolimi lwesiZulu?** Ngibe sengakha nemibuzo yocwaningo, ebe wumxhantela ovele embuzweni omqoka. UYin (1994) yena uma echaza ucwaningo lobunjalo botho ubeka kanjena:

Qualitative methods are particularly well suited for examining instances of self-regulated learning as event because they involve a rich, holistic description, and do not make assumptions, intra- individual stability, and are oriented to revealing complexity. (Yin, 1994, p.105)

Amazwi kaYin (1994) achaza ukuthi ucwaningo lobunjalo botho lukulungele ukuhlolisisa izimo nezenzeko ngoba luthi uma seluhlolile, bese luphuma nolwazi olungaqageli, kodwa olushaya emhlozeni nolwambula amaqiniso ngokwenzekayo. Ngokusebenzisa indlela yocwaningo lobunjalo botho, bengihlose ukwambula amaqiniso nolwazi obelufihlakele ngokufundiswa kwezibalo ngezilimi zomdabu, nangokulungela kwabafundi abasaqeqeshwa ukufundisa izibalo ngesiZulu.

Isizathu sokukhetha ukusebenzisa indlela yocwaningo lobunjalo botho ukuthi lolu cwaningo luhlose ukuhlola isimo esithile, okungukulungela kwabafundi abasaqeqeshelwa ukuyofundisa izibalo ngezilimi zomdabu. Ulwazi olutholakele luhlaziywe ngamazwi abhaliwe ngoba lolu cwaningo alugxilile ekutholeni isibalo esithile njengasocwaningweni lobungako botho. Okutholakele kuvele ngokuthi ngihlaziye futhi ngihlolisise izimpendulo eziqhamuke kwinhlolovo esakuhleleka, ekuhlaziyweni kwamadokhumenti, kanye nasekubukeni indlela abafundi abasaqeqeshelwa ukufundisa abafundisa ngayo.

Kuyaphawuleka ukuthi ucwaningo lobunjalo botho lwezindlelakwenzeka (*processes*) zokuhumusha, ezihlose ikakhulukazi ukuthola izincazelo ngesenzeko esithile kanye nendlela ocwaningayo ahumusha ngayo lezo zincazelo (Hoepfl, 1997, p.4). USherman benoWebb (1988) bachaza ucwaningo lobunjalo botho njengocwaningo olwenziwa lapho abahlanganyeli besesimweni abaphila kuso nabahlangabezana naso imihla namalanga. USherman benoWebb (1988) babeka kanjena:

Qualitative research approaches are considered relevant, as they reveal situations “lived”, “felt” or “undergone”. Qualitative research involved the use of qualitative data, interviews, questionnaires, documents, text, and participation of observation data, to understand and to explain social phenomena. Examples of qualitative methods include action research, case study research and ethnography. (Sherman noWebb, 1988, p.256)

Amazwi oSherman noWebb (1998) achaza ukuthi ucwaningo lobunjalo botho luyanemba njengalokhu lwembula izimo abantu abaphila ngaphansi kwazo, abazizwele bona ngokwabo

ukwenzeka kwazo, kanye nabadlula kuzona. Laba bacwaningi bathi yingakho kulolu hlobo locwaningo kuvame ukusebenzisa izinhlolovo, imibhalo, kanye nocwaningo oluhlolisisa izenzo zabahlanganyeli. Ngibone lolu hlobo locwaningo lungolushaya emhloeni, futhi lungalekelela ekuvundululeni ulwazi nasekufezekiseni izinhlosongqangi zalolu cwaningo. Okunye okubalulekile ngocwaningo lobunjalo botho ukuthi luyakwazi ukuthola ulwazi olunothile ngesimo kanye nokwembula izimo ezicashile noma ezifihlakele. Ngale ndlela benginethemba lokuthi lolu cwaningo luzoveza obala lokhu obekungaziwa mayelana nokulungela kothisha abasaqeqeshelwa ukuyofundisa izibalo ngezilimi zomdabu.

### **3.5 INDAWO YOCWANINGO**

Lolu cwaningo lwenziwe kwesinye sezikhungo zemfundo ephakeme esisesifundazweni saKwaZulu-Natali. Othisha abaqeqeshwa kulesi sikhungo abawo wonke amabanga, kusukela emabangeni ayisisekelo kuya emabangeni asesiGabeni sokuMukezela kuze kugcine emabangeni athe thuthu. Njengoba abahlanganyeli kulolu cwaningo bekungabafundi abaqeqeshelwa ukuyofundisa amabanga aphansi nje, lesi sikhungo siye saqokwa njengendawo yocwaningo.

Esinye sezizathu zokuqokwa kwalesi sikhungo ukuthi inqubomgomo yolimi kulesi sikhungo incoma ukuba kusetshenziswe ulimi lwesiZulu nolwesiNgisi lapho kufundwa, kufundiswa, noma kwenziwa ucwaningo (Vithal, 2016). Kodwa, njengoba enye yezindlela zokuqoqa ulwazi bekungukubukela abafundi abaqeqeshelwa kulesi sikhungo ngesikhathi bezilolongela ukuyofundisa nje, lolu cwaningo luphinde lwaqhutshelwa ezikoleni ezisemalokishini akhele idolobha lalapho isikhungo sikhona. Kukhethwe izikole ezisemalokishini ngoba amalokishi akhele leli dolobha anezakhamuzi eziningi ezikhuluma ulimi lwesiZulu njengolimi lwasekhaya. Izikole ezikhethiwe ezikukhwantili yesine. Lolu hlobo lwezikole lukhethwe ngoba isikhathi esiningi abafundi abafunda kulolu hlobo lwezikole ngabebala elimnyama. Njengoba lezi zikole zikwelinye lamadolobha amakhulu esifundazweni, abafundi abafunda kuzona iningi labo likhuluma ulimi lwesiZulu njengolimi lwasekhaya.

### **3.6 UKUQOKWA KWABAHLANGANYELI BOCWANINGO**

Ngiqoke indlela yokukhethwa kwabahlanganyeli bocwaningo enenhloso. UYin (2011) uncoma lolu hlobo lokukhethwa kwabahlanganyeli ngokuthi luwuhlobo lokukhetha abahlanganyeli bocwaningo olugxile kuphela kubahlanganyeli abambandakanyekayo esimweni esisuke

sicwaningwa, nabanganikeza futhi nolwazi olushaya emhloeni. Njengoba bengihlose ukucwaninga ngokulungela kwabafundi abaqeqeshelwa ukuyofundisa emabangeni aphantsi, ngiye ngakhetha ukusebenzisa lolu hlobo lokukhetha abahlanganyeli ngoba bengihlose ukuthola ulwazi olungafuniseli, futhi olubandakanya bona kanye abahlanganyeli engihlose bambandakanyeke. Bayisihlanu abafundi abaqeqeshelwa ukuyofundisa engibakhethethe ukuba babe ngabahlanganyeli kulolu cwaningo. Kulabo abayisihlanu, babe bathathu abesifazane, baba babili abesilisa. Ngibone kungcono ukuxuba bobubili ubulili, yikhona nemiphumela ingezukuba ngecheme ngokobulili. Bonke laba bahlanganyeli bebeqeqeshelwa ukuyofundisa izibalo emabangeni aphantsi.

Bobahlanu abahlanganyeli engibakhethethile kulolu cwaningo bekungabakhuluma ulimi lwesiZulu njengolimi lwasekhaya. Isizathu sokuthi ngikhethethe abakhuluma ulimi lwesiZulu njengolimi lwasekhaya ukuthi inqubomgomo *i-Language in Education Policy* yowe-1997 yamabanga ayisisekelo ithi uthisha wezibalo kula mabanga kufanele afundise ngolimi lwakhe lwasekhaya, oluphinde futhi lube ngulimi lwabafundi lwasekhaya. Ngakho-ke, njengoba ngikade ngibheka ukufundiswa kwezibalo ngolimi lwesiZulu, kudingeke ukuthi ngikhethethe abahlanganyeli abakhuluma lolu limi njengolimi lwasekhaya.

Bonke abahlanganyeli kulolu cwaningo bekungabokudabuka esifundazweni saKwaZulu-Natali. Isizathu sokuthi ngikhethethe abangabokudabuka esifundazweni saKwaZulu-Natali ukuthi izakhamuzi eziningi kulesi sifundazwe zikhuluma ulimi lwesiZulu njengolimi lwasekhaya. Kanjalo futhi ezikoleni eziningi kulesi sifundazwe kunenani labafundi elikhuluma ulimi lwesiZulu. Ngaleso sizathu, labo bafundi kulindeleke bafundiswe izibalo ngolimi lwesiZulu emabangeni aphantsi.

### **3.7 IZINDLELA ZOKUQOQA ULWAZI**

#### **3.7.1 Indlela yenhlololwazi esakuhleleka**

Enye yezingxenye ezimqoka lapho kwenziwa ucwaningo ukuqoqwa kolwazi kubahlanganyeli bocwaningo. Izindlela ezilandelwayo ukuqoqa ulwazi kubahlanganyeli bocwaningo kumele kube ngezihambisana nohlobo locwaningo olwenziwayo. Njengoba lolu cwaningo lusebenzise ipharadayimu yomhumusho nje, enye yezindlela engikhethethe ukuzisebenzisa ukuqoqa ulwazi yinhlololwazi esakuhleleka. Le ndlela uRashej (2011) uyibuka njengendlela eyenza ubudlelwano phakathi komcwaningi nabahlanganyeli. URajesh (2011) uphinde ancome le ndlela yokuqoqa ulwazi ngokuthi ivulelekile, inikeza abahlanganyeli ithuba lokuveza izimvo

zabo ngendlela abafisa ukuziveza ngayo. Enaba ngale ndlela yokuqoqa ulwazi, uNaidoo (2011) uthi umcwaningi usuke enayo imibuzo ayihlelile, kodwa futhi angachezuka kuleyo mibuzo uma ehlose ukuthola ulwazi oludephile. Noma bengikade ngiyihlelile imibuzo yenhlololwazi esakuhleleka, kodwa ngibuye ngenezela ngemibuzo yokulandelela (*probing questions*) ngenhloso yokuzuzwa ulwazi olunomsoco nodephile.

### **3.7.2 Ukuhlaziywa kwamadokhumenti**

Abacwaningi abangoCarbin noStrauss (2008) bathi ukuhlaziya amadokhumenti kuwukubuyekeza, ukuhlola kanye nokuninga ngolwazi olushicilelwe ngabadidiyeli bemiqingo ethile. Beqhubeka laba bacwaningi bathi lolo lwazi kungenzeka lube ngolubhalwe ngomshini lwase luyagaywa lwaba ngamaphepha aphahekayo, noma futhi lube ngolungagayiwe, kodwa olutholakala kwi-inthanethi nakumakhompuyutha (*soft-copies*). U-Aktsen (1997) yena uthi ukuhlaziya amadokhumenti kungukubheka ngeso elinzulu izithombe noma imibhalo ekumadokhumenti athile ngenhloso yokugxeka ngokwakhayo, noma yokuncoma okushicilelwe kuwona. Ukuhlaziya amadokhumenti akuvamile ukusetshenziswa kube yiyona ndlela kuphela yokuqoqa ulwazi, kodwa umcwaningi uyaye asebenzise le ndlela njengesengezelo sokuqinisa ulwazi azoluthola nangezinye izindlela zokuqoqa ulwazi (Hansen, 1997). Kulolu cwaningo ngizohlaziya amadokhumenti ukuze ngiqhathanise, ngiqinise ulwazi engizobe ngiluthole nangezinye izindlela zokuqoqa ulwazi. Ngikhethe ukuhlanganisa le ndlela yokuhlaziya amadokhumenti nezinye izindlela ezimbili, okuyindlela yenhlololwazi esakuhleleka, kanye nokubuka abahlanganyeli befundisa. Lokho kuyosiza ekuqiniseni ulwazi olutholakele. Ngihlaziye izincwadi zabafundi, ezothisha kanye namafayela othisha esifundo. Ngiphinde futhi ngahlaziya amadokhumenti avela kuhulumeni, kanye nemiqingo yezinqubomgomo, okuyilezi: *Inqubomgomo yohlelo lwezifundo nokuhlola, inqubomgomo i-Language in Education Policy kanye nenqubomgomo i-Language in Education Policy for Higher Education Institutions*.

### **3.7.3 Ukubukela abahlanganyeli befundisa (*observation of lessons*)**

Ukubukela okwenziwa ngabahlanganyeli bocwaningo ngenye yezindlela ezinconywa abacwaninga ngobunjalo botho. Umcwaningi osebenzisa le ndlela uyaye abheke indlela abahlanganyeli bocwaningo abenza ngayo izinto kanye nendlela abaziphatha ngayo uma

bebhekene nezimo ezithile (Niewehuis, 2008, p.83-84). UNiewehuis (2008) uqhubeka athi uma umcwaningi esebuke indlela abahlanganyeli abenza ngayo nabaziphatha ngayo ube esefuna umsuka nesizathu sokuziphatha kwabo. Kulolu cwano ngibukele obekwenzeka emagunjini okufundela ngesikhathi abafundi abasaqeqeshelwa ukuyofundisa befundisa izibalo ngolimi lwesiZulu. Angibambanga qhaza kulokho okwabe kwenziwa ngabahlanganyeli, kodwa inhloso bekuwukubuka nje, bese ngihlaziya indlela abafundisa ngayo, kanye nolimi abalusebenzisayo ngesikhathi befundisa. Enye inhloso yokubukela abahlanganyeli befundisa bekuwukuhlola ukuthi ngabe bukhona yini ubudlelwano phakathi kwalokho abakusho ngesikhathi ngibabuza imibuzo kwihlobo lwazi esakuhleleka kanye nendlela abafundisa ngayo.

### **3.8 UKUHLAZIYWA KOLWAZI OLUTHOLAKELE**

Ukuhlaziywa kolwazi olutholakele kuyiyona ndlela yokuphendula imibuzongqangi yocwano, nokwenza nokusonga ngokutholakele. Njengoba lolu kuwucwano olulandela indlela yobunjalo botho nje, nangesikhathi sengihlaziya okutholakele ngisebenzise izindlela zokuhlaziya ucwano lobunjalo botho. Umcwaningi ongunoti wohlobo locwano olulandela indlela yobunjalo botho, uTaylor (2010) uthi kulolu hlobo locwano, umcwaningi usuke engazi naye ukuthi imibuzongqangi yocwano izophenduleka kanjani. Ngaphezu kwalokho, umcwaningi usuke engaqondile ukuqinisekisa ukukholakala kwesitatimende (*hypothesis*) esithile. Ngakho, ucwano olulandela indlela yobunjalo botho luqale luzame ukuphendula imibuzongqangi yocwano ngokuqoqa ulwazi. Ulwazi olusuke seluqoqiwe, luyahlaziywa, lucutshungulwe, bese kufinyelelwa esiphethweni ngokuthi kuphendulwe imibuzongqangi yocwano. Ngamanye amazwi, ucwano luqale lube nolwazi olwendlalekile. Lolo lwazi olwendlalekile, luyancishiswa, ukuze kuphenduleke imibuzongqangi yocwano (*inductive data analysis*). UTaylor (2010) unaba athi ucwano olulandela indlela yobunjalo botho luhlaziywa ngokwezindikimba (*thematic Analysis*). Izindikimba kungaba yizimpundo ezithinta imibuzongqangi yocwano, noma kube izitatimende, kodwa eziphendula imibuzongqangi yocwano (Cresswell, 2012). Kodwa uCresswell (2012) uthi ngaphambi kokuthi ucwano lufinyelele esigabeni sokuthi lwehlukaniswe ngokwezindikimba, okokuqala luyaye lwehlukaniswe lube maqembuqembu (*coding*). Iqembu neqembu lisuke limele uhlobo oluthile olwazi (Cresswell, 2012). Emva kwalawo maqembu, kube sekubhekwa amaphethini agqamayo, alokhu eba yimvama emaqenjini ahlukehlukeni (Niewehuis, 2008). Lawo maphethini abe esholela umcwaningi esigabeni sokuthi abumbe izindikimba. Nakhona kulolu cwano ngiqale ngaqoqa ulwazi. Emva kwalokho, ngibe sengilwehlukaniswa (ulwazi) ngokwamaqembu, ngaqaphela

namaphethini avelayo. Ulwazi olugqame kulawo maphethini luholele ekutheni ngibumbe izindikimba. Lezo zindikimba akubanga yimibuzongqangi yocwaningo, kodwa kube yizitatimende eziyizimpendulo zemibuzongqangi yocwaningo.

### **3.9 UKUKHOLAKALA KOCWANINGO**

Ukuqinisekisa ukuthi lolu ucwaningo luyakhokakala, ngisebenzise izindlela ezintathu zokuqoqa ulwazi engizibalule ngenhla (*triangulation*). UCresswell (2011) uthi ukusebenzisa izindlela ezintathu nangaphezulu ekuqoqeni ulwazi kuqinisekisa ukuthi ucwaningo lungolukholakalayo, ngoba umcwaningi uyaye abheke izimpendulo ezifanayo noma imiphumela efanayo etholakale kuzona zontathu lezo zindlela ezisetshenziwe.

### **3.10 INKAMBISO ELUNGILEYO YOCWANINGO (*RESEARCH ETHICS*)**

Ngaphambi kokuthi ngiqale ukuqoqa ulwazi, ngiye ngalandela imikhondo nemigudu yenkambiso elungileyo njengalokhu imiswe isikhungo engisikhethe saba yindawo yocwaningo. Okokuqala, ngiqinisekisile ukuthi ngifaka isicelo sokwenza ucwaningo. Njengoba ngikade ngenza ucwaningo kubafundi besikhungo semfundo ephakeme nje, ngifake nesicelo sokuthola imvume esikhungweni abaqeqeshelwa kusona (*Gatekeepers letter*). Ngiphinde ngachasisela abahlanganyeli ngamalungelo abo, okuyilawa:

- Abahlanganyeli bazibandakanya ocwaningweni ngaphandle kwempoqo.
- Konke okuphathelele nocwaningo kuzoba ngukuthanda nokuvuma kwabahlanganyeli.
- Abahlanganyeli banelungelo lokuzikhethela ukuba yingxenye yocwaningo.
- Ukuqinisekisa ukuthi abahlanganyeli banikezwa ilungelo lokuthi bahoxe ocwaningweni lapho sebefisa ukuhoxa.
- Ulwazi olutholakele luyosetshenziselwa ucwaningo kuphela.
- Ukuqinisekisa ukuthi amagama abahlanganyeli, kanye negama lesikhungo abaqeqeshelwa kuso kuzoba yimfihlo.

Njengenywe yemikhondo yenkambiso elungileyo, ngiphinde ngaqikelela ukuthi ulwazi olutholakele lugcinwa, futhi luhluthulelwa ekhabethe eliphephile. Kuyothi emva kweminyaka emihlanu, bese lushabalaliswa.

### **3.11 IMINGCELE NEZINGQINAMBA ZOCWANINGO**

Uma kwenziwa ucwaningo lwanoma yiluphi uhlobo, kuyenzeka kube khona izingqinamba kanye nezithiyo ucwaningo oluhlangabezana nazo. Ingingqinamba yalolu cwaningo wukuthi belunenani elincane labahlanganyeli. Njengoba lolu cwaningo belunabahlanganyeli abahlanu kuphela, okutholakale kulolu cwaningo ngeke kuthathwe ngokuthi bekungatholakala nasocwaningweni olunabahlanganyeli abayinani elikhulu. Kuphela nje, okutholakele kuzothathwa ngokuthi kungatholakala kuphela ocwaningweni olunenani labahlanganyeli elifuze leli.

Enye ingqinamba yalolu cwaningo kube wukuthi, ulwazi beluqoqwa ezikoleni, lapho abahlanganyeli bebenza khona izifundo zokuzilolongela ukuyofundisa. Ezikoleni kuyenzeka kube neziteleka, noma kube nodlame oluthile, obelungavimba umcwaningi ukuthi aqhube ucwaningo. Ukuze kugwemeke lezi zingqinamba, ngiye ngaba nabahlanganyeli abaseceleni (ngaphezu kwalaba abahlanu), ebengibakhethele ukuthi uma kwenzeka ngiba nengqinamba ezikoleni laba abahlanu abazilolongela kuzona, ngikwazi ukuqoqa ulwazi ezikoleni zalaba abanye abaseceleni. Nokho, abahlanganyeli abaseceleni ngigcine ngingabasebenzisanga ngoba alukho udlame noma iziteleka engihlangabezane nazo ezikoleni lapho abahlanganyeli abahlanu abebenza khona izifundo zokuzilolongela ukuyofundisa

Ezinye izikole zinombandela wokungavumeli abacwaningi bangene, baqoqe ulwazi. Ukugwema le ngqinamba, ngifake izicelo zokwenza ucwaningo kothishanhloko balezi zikole. Kulezo zicelo, ngichasise konke okumayelana nocwaningo, ngagcizelela nokuthi ucwaningo oluzokwenziwa:

- Ngeke lube nomthelela omubi kubafundi, kothisha noma kwingqalasizinda yesikole.
- Luzoba namagalelo kwezemfundo, lulethe nezinguquko kwizinqubomgomo.
- Inyuvesi iyazi ngalo, futhi ikugunyazile ukuthi lwenziwe.

Kubalulekile ukuthi ucwaningo lungendlaleki, lube nemiklamo nemingcele olubekelwe ukugcina kuyona. Nakulolu cwaningo, ibe khona imingcele. Ucwaningo belubheka kuphela ukufundiswa kwezibalo, belungabheki nokufundiswa kwezinye izifundo ezifundwa esiGabeni esiyisiSekelo. Futhi lolu cwaningo beluhlola kuphela ukufundiswa kwezibalo emabangeni ayisisekelo, belungeqeli emabangeni akwezinye izigaba ngaphandle kwesiGaba esiyisiSekelo. Kanjalo futhi belubuka ukusetshenziswa kolimi lwendabuko okuyisizulu kuphela kwazise belugxile esifundazweni saKwaZulu-Natali.

### **3.12 UKUVIVINYA AMATHULUZI OCWANINGO (*PILOTING RESEARCH INSTRUMENTS*)**

Ukuze ucwaningo lube yimpumelelo, kuye kudingeke umcwaningi abe nekhono elinzulu lokusebenzisa amathuluzi okuqoqa nokuhlaziya ulwazi locwaningo. Ukuvivinya amathuluzi ocwaningo kwelekelela umcwaningi ukuthi ahlole ukusebenziseka kwezindlela zokuqoqa ulwazi. Kulolu cwaningo, ukusebenza kwezindlela zokuqoqa ulwazi kwavivinywa ngokuthi kuqale kubuzwe othisha asebesensimini yokufundisa imibuzo yenhlolovo esakuhleleka. Kwaphinde kwahlolwa futhi nendlela abaphendula ngayo ukuthi iphendula imibuzo yocwaningo yini. Ngaqale ngavivinya imibuzo yenhlolovo esakuhleleka ngokuthi ngiyibuze othisha (asebesensimini yokufundisa) basesikoleni esithile samabanga aphansi. Othisha asebesensimini yokufundisa ngababuza ngokulungela kwabo ukufundisa izibalo ngolimi lwesiZulu. Lokhu ngangikwenzela ukuhlola ukuthi ngabe imibuzo yenhlolovo esakuhleleka iyophenduleka yini lapho seyibhekiswa kubafundi abaqeqeshelwa ukufundisa izibalo emabangeni aphansi, ababeyingxenye yocwaningo. Ukuvivinya amathuluzi ocwaningo kwangilekelela ngoba ngathola ithuba lokuguqula eminye yemibuzo ngayimisa ngenye indlela ngoba indlela engangiyimise ngayo ekuqaleni yabonakala ingabi ngengitholela ulwazi olwanele kothisha.

### **3.13 IQOQA LESAHLUKO**

Kulesi sahluko ngihlaziye izindlela zokuqhuba ucwaningo ezisetshenzisiwe. Ngiphinde ngabheka indlela yobunjalo botho njengendlela esemqoka yokuqoqa ulwazi olucubungulwe kulo msebenzi. Ngibheke nepharadayimu esetshenzisiwe kulolu cwaningo. Ngiphinde ngakhuluma ngezindlela ezisetshenzisiwe ukuqoqa ulwazi, kanye nomumo wocwaningo. Ngidingide izindlela zokuhlaziya ulwazi olutholakele, ngaphinde ngadalula nezingqinamba nemiklamo yalolu cwaningo. Isahluko siveze nokukholakala kolwazi olutholakele, kanye nokuthi ulwazi olutholakele luyogcinwa luphinde lushabalaliswe kanjani. Ngibuke nenkambiso elungileyo elandelwe ngesikhathi kuqhutshwa ucwaningo. Ngasemaphethelweni ngibheke imizamo eyenziwe ukuvivinya amathuluzi ocwaningo.

# Isahluko 4

---

## UKUHLAZIYWA KOLWAZI OLUTHOLAKELE

### 4.1. ISINGENISO

Esahlukweni esedlule ngikhulume kabanzi ngezindlela zokuqhuba ucwaningo ezisetshenziswe kulo msebenzi. Ngiphinde ngadingida izindlela zokuqoqa ulwazi ezilandela ubunjalo botho. Ukuqokwa kwenjulalwazi kaVygotsky yowe-1978 kanye nohlaka lwemicabango njengohlaka lwenjulalwazi yokuhlaziya kulolu cwaningo ngezinye zezihloko engikhulume ngazo esahlukweni esandulela lesi. Inhloso yalesi sahluko ngukwethula nokuhlaziya ulwazi olutholakale ngesikhathi ngiphendula umbuzo omqoka walolu cwaningo othi: Ngabe abafundi abaqeqeshelwa ukufundisa emabangeni ayisisekelo bakulungele yini ukuyofundisa izibalo ngolimi lwesiZulu? Lo mbuzo omqoka wocwaningo ngiwuphendule ngokuthi ngihlaziye ulwazi engiluthole kubahlanganyeli bocwaningo ngenkathi ngizama ukuphendula imibuzongqangi yocwaningo. Njengoba bese ngike ngaphawula, izindlela zokuqoqa ulwazi engizisebenzisile kulolu cwaningo yilezi: Indlela yenhlololwazi esakuhleleka ebimbandakanya abahlanganyeli bocwaningo, ukubukela abafundi abaqeqeshelwa ukufundisa amabanga aphantsi ngesikhathi benza izifundo zokuzilongela ukufundisa (*teaching practice*) kanye nokuhlaziya amadokhumenti. Nansi imibuzongqangi ebingumgogodla walolu cwaningo esetshenziswe ukuthola ulwazi olungumongo walolu cwaningo:

- ✓ Ngabe abafundi abaqeqeshelwa ukuyofundisa bakuqonda kanjani ukubaluleka kokufundiswa kwezibalo ngolimi lwesiZulu emabangeni ayisisekelo?
- ✓ Ngabe abafundi abasaqeqeshelwa ukuyofundisa amabanga ayisisekelo bakulungele kangakanani ukuyofundisa izibalo besebenzisa isiZulu njengolimi lokufundisa?
- ✓ Kungani laba bafundi bekulungele/bengakulungele ukufundisa izibalo besebenzisa ulimi lwesiZulu?

Ukuhlaziya kolwazi olutholakele kube sekusekwa ngohlaka lwenjulalwazi kaVygotsky yowe- 1978 eyaziwa nge-*Socio Cultural Theory of Learning* (engenabe kabanzi ngayo esahlukweni sesithathu). Ngenkathi ngihlaziya ulwazi engiluthole kubahlanganyeli

bocwaningo ngibuye ngasebenzisa la makhonsephehi alandelayo ukweseka injulalwazi kaVygotsky yowe-1978, esetshenziswe njengensizakuhlaziya: indlela yokufundisa izibalo, ulimi lokufundisa nokufunda, kanye nolwazi lokubala (inyumerasi).

Ngesikhathi ngihlolisisa ulwazi olutholakele kube sekuvela ngokugqamile izindikimba ezine, okuyilezi ezilandelayo:

- Ukungaqondi kahle ukubaluleka kokuba abafundi bamabanga ayisisekelo bafundiswe izibalo ngolimi lwabo lwasekhaya (okuyisiZulu).
- Ukungaqeqesheki ngokwanele kwabafundi bezibalo abasaqeqeshwa ukufundisa izibalo ngolimi lwesiZulu emabangeni ayisisekelo.
- Ukushoda kwezinsizakufundisa kanjalo nezinsizakufunda ezibhalwe ngolimi lwesiZulu.
- Ulwazi lwamatemu ezibalo ngolimi lwesiZulu (*metalanguage*) olungekho ezingeni

Nakuba kungenzeka kuzwakale sengathi lezi zindikimba zizimela ngayinye, iqiniso wukuthi kunokuxhumana nobudlelwano obunzulu phakathi kwalezi zindikimba, njengalokhu zozine zenza umsebenzi owodwa, okuwukuphendula umbuzo omqoka walolu cwaningo.

Njengoba lolu cwaningo lungolohlobo lobunjalo botho, ngesikhathi ngihlaziya bengilandela imigudu nezindlela zokuhlaziya ucwaningo lobunjalo botho. USeidel (1998) uthi uma kuhlaziywa ucwaningo lobunjalo botho, kunezigaba ezintathu okudingeka umcwaningi adlule kuzona, futhi zontathu lezi zigaba zinokuxhumana. Ngamanye amazwi asikho isigaba esingancikile kwesinye. Uma ezigagula ngokulandelana kwazo uSeidel (1998) lezi zigaba uziveza kanje: Isigaba sokuqoqa ulwazi, isigaba sokuhlela ngononina nokuhlaziya ulwazi bese kuba yisigaba sokwethula okutholakele. Njengoba lezi zigaba zinokuxhumana nje, akulula ukuba umcwaningi eke isigaba esithile aye kwesinye ngoba zonke zihlobene. Umdwebo olandelayo ukhanyisa ngokuxhumana kwalezi zigaba.

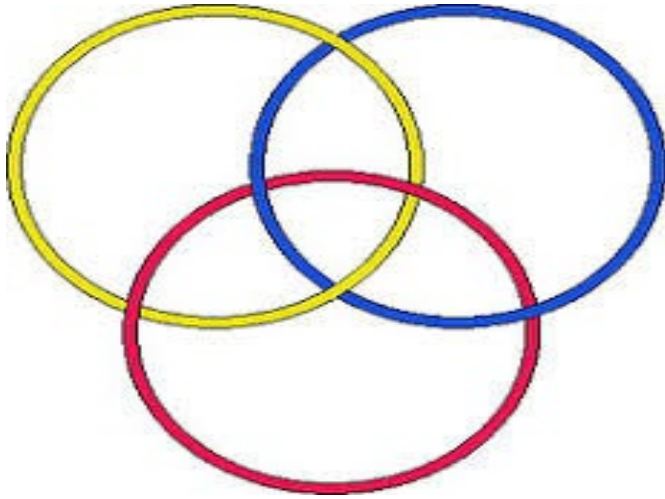


Figure 4 Umbala ophuzi uchaza isigaba sokuqoqwa kolwazi, umbala oluhlaza sasibhakabhaka uchaza ukuhlaziywa kolwazi bese umbala obomvu wona uchaza ukwethulwa kolwazi olutholakele.

Figure 4: Isigaba sokuhlaziya ulwazi (Seidel, 1998, p.140)

Zontathu lezi zigaba ezishiwo nguSeidel (1998) ngizilandelile kulolu cwaningo. Ngiqale ngokuqoqa ulwazi ngisebenzisa izindlela zokuqoqa ulwazi njengoba zibalulwe ngenhla. Esigabeni esingezansi yilapho ngizohlukanisa khona ulwazi olutholakele ngokwezindikimba, ngiluhlaziye, bese ngiphinde ngilwethula. Ngamafuphi, zontathu lezi zigaba ezishiwo ngenhla ngizilandelile kulolu cwaningo.

Esigabeni ngasinye kulezi ezintathu engizigagule ngenhla, kunemigudu elandelwayo ukuze ulwazi olwethulwayo lube nobuqiniso. Angiqale ngemigudu elandelwa esigabeni sokuqala. Umcwani nguWertz (1983) uthi ocwani ngweni lobunjalo botho, kusemqoka ukusebenzisa izindlela zokuqoqa ulwazi ezihambisana ncamashi nepharadayimu ekhethwe ngumcwani. OCresswell noNieuwenhuis (2008) nabo baqinisa okushiwo nguWertz (1983) ngokuthi, ocwani ngweni lobunjalo botho kufanele kuqikelewe ukuthi izindlela zokuqoqa ulwazi, umumo wocwani, kanye nepharadayimu kokuthathu kuyahambisana futhi kungena khaxa okunye kokunye. Izindlela zokuqoqa ulwazi engizikhethile ngiye ngaqikelela ukuthi zihambisana nepharadayimu yomhumusho. Futhi nayo ipharadayimu yomhumusho, ngiye ngaqikelela ukuthi ngiyikhetha ngoba ihambisana nalokho engifuna ukukucwani. Ocwani ngweni lomhumusho, abahlanganyeli baba yingxenyeye yocwani, futhi izimvo, izenzo, amazwi kanye nemibono yabo kubekwa eqhulwini. Umcwani uma esebenzisa ipharadayimu yomhumusho, usuke eqonde ukuthola ukuthi ngabe yini le eyenza abahlanganyeli baziphathe futhi babuke izinto ngeso ababuka ngalo (Betram, 2009). Yingakho kulolu cwaningo phakathi kwezindlela zokuqoqa ulwazi ezikhethiwe kube khona

nendlela yenhlolovo esakuhleleka. Inhlolovo esakuhleleka inikeza abahlanganyeli imibuzo evulelekile, abayiphendula ngokuvuleleka, ukuze kutholakale imibono nezimvo ezicashile (Cresswell, 2014). Ngiqhubekile futhi ngaqikelela ukuthi ngilandela izimiso zenkambiso elungileyo yocwaningo, nakuba ngisebenzise ipharadayimu yomhumusho nenhlolovo esakuhleleka.

Ulwazi engizoluhlaziya ngezansi ngiqale ngalwehlukana ngokwamakhodi. UWertz (1983) uthi amakhodi afana nokuqamba ulwazi oluqoqiwe amagama ngokwehlukana kwalo. Ngamanye amazwi, lokhu kuchaza ukuthi ulwazi ngalunye lwehlukaniswa kolunye ngokuthi lunikezwe igama, umaki, noma inombolo ethile, engafani nenikezwa olunye ulwazi. Nami ngithe sengiluqoqile ulwazi, ngabe sengilwehlukana, oluphendula umbuzongqangi wokuqala ngaluqoqela ndawonye, ngaluqamba igama ngathi wulwazi lokuqala. Kanjalo noluphendula umbuzongqangi wesibili ngiluqoqele ndawonye ngalubiza ngolwazi lwesibili nolwesithathu kanjalo. Uma ulwazi selunikezwe amagama, izinombolo noma omaki, kuyaye kube sekubhekwa iphethini kulolo lwazi oseluhlukaniswe ngokwamakhodi. Ngamafuphi nje, kuyaye kubhekwe ukuthi yini ethi ayifane, noma elokhu iphindaphindeka kumakhodi ahlukeni (Cresswell, 2009). Eqhubeka uCresswell (2009) uthi uma sekubhekwe amaphethini agqamayo, ucwaningo lube seluhlelwa ngokwezindikimba (*themes*). Izindikimba engizibalule ngenhla zivele ngemuva kokuthi sengiqaphele ukuthi kukhona izimpendulo noma imiphumela eyimvama, elokhu ivela njalo olwazini oseluhlukaniswe ngokwamakhodi. Lezi zindikimba eziye zavela zagqama yizona engizihlaziye ngokujulile ukuveza umqondo opheleleyo eziwuqethe. Ngenabe kabanzi ngendikimba ngayinye ngokuthi ngisekele ulwazi engilutholile, okungamazwi ayizimpendulo zabahlanganyeli kanye nalokho engikuqaphele ngesikhathi ngibukela abahlanganyeli.

Ulwazi engiluhlaziye ngezansi ngiphinde ngaluphasa ngohlaka lwenjulalwazi nangohlaka lwemicabango. Injulalwazi kaVygotsky yowe-1978 ithi: Uma kunokuxhumana nokuzwana ngengxoxo phakathi komfundi nothisha, abafundi bakuqonda kangcono okusuke kufundiswa. Le njulalwazi iphinde ithi ukuqonda komntwana (noma komfundi) kuvame ukuthuthukiswa ukuthi abone aqhinde alingise labo abamzungezile. Ngesikhathi ebabukela, ugcina ecabanga, ekhuluma, enza futhi ebuka umhlaba njengabo. Ngokwale njulalwazi, ulimi lusebenza ukucija ubukhali bokucabanga kubafundi (*cognitive development*) kusukela umfundi engazi lutho, kuye kufinyelele lapho eseqonda kahle khona. Ulimi ngokwale njulalwazi kungaba ukuthi

lusuke lusetshenziswa abamzungezile, okungaba abadala, noma abalingana naye umfundi kodwa abanolwazi oluthe thuthu kunolwakhe.

Phakathi kwezinto engizenzile kulolu cwaningo ukuba nenhlololwazi nabahlanganyeli ngenhloso yokuthola ulwazi ngemvelaphi yabo, nokuthola indlela abaqonda ngayo indima yabo njengothisha bezibalo bamabanga ayisisekelo. Ngiphinde ngababukela ngesikhathi befundisa, ngenhloso yokuthola ukuthi bukhona yini ubudlelwano phakathi kwendlela abafundisa ngayo nalokho abakuveze kwihlololwazi. Isizathu esingqala bekuwukuthi ngithole ukuthi ngabe bakulungele yini ukuyofundisa izibalo ngezilimi zomdabu lapho sebesensimini, sebefundisa. Ngiqoke abahlanganyeli bocwaningo abahlanu. Ngibe sengiqoqa ulwazi kubona ngisebenzisa indlela yenhlolovo esakuhleleka nendlela yokubabukela befundisa. Kodwa, njengoba besaqeqeshwa nje, bengakayi ensimini yokufundisa, kuye kwadingeka ukuthi ngibabheke ngenkathi benza izifundo zokuzilolongela ukufundisa ezikoleni.

Emabangeni aphansi yilapho kuqiniswa khona ukuthi akufundiswe ngezilimi zomdabu. Ngaleso sizathu ngikhethe ukugxila emabangeni ayisisekelo asezikoleni ezisemalokishini. Njengoba izakhamuzi ezakhele amalokishi lapho abafundi abaqeqeshelwa ukuyofundisa bekade benza izifundo zokuzilolongela ukuyofundisa khona zikhuluma ulimi lwesiZulu, bengilindele ukuthi noma sekufundiswa izibalo kulezi zikole kusetshenziswe ulimi lwesiZulu. Ngesikhathi ngibukela abahlanganyeli benza izifundo zokuzilolongela ukuyofundisa, bengihlose ukubheka ukuthi ulimi balusebenzisa kanjani lapho befundisa, ukuxhumana ngolimi phakathi kwabo nabafundi ngabe kungokufanayo yini, kanye nokuthi ngabe izinsizakufunda nezinsizakufundisa abahlanganyeli bayazisebenzisa yini, futhi nazo lezo zinsizakufunda nezinsizakufundisa zibhalwe ngaluphi ulimi.

#### **4.1.1 Ukunqondani kahle ukubaluleka kokuba abafundi bamabanga ayisisekelo bafundiswe izibalo ngolimi lwabo lwasekhaya (okuyisiZulu).**

Le ndikimba ivele ngesikhathi ngihlose ukuphendula umbuzongqangi wokuqala wocwaningo, othi: Ngabe abafundi abaqeqeshelwa ukuyofundisa bakuqonda kanjani ukubaluleka kokufundiswa kwezibalo ngolimi lwesiZulu emabangeni ayisisekelo.

Umcwaningi ongu-Adler (1998) uthi ukuze abafundi baphumelele isifundo sezibalo, kubalulekile ukuthi othisha baqonde kabanzi ngobumqoka bendlela yokufundisa (iphedagoji) okumele bayilandele lapho bethula lesi isifundo. Eqhubeka u-Adler (1998) uthi indlela yokufundisa imbandakanya ulimi kanye nolwazi lwesifundo (*content knowledge*), ngakho kusemqoka ukuthi othisha babubone ubumqoka bokusebenzisa ulimi oluqondwa ngabafundi lapho befundisa izibalo, ukuze nolwazi abahlose ukulwethula luzwakale kahle kubafundi. Umcwaningi onguSteen (1990) uthi ukuphuyelelwa nokungaphuyelelwa kwezibalo kuncike kakhulu ekutheni othisha bezibalo bazizwa kanjani ngendlela yokufundisa izibalo, nangolimi okufanele bazifundise ngalo. Ngamanye amazwi, uma kuhloswe ukuthi izinga lokuphuyelelwa kwezibalo likhuphuke, kufanele isinyathelo sokuqala kube ukuqinisekisa ukuthi othisha balesi sifundo bayakuqondisisa ukubaluleka kokuthi sifundiswe ngolimi lomdabu emabangeni ayisisekelo.

Ngesikhathi ngenza inhlololwazi esakuhleleka, ngibuze abahlanganyeli umbuzo othi: Ngokubona kwakho, kungani kufanele kufundiswe izibalo emabangeni ayisisekelo? Yiluphi ulwazi oluzozuzwa ngabafundi ngalesi sifundo? Umhlanganyeli A uphendule kanje:

*Kumina, basic numeracy in the Foundation Phase is not for children to know everything, but to think logically and come up with a solution. Uyabona, if they develop a skill sokucabanga logically, lokho kuyabasiza noma sebesemabangeni aphezulu. They will engage critically and logically.*

Ngokwalo mhlanganyeli, inyumerasi emabangeni aphantsi ayifundiswa ngenhloso yokunikeza abafundi ulwazi ngayo yonke into, kodwa ibasiza ekutheni bathuthukise futhi bacije ikhono labo lokucabanga ngokujulile nangokuhlelekile ukuze bezoqhamuka nezimpendulo eziphusile. Okushiwo yilo mhlanganyeli kuthi akufane nokushiwo yinqubomgomo yoHlelo lweziFundo nokuHlola yamabanga R-3 yowezi-2012. Ngokwale nqubomgomo, izibalo zithuthukisa ikhono lokucabanga okuphusile, ziphinde zicije abafundi ngobuchule nobuhlakani ukuze babe yizakhamuzi eziveza izixazululo ezihlabahlosile ezinkingeni ezibhekene nezwe lonkana. Amazwi omhlanganyeli A akhombisa ukuthi uyakuqonda ukubaluleka kokufundisa izibalo ngezilimi zomdabu, futhi uyaqondisisa ukuthi isifundo sezibalo silekelela nasempilweni jikelele, asigcini nje ngokunikeza umfundi ulwazi lokubala.

Umhlanganyeli B yena unikeze le mpendulo kulo mbuzo obalulwe ngenhla:

*Inyumerasi ibalulekile ngoba ihlinzeka abafundi ngekhono lokwenza izinto practically. Lokho kusiza umfundi ngisho esemdala, kumenza akwazi ukwenza izinto practically, mhlawumbe agcine esephume na-something engaba wusizo ngokuhlanganisa izinto ezithile. Okunye nje ngeMaths eFoundation Phase ukuthi iyisiqalo esihle nesisekelo esihle seMaths yasemabangeni alandelayo.*

Njengomhlanganyeli A, umhlanganyeli B naye ubona inyumerasi isemqoka. Kodwa lo mhlanganyeli ucacisa ukuthi inyumerasi isiza ekuhlinzekeni abafundi ngekhono lokuzibambela mathupha, nokuhlanganisa izinto ezithile (ezibonakalayo) ukuze kuzophuma okungaba wusizo emphakathini. Okushiwo yibona bobabili laba bahlanganyeli kufakazelwa nguKotjaas (2010) lapho eveza ukubaluleka kwenyumerasi ngokuthi: *As the term "foundation" suggests, numeracy in the Foundation Phase can lay the fundamentals for everything logical, scientific and mathematical in the latter years, including the work place.* Lesi sicaphuno sichaza ukuthi izibalo zasemabangeni aphantsi zibalulekile ngoba ziyisisekelo sokucabanga ngendlela ehlelekile, ziphinde futhi ibe yisisekelo sesayensi, esingasetshenziswa ezigabeni ezithe thuthu zempilo, okungaba yisemsebenzini noma yisempilweni jikelele. Izimpendulo zalaba bahlanganyeli ababili zikhombisa ukuthi bayakuqondisisa ukubaluleka kokufunda izibalo emabangeni aphantsi, ngoba amazwi abo abethi awahambisane namazwi abacwaningi abamnkantsha ubomvu kwinyumerasi abafana noKotjaas (2010) noSpaull (2016).

Umhlanganyeli C ngesikhathi ebuzwa ngokubaluleka kokufundiswa kwezibalo emabangeni aphantsi uphendule ngokuthi:

*Uyabona, kwi-21<sup>st</sup> century, yonke into idinga itechnology. Inhle-ke inyumerasi ngoba inikeza abafundi ikhono lokuthuthukisa i-Technology. Bonke ososayensi abathuthukise iTechnology yaba yilokhu eyikhona namuhla, uma uzoqaphelisisa, iningi labo lifunde laqondisisa inyumerasi kwayima liqonda iMaths neScience.*

Lo mhlanganyeli yena uthi ukufundiswa kwezibalo emabangeni aphantsi kucija abafundi, kubacijele ukuthi bathuthukise ulwazi lobuchwepheshe besimanje. Eqhubeka lo mhlanganyeli, uthi ososayensi iningi labo lifunde laqondisisa inyumerasi kuqala, ngaphambi kokuthi liqonde izibalo zasemabangeni alandelayo. Ngamanye amazwi, lo mhlanganyeli

ubona izibalo zasemabangeni aphansi ziyisinyathelo sokuqala ekuqondeni ulwazi lwesayensi nezibalo. Okushiwo yilo mhlanganyeli kufakazelwa nanguKotjaas (2010) lapho ethi:

Mathematics is one of the branches of science that contributes greatly to the advancement of science and technology. Given the magnitude of the role of mathematics in transforming human civilization, maths is a branch of science that must be mastered by the students of the primary school level.

Lesi sicaphuno esingenhla sichaza ukuthi isifundo sezibalo singesinye sezifundo ezisemqoka ekuthuthukiseni ezesayensi nobuchwepheshe. Lo mcwaningi uthi izibalo ziphinde futhi zilekelele ekuletheni impucuko kubantu, ngakho-ke kufanele ziqondiswe emabangeni aphansi. Umhlanganyeli C kanye noKotjaas (2010) babuka izibalo njengesifundo esimqoka kwezobuchwepheshe nesayensi.

Emva kombuzo othi: Ngokubona kwakho, kungani kufanele kufundiswe izibalo emabangeni ayisisekelo? Yiluphi ulwazi oluzozuzwa ngabafundi ngalesi sifundo? ngibe sengibuza umbuzo oyisilandelelo, othi: Ngokubona kwakho, kungani kufanele izibalo zifundiswe ngolimi lwesiZulu ebangeni lokuqala?

Umhlanganyeli A uphendule lo mbuzo ngokuthi:

*Ngike ngathi iMaths eFoundation phase enhances critical and logical thinking. Kodwa iqiniso lithi izibalo ziyafeyilwa. Uke wazibuza nje ukuthi kungani zifeyilwa. Ngokubona kwami, le nto yokuthi ziqale zifundiswe ngesiZulu, kuyaba emabangeni alandelayo sezifundiswa ngesiNgisi, iyona mbangela enkulu yokuthi zifeyilwe. Ukuze amaconcepts neterminology yemaths yasemabangeni alandelayo ingezukuba yinkinga, leyo terminology ayiqale ifundwe ngesiNgisi khona emabangeni aphansi. Uma fundwe ngesiNgisi, abafundi bayothi befika emabangeni alandelayo, bengabi nayi inkinga yokuqala phansi baqonde iterminology yezibalo ebhalwe ngolimi lwesiNgisi, lesi abangasazi.*

Umhlanganyeli A esicaphunweni esingenhla uveze isizathu sokufeyilwa kwezibalo ukuthi ziqale zifundiswe ngolimi lwesiZulu, kodwa emabangeni alandelayo azibe zisafundiswa ngesiZulu, kodwa zifundiswe ngesiNgisi. Ngokwalo mhlanganyeli, amakhonsephe ezi zibalo zasemabangeni alandelayo agcina ngokungaqondwa, ngoba ethulwa ngolimi abafundi

abangaluqondi, okuwulimi lwesiNgisi (kula mabanga alandelayo). Nokho, abacwaningi abafana noVenkat (2013), Spaul (2016), Vinjevold (2017) bona bathi empeleni ukufundisa izibalo ngezilimi zomdabu emabangeni aphansi kulekelela ekutheni amakhonsephtsi ezibalo (kanye nazo izibalo uqobo) abafundi bawaqondisise kahle ngoba asuke efundiswa ngolimi abaluqondisisayo. Nenjulalwazi kaVygotsky yowe-1978 nayo ithi ukuxhumana ngengxoxo lapho kufundwa noma kufundiswa (ikakhulu emabangeni aphansi) kufanele kube ngokufanayo phakathi kwabafundi nothisha. Le njulalwazi ithi umfundi akafinyeleli esigabeni lapho ecabanga khona ngokujulile (*cognitive development stage*) uma engaqalanga wafundiswa ngolimi aluqondayo. Noma lo mhlanganyeli ethi ukuqonda amakhonsephtsi asemabangeni alandelayo kuba yinkinga uma umfundi eqale wafundi ngolimi lomdabu, kodwa abacwaningi abamnkantsha ubomvu olimini nasezibalweni abafana noNomlomo (2014) noSetati (2012) bona bathi, ukufundisa izibalo ngolimi olungolomdabu kubafundi kwenza akwazi ukuqonda kangcono amatemu ethulwa ngolimi lokwengeza uma esefinyelela emabangeni athe thuthu.

Umhlanganyeli B yena ngesikhathi ngimbuza ngokubaluleka kokuthi izibalo zifundiswe ngolimi lomdabu uthe:

*Language plays a very important role in the teaching and learning of mathematics. Kodwa I believe learners should be taught mathematics in the universal language, which is English so that they will be able to cope in the outside world. IsiZulu is not universal.*

Lo mhlanganyeli uveze ukuthi ulimi lubalulekile uma kufundwa noma kufundiswa izibalo. Kodwa lo mhlanganyeli ubalule ukuthi ubona kungcono ukuthi izibalo zifundiswe ngolimi olukhulunywa emhlabeni wonke, okuwulimi lwesiNgisi. Ngokusho kwalo mhlanganyeli, abafundi kufanele bakwazi ukumelana nomhlaba wangaphandle kwezwe laseNingizimu-Afrika, futhi ulimi lwesiNgisi olunamandla okubavulela amathuba okumelana nokuqhudelana nabafundi bakwamanye amazwe, ikakhulu ezibalweni. Ngamanye amazwi, lo mhlanganyeli uveze ukuthi akaboni ukuthi ulimi lwesiZulu luwulimi olubalulekile noluhlinzeka abafundi ngamakhono nolwazi lokumelana nokuqhudelana nabanye bakwamanye amazwe. Umcwaningi onguPhillipson (1992) naye uthi ulimi luyisikhali esibalulekile lapho kufundwa noma kufundiswa. Kodwa lo mcwaningi uthi abafundi kufanele baqale baqonde futhi bathuthuke olimini lwabo kuqala, emva kwalokho-ke sebengafundiswa ngolimi okufanele balusebenzise lapho sebexhumana nabanye abafundi bakwamanye amazwe. UPhillipson (1992) uthi:

Language is the integral and central part of the entire teaching and learning. Teachers use language to explain concepts. Nonetheless, the term “language” should not be confused with the term English language. African languages are as important in learning as English. Therefore, African languages should be promoted, as they are first stepladders for universal and international intercommunication engagement.

(Phillipson, 1992, pp. 34)

Lesi sicaphuno esingenhla sichaza ukuthi ulimi lubaluleke kakhulu, futhi ludlala indima enkulu ekucaciseni amakhonsephe nasekufundeni jikelele. Kodwa, lo mcwaningi uthi ulimi lwesiNgesi lungathathwa sengathi yilona kuphela oluwulimi olubalulekile ekufundeni nasekufundiseni. Nezilimi zomdabu nazo zibalulekile, empeleni ziyisinyathelo sokuqala ekucijeni umfundi ngolwazi nangokuxhumana nabanye abafundi bakwamanye amazwe. Uma umfundi eqale waqondisisa kahle ulimi lwakhe lwasekhaya, kuba lula ukuthi aqonde nolimi lwesiNgesi (olumlekelele ekuxhumaneni nabafundi bakwamanye amazwe) ngoba ulimi lwasekhaya lumsusa kulokho akwaziyo lumuse kulokho angakwazi (Nomlomo, 2014). Umfundi ofunde izibalo ngolimi lwasekhaya uziqonda kangcono futhi uba semathubeni okuqhudelana ngolwazi nabafundi bakwamanye amazwe (Shretha, 2009). Umhlanganyeli B kanye noPhillipson (1992) babuka ulimi lubalulekile uma kufundwa noma kufundiswa, kodwa uPhillipson (1992) ugqamisa ukuthi izilimi zomdabu ziyisinyathelo sokuqala ekuqondeni ulimi lwesiNgesi olusetshenziswa lapho kuxhunyanwa nabafundi bakwamanye amazwe, ngakho kufanele kuqale kufundiswe ngezilimi zomdabu ngaphambi kokuthi kufundiswe ngolimi lwesiNgesi.

Njengomhlanganyeli B, nomhlanganyeli C naye uthe ulimi (jikelele) lubalulekile, kodwa umehluko kulaba bahlanganyeli ababili ukuthi umhlanganyeli C yena ubalule ukuthi kusafanele kuthuthukiswe amakhonsephe namatemu ezibalo ngolimi lwesiZulu kuqala, ngaphambi kokuthi ulimi lwesiZulu lube ngolubalulekile lapho kufundwa noma kufundiswa izibalo. Nanka amazwi alo mhlanganyeli:

*Ulimi lubalulekile lona uma kufundiswa izibalo. Kodwa, isiZulu angiboni sisezingeni lokuthi sithi siwulimi olumqoka uma kufundiswa izibalo. okwamanje ngingathi, kusafanele kuthuthukiswe ama-concepts ne-vocabulary yezibalo ebhalwe ngolimi lwesiZulu. Ngalokho ngichaza ukuthi kusafanele kube ne-vocabulary yama-symbols noma yama-gama. Ngicabanga ukuthi kusafanele futhi kube ne-grammar enama-rules achaza kahle ngesiZulu ukuthi ama-symbols athile asebenza kanjani, kucace nje. On the other hand, ngibona kusenesidingo sokuthi kube na- range of meanings that can be communicated*

*with symbols in IsiZulu. Ngale kwalokho, angiboni neze isiZulu sibalulekile, sisenamakhonsephti abuthaka kakhulu.*

Ngokwalo mhlanganyeli, ulimi ludlala indima enkulu ekufundiseni nasekufundeni izibalo. Kodwa lo mhlanganyeli uveza ukuthi akukabi semqoka kangako ukufundisa izibalo ngolimi lwesiZulu ngoba amakhonsephti nolwazimagama lwesiZulu alukabi sezingeni. Lo mhlanganyeli uthi ngisho nolwazimagama lwamasimboli ezibalo ngesiZulu alukabi seqophelweni eligculisayo. Umbono walo mhlanganyeli uthi awufane nombono ovezwa ngabahlaziyimcabango nosonjulalwazi abahlaziya baphinde bacubungule ngezinjulalwazi zokwakha ulwazi (*constructivist theorists*) abafana noMarshall (1987); uLantolf (2000) kanye noBalfour (2016). Labo sonjulalwazi noma behlaziya zonke izinjulalwazi zokwakha ulwazi, kodwa bavame ukugxila kakhulu kwinjulalwazi kaVygotsky yowe-1978. Ngokwalaba bahlaziyimcabango, kusemqoka ukuqikelela ukuthi ulimi olusetshenziswa lapho kufundwa noma kufundiswa luyathuthukiswa, futhi lubekwa ngendlela ezwakalayo neqondakalayo kubafundi. Laba bacwaningi bathi uma ulimi lungathuthukisiswe ngokwanele, kuvame ukuthi kube nokuthiyeka kokuxhumana phakathi kwabafundi nothisha, ngaleyo ndlela abafundi bagcina bengazuzi ulwazi oluhlelwe lwaba yizinhlosomfezo zesifunjwana. Nokho, ukuthuthuka kolimi akunamkhawulo, luthuthuka imihla namalanga, futhi luthuthuka ngokusetshenziswa (Mackay, 2004). Ngamanye amagama, okushiwo nguMackay (2004) kuchaza ukuthi uma izibalo ziqhubeka zifundiswa ngolimi lwesiZulu, ulimi lwesiZulu luya luthuthuka ngoba lusuke lusetshenziswa imihla namalanga lapho kwethulwa isifunjwana sezibalo.

Ngokolwazi olutholakale kula bahlanganyeli ababalulwe ngenhla, akukakaqondakali kahle ukubaluleka kokuthi izibalo zifundiswe ngolimi lwesiZulu emabangeni aphansi. Abahlanganyeli noma bekuvezile ukubaluleka kolimi lapho kufundiswa noma kufundwa isifundo sezibalo, kodwa badalule ukuthi ababoni kusemqoka ukusebenzisa izilimi zomdabu lapho kufundiswa noma kufundwa izibalo emabangeni aphansi.

Ngesikhathi ngiqhubeka nokuqoqa ulwazi, kuye kwavela nokuthi abafundi abasaqeqeshelwa ukuyofundisa abaqeqeshekile futhi abacijekile ngokwanele ukufundisa izibalo ngolimi lwesiZulu.

#### **4.1.2 Ukunqeqeshi ngokwanele kwabafundi bezibalo abasaqeqeshwa ukufundisa izibalo ngolimi lwesiZulu emabangeni ayisisekelo.**

Le ndikimba ivele ngesikhathi ngizama ukuphendula umbuzongqangi wesithathu wocwaningo, othi: Ngabe abafundi abasaqeqeshelwa ukuyofundisa amabanga ayisisekelo bakulungele kangakanani ukuyofundisa izibalo besebenzisa isiZulu njengolimi lokufundisa?

OHakuta, uBatler kanye noWitt (2000) abangogoti bendlela yokufundisa izibalo (iphedagoji) bathi indlela uthisha wezibalo afundisa ngayo incike kakhulu oqeqeshweni aluthola ngesikhathi esacijwa ngokufundisa lesi sifundo. Ukungalandeli indlela elindelekile yokufundisa isifundo esithile, nokungasebenzisi ulimi lokufundisa ngendlela elindelekile imvamisa kuba yinkomba yokuthi uthisha akalutholanga uqeqesho olwanele ngendlela yokufundisa nangolimi okulindeleke ukuthi alusebenzise lapho efundisa (Hakuta, Batler kanye noWitt (2000). Laba bacwaningi baqhubeka bethi:

The need for a teacher to stay up to date in his (or her) area of specialism, whether he (or she) specialises in teaching primary, secondary, further education or higher education, has never been more pressing. And rightly so. Moreover, professional development has long been an indicating factor for teachers practice, content delivery and language of teaching.

(Hakuta, Batler kanye noWitt, 2000, pp. 123)

Lesi sicaphuno esingenhla sichaza ukuthi noma ngabe uthisha ufundisa kuliphi izinga, kodwa kuyaye kubize ukuzikhandla nokuzinikela ukuthi abe ngumpetha, futhi abe nolwazi olwanele ngesifundo. Ngaphezu kwalokho, uhlobo loqeqesho alutholayo luvame ukuba yisikhanyiso, esikhanyisa nesiveza ngokusobala indlela azofundisa ngayo, kanye nendlela azosebenzisa ngayo ulimi ukwethula isifunjwana. Ngenxa yokuvezwa kobumqoka boqeqesho nangenxa yendlela laba bacwaningi abadalula ngayo umthelela woqeqesho ekufundiseni kothisha, ngibone kubalulekile ukwenza inhlololwazi, ngihlole ngokudephile ukuthi ngabe uqeqesho olunikezwa abahlanganyeli ngokufundisa izibalo ngolimi lwesiZulu lusezingeni yini. Angigcinanga nje ekubeni nonhlololwazi nabahlanganyeli bocwaningi, kodwa ngiphinde ngayobabukela ngesikhathi befundisa, ngenhloso yokuhlolisisa nokuthola ukuthi ngabe uhlobo loqeqesho abahlinzekwa lona lunamthelela muni endleleni abasebenzisa ngayo ulimi lapho befundisa izibalo emabangeni aphantsi.

Ngesikhathi nginenhlololwazi nabahlanganyeli, ngibuze umbuzo othi: Njengoba wethwasela ubuthishela nje, ngabe yiluphi ulimi olusetshenziswa lapho uqeqeshwa ngendlela yokufundisa izibalo?

Umhlanganyeli A unikeze le mpendulo elandelayo:

*Uma siqeqeshwa ngendlela yokufundisa izibalo, abaqeqeshi bethu basiqeqesha besebenzisa ulimi lwesiNgisi. Ngisho ne-method module nje ichazwa ngolimi lwesiNgisi. Okuseqiniseni, i-course pack nje yezibalo ibhalwe ngolimi lwesiNgisi.*

Lo mhlanganyeli uveze ulwazi olumbaxambili. Okokuqala ubalule ukuthi ulimi olusetshenziswa lapho beqeqeshwa ngendlela yokufundisa izibalo wulimi lwesiNgisi. Lo mhlanganyeli uphinde waveza nokuthi nezincwadi abafundiswa ngazo, nazo zibhalwe ngolimi lwesiNgisi. Ngokubona kwami, lokho kwenza abahlanganyeli bangaqondi ukuthi ulimi lwesiZulu lusebenziseka kanjani lapho kufundwa noma kufundiswa izibalo. Uma uqeqesho lungethulwa ngolimi lwesiZulu, mhlawumbe abahlanganyeli bangaqeqesheka nangendlela yokusebenzisa amakhonsephe ezibalo ngolimi lwesiZulu. NgokukaChaille benoBrian (1997), indlela abaqeqeshi abafundisa ngayo kanye nolimi abalusebenzisa lapho befundisa yikhona okuba wumhlahlandlela olandelwa ngabafundi. Ngamanye amazwi, uma abaqeqeshi befundisa indlela yokufundisa izibalo ngolimi lwesiZulu, nabahlanganyeli (abangabafundi babo) nabo babukela kubona, balandele indlela abafundisa ngayo kanye nolimi abalusebenzisayo lapho befundisa. Ukuqeqeshwa kwabahlanganyeli ngolimi lwesiNgisi akwanele ngoba ulimi okulindeleke ukuthi bafundise ngalo lapho sebesensimini, sebefundisa izibalo, wulimi lwesiZulu. Kusemqoka ukuthi abaqeqeshi baqeqeshe ngendlela eyisibonelo kubafundi ababaqeqeshayo, yikhona abafundi ababaqeqeshayo bezoncela ulwazi lolimi lokufundisa oluyilona, nokulindeleke balusebenzise lapho sebefundisa (Da Costa, 2000:14).

Umhlanganyeli B wocwaningo ngesikhathi ngimbuza ngolimi olusetshenziswa lapho eqeqeshwa, unginikeze le mpendulo elandelayo:

*There is diversity in our institution, and that diversity has to be embraced. In this regard, we are taught Primary Mathematics in English. I think it cannot be taught in isiZulu, phela we are diverse, bazokwenzenjani nje abangasazi isiZulu?*

Njengomhlanganyali A, umhlanganyeli B naye ngesikhathi ngimbuza ngoqeqesho ngendlela yokufundisa izibalo, alunikezwa kulesi sikhungo, uveze ukuthi uqeqesho luhlinzekwa ngolimi lwesiNgisi. Kodwa umhlanganyeli B yena uveze akaboni kukhona okungenziwa ngabaqeqeshi ngokufundiswa kwezibalo ngolimi lwesiNgisi ngoba isikhungo sinabafundi bezinhlanga ezehlukene, ngakho ulimi okufanele lusetshenziswe lapho kufundiswa izibalo kufanele kube wulimi lwesiNgisi. Noma kunjalo, kodwa inqubomgomo yolimi kulesi sikhungo, i-University Language Policy yowe-2014, ithi kufanele ulimi lwesiZulu lusetshenziswe lapho kufundwa, kufundiswa, noma kwenziwa ucwaningo kulesi sikhungo. Ukusetshenziswa kolimi lwesiNgisi njengolimi lokufunda, lokufundisa nolocwaningo kuyinkomba yokuthi izilimi zomdabu, (ikakhulu ulimi lwesiZulu) azikabekwa eqhulwini, nasezingeni elifana nezinga ulimi lwesiNgisi elikulona (Vithal, 2013).

Umhlanganyeli C naye unikeze impendulo ethi ayifane nempendulo enikezwe ngumhlanganyeli A kanye nomhlanganyeli B. Kodwa lo mhlanganyeli yena uveze ukuthi ngisho indlela okufanele bayilandele lapho benza amalungiselelo esifunjwana (lesson plan template) ezibalo ibhalwe ngolimi lwesiNgisi. Lo mhlanganyeli ubeke kanje:

*Ngisho ne-lesson plan template esiyinikezwayo, isuke ibhalwe ngolimi lwesiNgisi. Ayikho i-template ebhalwe ngolimi lwesiZulu.*

Emva kokuzwa impendulo yomhlanganyeli C, ngibe sengibuza umbuzo oyisilandelelo kubona bobathathu abahlanganyeli, othi: Njengoba niveza ukuthi aniqeqeshwa ngolimi lwesiZulu nje, ngabe nisebenzisa luphi ulimi uma nenza amalungiselelo esifunjwana sezibalo?

Umhlanganyeli A uphendule wathi:

*Ngiyazama khona ukubhala i-lesson plan ngesiZulu, kodwa amakhonsephti agcina engiphelela ngoba vele ngisho ne-template ibhalwe ngolimi lwesiNgisi. Kuvele kube ukupatanisa nje okusebenzayo, nevocabulary okumele ngiyisebenzise uma ngenza ilesson plan ivele iphele.*

Lo mhlanganyeli uveze ukuthi noma ezama ukusebenzisa ulimi lwesiZulu uma efundisa izibalo, kodwa ngenxa yokuthi indlela okumele bayilandele lapho benza amalungiselelo esifunjwana kwayona ingolimi lwesiNgisi, ulwazimagama lugcina lumphelela. Ngikubona

kwami, umsuka nomnyombo wokuthi lo mhlanganyeli aphelelwe ulwazimagama ukuthi uqeqesho akaluhlinzekelwa ngolimi lwesiZulu. Ngakolunye uhlangothi, uhlaka lwamalungiselelo esifunjwana nalo lungolimi lwesiNgisi. Empeleni, isibonelo salokho okufanele bakwenze uma bebhala amalungiselelo esifunjwana naso sibhalwe ngolimi lwesiNgisi, ngakho kuba wumqansa ukwenza amalungiselelo esifunjwana ngolimi lwesiZulu.

Umhlanganyeli B njengomhlanganyeli A, naye uveze ukuthi uhlaka okufanele balulandele lubhalwe ngolimi lwesiNgisi. Kodwa lo mhlanganyeli uveze ukuthi yena akazami nokuzama ukubhala amalungiselelo esifunjwana ngolimi lwesiZulu. Lo mhlanganyeli uthe amalungiselelo esifunjwana uwabhala ngolimi lwesiNgisi kuphela. Nanka amazwi alo mhlanganyeli:

*Mina I don't even try ukubhala o-lesson plan ngolimi lwesiZulu, ngoba vele i-template ibhalwe ngolimi lwesiNgisi. Ngiwabhala ngesiNgisi. Vele akukho lapho engibukela khona ukuthi ulesson plan wezibalo wenziwa kanjani ngolimi lwesiZulu.*

Lo mhlanganyeli uveze ukuthi ngenxa yokuthi akanawo amakhonsephtsi ezibalo angolimi lwesiZulu, futhi akukho lapho abukela khona ukuthi amalungiselelo esifunjwana enziwa kanjani ngolimi lwesiZulu, ugcina esebhala amalungiselelo esifunjwana ngolimi lwesiNgisi, engasalufaki nhlobo ulimi lwesiZulu lapho ehlela isifunjwana sakhe. Nangesikhathi ngibheka amalungiselelo esifunjwana omhlanganyeli B, avezwe kwisithasiselo sokuqala, ngitholile ukuthi abhalwe ngolimi lwesiNgisi. Njengoba kuvelile kwisithasiselo sokuqala, izinjongo zesifunjwana, izinhlosomfezo zesifunjwana kanye nolwazi oluzokwethulwa konke kubhalwe ngolimi lwesiNgisi. Isizathu okuyisona esinqala salokhu ukuthi alwanele uqeqesho olunikezwa abahlanganyeli ngokufundiswa kwezibalo ngolimi lwesiZulu. Ngisho namakhonsephtsi ezibalo ngolimi lwesiZulu abawafundiswa, yingakho begcina benza amalungiselelo esifunjwana ngolimi lwesiNgisi.

Ngiphinde ngabuza umbuzo othi: Ngabe indlela oqeqeshwa ngayo inamthelela muni ekufundiseni kwakho njengothisha wezibalo emabangeni aphansi?

Umhlanganyeli A uthe:

*Ngizibona ngingaqeqeshokile ngokwanele. Ngaleso sizathu, ngigcina ngifaka amagama amaningi olimi lwesiNgisi lapho ngethula isifunjwana sezibalo. Nekhono lokwethula ulwazi ngolimi lwesiZulu, empeleni angazi ukuthi yinto enjani ngoba anginikezwa uqeqesho olwanele. Ngaleso sizathu ngigcina sengenza i-codeswitching, nokuyinto engiqonda kahle ukuthi ayamukelekile kula mabanga.*

Lo mhlanganyeli uveze ukuthi ngenxa yokuthi uqeqesho olwanele akalutholi, ugcina esexuba ulimi lwesiZulu nolimi lwesiNgisi ekufundiseni kwakhe. USetati (2014) uthi ukuxuba izilimi, (*i-codeswitching*), kuyisu elisemqoka ekufundisen izibalo. Kodwa lo mcwaningi uthi emabangeni aphantsi, akakukhuthazi ukuxuba izilimi ngoba kula mabanga umfundi kufanele aqondisise ulwazi lwezibalo ngolimi lwakhe lwasekhaya. Esigabeni esilandelayo, ulimi lwesiNgisi selungaxutshwa nolimi lwesiZulu ngoba umfundi usuke esenalo ulwazi lolimi lwesiNgisi uma esefinyelele kula mabanga, kodwa emabangeni aphantsi, umfundi usuke esenolwazi lolimi lwasekhaya kuphela. Lo mcwaningi ukhuthaza ukuthi ulimi lokufundisa nokufunda kube wulimi lwasekhaya kumfundi wamabanga ayisisekelo. UShretha (2009) yena uthi uma kuxutshwa izilimi emabangeni aphantsi, lokho kuyinkomba yokuthi uthisha usuke engaqondi ngobumqoka bokusebenzisa ulimi oluqondwa ngabafundi lapho efundisa izibalo. Kodwa isizathu sokuthi umhlanganyeli A axube izilimi ukuthi akanikezwa uqeqesho olwanele ngokufundisa izibalo ngolimi lwesiZulu.

Umhlanganyeli B njengomhlanganyeli A naye uveze ukuthi ukungaqeqeshwa ngendlela efanele nelindelekile kumenza angakwazi ukufundisa izibalo ngolimi lwesiZulu. Kodwa lo mhlanganyeli uphinde waveza nokuthi ukungaqeqeshwa ngendlela kwenza ngisho naye angabi nolwazi lolimi lokufunda nokufundisa izibalo. Lo mhlanganyeli ubeke kanje:

*Ngisho nami uqobo ngigcina sengingenalo ulwazi lokufunda nokufundisa izibalo. Uma sekuyimina engingenalo lolu lwazi, abafundi bazoqonda kanjani zibalo engizifundisayo. Empeleni ukungabi nalo ulwazi lokufunda nokufundisa ngikubona kuyinkomba yokuthi kwamina angikulungele ukuyofundisa izibalo ngesiZulu. Ngiyathanda khona, kodwa uqeqesho engilunikezwayo lungenza ngingabi nalo ulwazi lolimi lokufunda nokufundisa isiZulu.*

Lo mhlanganyeli uveze ukuthi ngisho naye uqobo akanalo ulwazi lolimi lokufunda nokufundisa ngenxa yokuthi akaqeqeshwa ngendlela efanelekile. Ukungabi nalo ulwazilolimi lokufunda nokufundisa kwenza angakwazi ukwedlulisa ulwazi lwezibalo ngolimi

oluzwakalayo kubafundi. Njengoba injulalwazi kaVygotsky yowe-1978 isho nje, ulimi lokufunda nokufundisa ludlala indima emqoka ekususeni umfundi kulokho angakwazi, lumuse kulokho aphokophele ukukuqonda. Kodwa uma ulimi lokufunda nokufundisa lungaqondwa ngisho nawuthisha, ulwai alwedluliseki ngendlela, futhi nomfundi akalekeleleki ukusuka olwazini angalwazi ukuya kulokho aphokophele ukukwazi. Uthisha udlala indima ebalulekile ekusizeni abafundi ukuthi baqonde ulwazi olwethulwayo, kanye nolimi olusetshenziswa lapho befundiswa (Jones, 2009; Goba, 2014). Uma naye uthisha engalufundi ulimi lokufunda nokufundisa, lokho akutheli izithelo ezinhle ekutshaleni ulwazi ngesifundo sezibalo.

Nomhlanganyeli C naye uveze ukuthi ngenxa yokuthi akaqeqeshwa ngendlela, akaziboni ekulungele ukuyofundisa izibalo ngolimi lwesiZulu. Lo mhlanganyeli uthethe:

*Ngenxa yokuthi uqeqesho ngilunikezwa ngesiNgisi, ngizithola nginengqinamba ekufundiseni izibalo ngolimi lwesiZulu. Empeleni, anguwuqedi umusho ngingafakanga amatemu namakhonsepthi ezibalo engolimi lwesiZulu.*

Lo mhlanganyeli uveze ukuthi lapho efundisa, akawuqedi umusho engafakanga amakhonsepthi ezibalo ngolimi lwesiNgisi. Lokhu kuveza ngokusobala ukuthi ukungaqeqeshwa ngendlela efanelekile kumenza engabi nolwazi lokuhumusha, nokufaka amakhonsepthi ezibalo ngolimi lwesiNgisi. Ngenxa yamazwi alo mhlanganyeli, ngibone kusemqoka ukuyombukela lapho efundisa, ngibukisise ukuthi ngabe ukungaqeqeshwa ngendlela kwakhe kunamthelela muni endleleni afundisa ngayo. Engikuphawulile ngendlela lo mhlanganyeli afundisa ngayo ukuthi ubefaka amakhonsepthi esiNgisi lapho efundisa. Lokho bekudala ukuthi isifunjwana sezibalo sigcine singaqondwa ngabafundi ngenxa yokuthi abafundi bona bazi futhi baqonda ulimi lwesiZulu. Ngenxa yokuthi abafundi bebengaluzwa ulimi obekufundiswa ngalo, bebonakala beziqhelelanisa nesifunjwana, esikhundleni sokuthi ngabe baba yingxenywe yesifunjwana esethulwayo sezibalo. Ngiqaphele ukuthi isifunjwana besigcina simbandakanya uthisha kuphela, abafundi bengasabonakali bebamba iqhaza kokufundwayo. Kungikhanyelile ukuthi imbangela yokuthi abafundi beziqhelelanise nesifunjwana ukuthi bebengaqondi ukuthi isifunjwana simayelana nani, ngenxa yokuthi amakhonsepthi abesetshenziswa yilo mhlanganyeli abengolimi lwesiNgisi. Kugcine kubonakala sengathi nguthisha kuphela oyingxenywe yesifunjwana (*teacher centered*)

esikhundleni sokuthi ngabe nabafundi baba yingxenye yesifunjwana (*learner-centered*). Nakhu engikubone ngesikhathi ngibukela umhlanganyeli C efundisa:

Isihloko sosuku : Iphethini yezinombolo

Ibanga : Lokuqala

Isihlokwana sosuku (subtopic) : Umehluko phakathi kwezizombolo ezilandelanayo

Isifunjwana sasigxile kulokhu: Ukuhlanganisa nokuhlukanisa

Isigaba A

Umhlanganyeli A

*Uthisha : Class, today we will be talking about the pattern of numbers, and tables.*

*Abafundi : (Abanye bathule, abanye bebange umsindo, bezidlalele nje).*

*Uthisha : Ake silalelane!!!*

*Abafundi : (Bexokozela, bekhuluma kodwa kungezwakali ukuthi bathini, abanye bezidlalele nje).*

*Uthisha : I-number pattern....thulani phela (ethulisa umsindo)...i-number pattern is the pattern and sequence of numbers, ukuthi izinamba zilandelana kanjani. Njengalana nje, weqiwa izinamba. From one, you skip two bese ufike ku-three, and then from three you skip four ufike ku-five.*

*Abafundi : (Belalele...kodwa bebonakala bedidekile, bengakuqondi lokho okuchazwa nguthisha).*

*Uthisha : (enameka ishadi ebhodini), ake siqedele nali ithebuli...*

Njengoba kuvela esicaphunweni esingenhla, umhlanganyeli C ubefaka amagama amaningi olimi lwesiNgisi. Ngaleso sizathu abafundi babegcina bengezwa futhi bengalandeleli ukuthi ngabe isifunjwana simayelana nani. Ukungezwa kwabafundi (njengoba kuvelile esicaphunweni esingenhla) bekugcina kubenza bazizwe bengeyona ingxenye yesifunjwana, yingakho nje bekade bexokozela futhi bezibangela umsindo. Imbangela yokuthi lo mhlanganyeli afake amakhonsepthi ezibalo angolimi lwesiNgisi ukuthi naye uqobo akaqeqeshwa ngendlela efanelekile yokufundisa izibalo ngolimi lwesiZulu. Abacwaningi abafana noSetati (2008) bathi ukuxuba izilimi kwenza ukuthi ukuxhumana ngengxoxo (*interaction*) phakathi komfundi nothisha kungabi ngokufanayo. Nenjulalwazi kaVygotsky yowe-1978 iqhakambisa ukuthi ukuqonda kuba khona kuphela uma ukuxhumana ngengxoxo (noma ngolimi) phakathi komfundi nothisha kungokufanayo. Lokhu kuchaza ukuthi uma ukuxhumana ngolimi kungafani, kanjalo nesifunjwana esethulwayo sigcina singaqondakali

kubafundi. Ukufaka kakhulu amagama esiNgisi kwalo mhlanganyeli ngigcine ngibona ukuthi kuchaza ukuthi akakakulungeli ukufundisa izibalo ngolimi lwesiZulu. Mhlawumbe ukube uthola uqeqesho olwanele ngendlela yokufundisa izibalo ngolimi lwesiZulu, ubengaba nesu lokuhumusha nokusebenzisa amakhonsephti ezibalo angolimi lwesiZulu.

Umhlanganyeli C engicaphune amazwi akhe ngenhla kuyaqapheleka ukuthi ubengawuqedi umusho engafakanga igama lesiNgisi. Uma kubhekiswa, umusho wakhe wokuqala ngqa kule ngxoxo ecashunwe ngenhla ungolimi lwesiNgisi. Ngokucabangela kwami, yiso kanye lesi sizathu ebesenza abafundi babange umsindo. Bebenqangi umsindo nje kuphela, kodwa ngiqaphelisisile nokuthi bekunokudideka obekubhalwe ebusweni babo. Bebebonakala bengaqondi ukuthi okusempeleni ithini ingqikithi yesifunjwana. Kafushane nje, ukufaka kwalo mhlanganyeli amagama amaningi esiNgisi bekudida abafundi ngezindlela ezimbili. Bebedidwa wulimi alusebenzisayo, baphinde futhi badidwe ukuthi okusempeleni isifunjwana sezibalo leso asethulayo ithini ingqikithi yaso. Injulalwazi kaVygotsky yowe-1978 ithi indlela yokufundisa esetshenziswa nguthisha iba nomthelela kumfundi ngandlela thize, okungaba umthelela omubi noma omuhle. Nakulo mhlanganyeli, ukufaka kwakhe amagama amaningi esiNgisi bekugcina kuba nomthelela ongemuhle, kudala ukudideka kubafundi. Nokho, ukusebenzisa amakhonsephti angolimi lwesiNgisi kwalo mhlanganyeli bekudalwa ukuthi uqeqesho ngendlela yokufundisa izibalo ngolimi lwesiZulu akalutholi ngokwanele, ngoba esicaphunweni esingenhla, uvezile ukuthi ngisho beqeqeshwa ngendlela yokufundisa izibalo (*method*), abaqeqeshwa ngolimi lwesiZulu.

Ngqiqaphelile ukuthi abahlanganyeli abakulungele ukufundisa izibalo ngolimi lwesiZulu. Esinye sezizathu zokungalungeli kwabo ukuthi abanikezwa uqeqesho olwanele ngendlela yokufundisa izibalo ngolimi lwesiZulu. Bavezile ukuthi ngisho beqeqeshwa ngendlela yokufundisa izibalo (*methodology*) abaqeqeshi babo abasebenzisi ulimi lwesiZulu. Lokho kudala ukuthi ngisho sebefundisa (abahlanganyeli) bafake amagama amaningi esiNgisi. Ukufaka kwabo amagama amaningi esiNgisi bekudala ukuthi abafundi bangaqondisisi ulwazi lwezibalo okuhloswe ukuthi baluqondisise. Ngithole ukuthi eqinisweni abahlanganyeli abakulungelke ngokwanele ukuyofundisa izibalo ngolimi lwesiZulu ngenxa yokuthi abatholi uqeqesho olwanele ngendlela yokufundisa izibalo ngolimi lwesiZulu.

#### **4.1.3 Ukushoda kwezinsizakufundisa kanjalo nezinsizakufunda ezibhalwe ngolimi lwesiZulu.**

Le ndikimba ivele ngesikhathi ngizama ukuphendula umbuzongqangi wesithathu wocwaningo othi: Kungani laba bafundi bekulungele/bengakulungele ukufundisa izibalo besebenzisa ulimi lwesiZulu.

Abacwaningi abafana noVerspoor, Farrel noHeynemen (1989) bathi izinsizakufunda nezinsizakufundisa kungenye yezindlela ezithuthukisa ukuqonda kumfundi. Beqhubeka laba bacwaningi bathi izinsizakufunda nezinsizakufundisa kungachazwa ngokuthi yinoma yiluphi uhlobo lwemibhalo, lwezithombe noma lwamavidiyo, olwelekelela umfundi ukuthi aqonde kangcono, nothisha ukuthi afundise kangcono. Ngamafuphi, laba bacwaningi baqonde ukuthi izinsizakufunda nezinsizakufundisa zidlala indima enkulu kakhulu ekuthuthukiseni izinga lokuqonda, nokufundisa okuzwakalayo. Nakuba laba bacwaningi beveza ukuthi izinsizakufundisa nezinsizakufunda zelekelela kakhulu lapho kufundwa ukufunda nokubhala (ilitherasi) ngokubona kwami izinsizakufundisa nezinsizakufunda ziphinde zidlale enkulu indima lapho kufundiswa noma kufundwa ulwazi lokubala, inyumerasi. OVerspoor, Farrel noHeynemen (1989) babalula ukuthi ulimi lungenye yezingxenye ezisemqoka, nezidinga ukuqashelwa nokubekwa eqhulwini lapho kwakhiwa, noma kusetshenziswa izinsizakufunda nezinsizakufundisa.

Ngaphambi kokwenza lolu cwaningo, bengingaluboni ulimi njengesikhali esibalulekile lapho kudluliswa imiyalezo ngezinsizakufunda nezinsizakufundisa. Kuthe sengenze lolu cwaningo, ngaqaphelisisa ukuthi ulwazi noma lungaba khona kwizinsizakufunda nezinsizakufundisa, kodwa luyaye lungawudlulisi umyalezo uma lubhalwe ngolimi olungaqondwa ngabafundi, ikakhulu emabangeni ayisisekelo. Emabangeni ayisisekelo yilapho abafundi befunda khona ngokubukela, ngakho-ke kusemqoka ukuthi abakubukelayo kube ngolimi abaluqondayo. Uma abakubukelayo kungolimi abaluqondayo, nomyalezo ngokunjalo kuyaye kuvame ukuthi bawuqonde (Galesic, 2010). Eqhubeka uGalesic (2010) uthi kuyijoka likathisha nohulumeni ukuqinisekisa ukuthi izinsizakufundisa zidlulisa umyalezo ngendlela nangolimi oluqondwa kangcono ngabafundi.

Le ndikimba ivele ngesikhathi ngibuka isimo segumbi lokufundela lapho abahlanganyeli kulolu cwaningo bekade benza khona izifundo zokuzilolongela ukuyofundisa. Inhloso bekuwukuthi ngibheke kuphela ukuthi izinsizakufundisa nezinsizakufunda ezingamashadi

zikhona futhi ziyasetshenziswa yini lapho kufundiswa. Kodwa kuthe sengisemagunjini lokufunda ngazinikeza isikhathi sokuhlola nokuthi amadokhumenti (okuyizincwadi) njengoba nawo eyingxenye yezinsizakufundisa nezinsizakufunda, ngabe abhalwe ngolimi uthisha noma abafundi abaluoqondayo yini. Ngamanye amazwi, angibange ngisakhawuka nje ekubhekeni amashadi, kodwa ngenabele nasekubhekeni namadokhumenti. Le ndikimba ibe seyehlukaniseka izigaba ezimbili. Isigaba sokuqala kube ukubheka izinsizakufunda ezisodongeni egunjini lokufundela (okungamashadi, izithombe kanye nokunye). Isigaba sesibili kube ukubheka nokuhlola ukuthi ngabe ulimi olusetshenziswe kumadokhumenti, (okuyizincwadi zabafundi, izincwadi zothisha kanye namadokhumenti ayinkombandlela kathisha ashicilelwa umnyango wemfundo eyisisekelo, ama-*teacher tracker documents* lungoluoqondakalayo yini kubafundi kanye nakubahlanganyeli. Empeleni bengihlose ukuhlola ukuthi ngabe yisiphi isizathu esidala laba bahlanganyeli bebonakale bengakulungele ukufundisa izibalo ngolimi lwesiZulu (njengoba sekuvelile ngenhla ukuthi abakulungele). Kubahlanganyeli abayisihlanu ebengibabukela befundisa, okuyilaba: uMhlanganyeli A, umhlanganyeli B kanye nomhlanganyeli C kuye kwavela ukuthi izinsizakufundisa abebezisebenzisa (okubandakanya namadokhumenti) bezibhalwe ngolimi lwesiNgisi.

Egunjini lokufundela lomhlanganyeli A bekunalezi zinsizakufundisa ezivezwe kwisithasiselo sesibili kanye nakwisithasiselo sesithathu. Isithasiselo sesibili siyisithombe seshadi ebelinanyekwe obondeni egunjini lomhlanganyeli A. Kuyaqapheleka ukuthi kuleli shadi kukhona izinombolo ezisukela enombolweni yokuqala kuze kufinyelele enombolweni yamakhulu ayisithupha. Nasesithasiselweni sesithathu kuvezwe isithombe seshadi, kodwa-ke kuleli shadi kuvezwe umugqa wezinombolo osukela enombolweni encinyane uze ufinyelele kwenkulu. Ngisekhona esithasiselweni sesithathu, kuyaqapheleka ukuthi ngakwesokunxele salowo nalowo mugqa kukhona izikhala obekulindleleke ukuthi umfundi azigwalise. Lezo zikhala bekulindleleke ukuthi zigwaliswe ngokukhetha inombolo okuyiyona yona efaneleke ukungena esikhaleni ngasinye. Okugqamayo ngawo womabili la mashadi ukuthi nakuba wona eyizinombolo, kodwa izihloko ezicacisa ngawo zibhalwe ngamagama esiNgisi. Ngicabanga ukuthi isihloko yiwona mhlahlandlela okhanyisela abafundi ukuthi ulwazi olwethulwayo lungani. Uma abafundi bengasiqondi isihloko bagcina bengaqondi nanokuthi yini kahle kahle eyethulwa kuleyo nsizakufundisa. Lama shadi omabili akhishwa ngunyango wezemfundo eyisisekelo njengenywe yezindlela zokusiza uthisha lapho efundisa izibalo mabangeni aphantsi. Okuye kwaletha ukudideka ukuthi kula mabanga kulindleleke abahlanganyeli bafundise izibalo ngolimi lwesiZulu. Kodwa, izinsizakufundisa, okuyizona okumele zilekelele othisha

ekufundiseni izibalo ngolimi lwesiZulu, kwazona zibhalwe ngolimi lwesiNgisi. Lokho bekuletha ukudideka kubahlanganyeli kanye nabafundi.

Ngiqaphele ukuthi ngesikhathi umhlanganyeli A enikeza abafundi imibuzo ezimpendulo zayo bezikulama shadi, abafundi abanikezanga izimpendulo eziyizona. Naye umhlanganyeli A ubebonakala enokudideka, edidwa ukuthi kungani leli shadi libhalwe ngolimi lwesiNgisi. Ukunikeza kwabafundi izimpendulo ezingezona bekuyisikhanyiso sokuthi kwasihloko abasiqondisisanga. Ukunqondisisi kwabafundi isihloko yikhona kanye okubenza bagcine bephendula okungabuziwe, futhi nobuso babo bukhombisa ukuthi badidekile. Empeleni umnyombo wokudideka kwabo wukuthi abaqondi ukuthi la mashadi okuthiwa abawabheke okusempeleni yini ayethulayo ngoba abhalwe ngolimi abangaluqondi. Abanye abafundi bebephendula ngokungazethembi, kubonakale ukuthi abanaso isiqiniseko sokuthi ulwazi oluseshadini ngabe yilo yini lolu oludingwa wumbuzo obuzwe ngumhlanganyeli, noma mhlawumbe izimpendulo embuzweni obuziwe zikwenye indawo. Umcwani onguWatson (2002) uthi izimpendulo zabafundi emibuzweni ebuzwa nguthisha yizona ezimdwebela isithombe sokuthi izinhlosomfezo zesifundo zifizekile yini, noma kusadingeka athi ukwenaba ukuze abafundi baqonde. Njengoba abafundi bebephendula ngokuzangethembi nje, lokho bekuchaza ukuthi empeleni izinhlosomfezo kanye nesifundo abasiqondanga neze ngenxa yolimi obelusetshenziswa.

Ngesikhathi ngihlola amadokhumenti ngiqale ngokubheka izincwadi zabafundi zomsebenzi. Lezi zincwadi zona bezibhalwe ngolimi lwesiZulu kubona bobahlanu abahlanganyeli. Ngiye ngaphinde ngabuka idokhumenti ekhishwa ngumNyango weMfundo eyisiSekelo, eyaziwa nge-*teacher tracker*. Ngithole ukuthi ibhalwe ngolimi lwesiNgisi, njengoba iveziwe kwisithasiselo sesine (a) kanye nakwisithasiselo sesine (b). Ukubhalwa kwamadokhumenti ayinkombandlela kathisha (aphinde abe yinsizakufundisa), ngolimi lwesiNgisi, ngikuphawule njengenye yezimbangela zokuthi abafundi abasaqeqeshwa babe ngabangakulungele ukufundisa izibalo ngolimi lwesiZulu. Ngemumva kokuthi sengibuke i-*teacher tracker* ngibe sengibuza umhlanganyeli obezilolongela kuleli gumbi, (ongumhlanganyeli B) ukuthi ngabe uthini ngolimi olusetshenziswe kule dokhumenti. Nansi impendulo anginikeze yona:

Umhlanganyeli B

*Uma ngisho u-tracker ubhalwe ngesiNgisi.....ngivele ngingazi nje ukuthi ngizoqala ngithini uma ngifundisa izibalo ngesiZulu. Ngivele ngicabange nje ukuthi njengoba u-tracker kwawona ubhalwe ngesiNgisi, kusho ukuthi vele izibalo azifundiseki ngesiZulu. Yizona zonke nje izizathu ezenza ngibone ngingakulungele ukufundisa*

*izibalo ngesiZulu. Le nto ihlula ngisho uhulumeni. Mina bengiwubani. Mina nje I am not ready. Ngiyahluleka nje 'straight' ukufundisa izibalo ngisebenzisa ulimi lwesiZulu.*

Lo mhlanganyeli uveza ukuthi uma le dokhumenti ibhalwe ngesiNgisi, uvele abone kuyinto engenzeki nje ukufundisa izibalo ngesiZulu. Yingakho lo mhlanganyeli ebefaka ulimi lwesiNgisi ngesikhathi efundisa. Okusempeleni, insizakufundisa eyinkombandlela yokuthi kufanele afundise ini, nini, kanjani futhi nayo uma ibhalwe ngolimi lwesiNgisi. Ucwangingo lukaNaidoo (2010) luveza ukuthi amadokhumenti akhishwa nguhulumeni awalandelwa ngothisha lapho befundisa izibalo, kanye nolwazi lokubala (inyumerasi). Nokho, emva kwengxoxo nomhlanganyeli B, kungikhanyelile ukuthi eqinisweni amadokhumenti ayasetshenziswa. Umehluko nje ukuthi abhalwe ngolimi lwesiNgisi. Ukubhalwa kwawo ngesiNgisi kwenza ukuthi noma sekufundiswa izibalo, zifundiswe ngolimi lwesiNgisi. Phela la madokhumenti yiwona ahlahla indlela ngokufundiswa kwezibalo.

Egunjini lomhlanganyeli C ngiye ngaqaphela ukuthi kutshenziswe insizakufundisa eyishadi ebelibhalwe ngolimi lwesiNgisi, njengoba lokho ngikuveze kwisithasiselo sesihlanu. Kuleli shadi kubhalwe amagama ezinombolo ngolimi lwesiNgisi. Emabangeni aphansi, izibalo kufanele zifundiswe ngolimi olungolomdabu kubafundi, njengoba kubalula iNqubomgomo i-*Language in Education Policy* yowe-1997. Ngokunjalo futhi izinsizakufunda nezinsizakufundisa kufanele zibhalwe futhi zethulwe ngolimi olungolomdabu kubafundi. Kodwa kuleli shadi elisesithasiselweni sesine, amagama ezinombolo abhalwe ngolimi okungelona olomdabu kubafundi. Lokhu kuchaza ukuthi abafundi kuleli gumbi bafundiswa izinombolo ngolimi abangalufundi kwalona. Lokhu kuveza isithombe sokuthi lesi singesinye sezizathu esidala ukuthi izibalo zingaqondwa futhi zingaphunyelelwa kahle emabangeni aphansi.

Ngesikhathi ngihlola izinsizakufundisa nezinsizakufunda ezisetshenziswe egunjini lomhlanganyeli D, ngiye ngathola ukuthi bezibhalwe ngolimi lwesiZulu. Lokhu kuye kwangicacisela ukuthi zikhona nokho izinsizakufundisa nezinsizakufunda ezibhalwe ngolimi lwesiZulu.

Ngikutholile ukuthi imbangela enkulu yokuthi abahlanganyeli bengabi ngabakulungele ukuyofundisa izibalo ngolimi lwesiZulu ukuthi amadokhumenti akhishwa nguhulumeni, kanye nezinsizakufunda nezinsizakufundisa kungolimi lwesiNgisi. Ngaleso sizathu,

abahlanganyeli bebegcina bengaboni ukuthi ulimi lwesiZulu lusebenziseka kanjani njengolimi lokufunda nokufundisa. Ngakolunye uhlangothi, nabafundi, uma befundiswa kusetshenziswa izinsizakufundisa nezinsizakufunda ezibhalwe ngolimi lwesiNgisi, bebegcina bengaqondisisi kahle lokho abakufundiswayo.

#### **4.1.4 Ulwazi lwamatemu ezibalo ngolimi lwesiZulu (*metalanguage*) olungekho ezingeni.**

Nayo futhi le ndikimba ivele ngesikhathi ngizama ukuphendula umbuzongqangi wesithathu wocwaningo, othi: Kungani laba bafundi bekulungele/bengakulungele ukufundisa izibalo ngolimi lwesiZulu.

Kubahlanganyeli abayisihlanu ebengibabukela befundisa, ngiqaphelile ukuthi ababili kubona bebezama ukufundisa izibalo ngolimi lwesiZulu. Nokho, ngenxa yokuthi abanalo ulwazi-magama olwanele lwesiZulu, bebegcina sebefaka amagama esiZulu aletha incazelo ehluke kakhulu encazelweni yamatemu ezibalo abahlose ukuyinikeza abafundi. Ngibe sengikhanyelwa isithombe sokuthi lesi ngesinye sezizathu zokuthi laba bahlanganyeli bangabi ngabakulungele ukufundisa izibalo ngolimi lwesiZulu. Ngokusho kukaMojela (2002), isifundo sezibalo sinamatemu aso, athe ukuhluka kulawo asetshenziswa olimini lwesiNgisi nakwezinye izilimi. Eqhubeka uMojela (2002) uthi izibalo ziwulimi nazo ngokwazo, ngakho ukusetshenziswa kwamagama athile ezibalo noma kuyaye kufane ngempimiso nangokubhaleka, kodwa empeleni lawo magama (ezibalo) aletha incazelo ehluke kakhulu encazelweni eyejwayelekile. Lo mcwaningi uthi kubalulekile ukuqikelela ukuthi amatemu ezibalo awahunyushwa ngokusebenzisa izichazamazwi zolimi lwesiNgisi (noma zezinye izilimi), kodwa uma kuhunyushwa la matemu kufanele kuqikelelwe ukuthi kusetshenziswa isichazamazwi sezibalo. Ukusebenzisa incazelo ejwayelekile ukuchaza nokuhumusha ulimi lwezibalo kuletha ukudideka (*misconception*) kuphinde kuchezele umfundi olwazini okuhloswe ukuthi aluzuze. (Calteaux 1994). Ukuqikelela ukuthi akubi nokudideka, kufanele uthisha aqale aqeqesheke ngolwazi lokuhumusha amatemu ezibalo, ukuze ulwazi olungumongo (*key concepts*) lwezibalo lungeke ludidaniswe nolwazi olwejwayelekile (Labov, 1972).

Ukungabi nalo ulwazi lwamatemu ezibalo nencazelo yawo kuyinkomba yokungaqeqesheki nokungalungeli kothisha ekusebenziseni, ekuqondeni kanye nasekuchazeni ulimi lwezibalo (Calteaux 1994). Ngiye ngaqaphela ukuthi abahlanganyeli kulolu cwaningo bebefinyelela

lapho bedideka khona ukuthi amatemu anembayo ezibalo bazowachaza ngokuthini ngolimi lwesiZulu. Yilapho-ke abebezwakala khona sebenikeza incazelo beyithathela esiNgisini, kwesinye isikhathi bezibumbela izincazelo zamagama athile ngokuzwa indlela abizeka ngayo olimini lwesiNgisi. Ngigqanyelwe isithombe sokuthi lokhu kulumusha kudalwa ukuthi ulwazi-magama lwesiZulu abanalo, kanti futhi nobuchule bokuqonda amatemu ezibalo njengalokhu esetshenziswa kulesi sifundo abanabo. Lokhu ngikubone kuyisona sizathu sokuthi babonakale bengakulungele ukufundisa izibalo ngolimi lwesiZulu. Umhlanganyeli A ubehumusha esebenzisa incazelo yolimi lwesiNgisi lapho echaza futhi efundisa amatemu ezibalo ngolimi lwesiZulu. Lawo matemu ngiwabhale ngokunzima kule nkulumo engezansi.

*Uthisha : Lalelani, bhekani la! La. Kulo layini wezinombolo, uma ubhekisisa kugcina kuphuma umdwebo 'owumsebenzi' othile. Niyabona ?*

*Abafundi : (kuthuleke, abafundi bebonakala bedidekile)*

*Uthisha : Ngisho ukuthi uma sibheka lana, buka 'umsebenzi' ohamba 'njengamagagasi' ezinombolweni (edweba ebhodini likashoki).... niyabona?*

*Abafundi: (kuba nomsinjwana, kubonakale nokho ukuthi abafundi abezwanga).*

*Uthisha : Zishiyana ngobani lezi zinamba?*

*Abafundi: (kuphendula abambalwa) ngo-2*

*Uthisha: Ilokho engikushoyo nje.*

Kulo mhlanganyeli ocashunwe efundisa ngenhla, ekufundiseni kwakhe ngiye ngaqaphela ukuthi ubehumusha ethathela encazelweni yesiNgisi. Empeleni (njengoba ngikade ngiyingxenye yesifunjwana nje) igama elithi 'umsebenzi' ubelikusela egameni lesiNgisi elithi 'function'. Bekungezwakala kangconywana ukube uqale wazinika isikhathi, waqonda incazelo yaleli gama ngokwezibalo, ngaphambi kokuthi alihumushele esiZulwini. Emva kwesifunjwana, ngibe sengiba nengxoxo nalo mhlanganyeli, ngaphakamisa ukuthi mhlawumbe ukube usebenzise igama elithi 'umdwebo owumugqa ongaqondile' ngabe abafundi bezwile. Lo mhlanganyeli uphendule wathi:

*Ngiyakuzwa, kodwa ngicabanga ukuthi uyabona ukuthi yizona zizathu lezi ezenza ngithi angikulungele ukufundisa izibalo ngolimi lwesiZulu. Mhlawumbe ukube ngiyaluthola uqeqesho ngokuhumusha amatemu ngendlela, ngabe i-metalanguage nginayo. Njengoba ngishilo nje, uqeqesho yilona esingalutholi.*

Lo mhlanganyeli uyavuma ukuthi ulwazi ngamatemu ezibalo akanalo, kodwa ugcizelela ukuthi konke lokhu kudalwa ukuthi uqeqesho ngamatemu nangendlela yokuhumusha eyiyo akalutholi kahle. Uthi yisona sizathu esenza azibone engakulungele ukufundisa izibalo ngolimi lwesiZulu. Ngibe sengifinyelela esiphethweni sokuthi empeleni umsuka wokungabi nalwazi ngencazelo nangokuhumusha amatemu ezibalo udalwa ukungaqeqesheki kwabafundi abasathwasela ukuyofundisa la mabanga. Ngikuphawulile futhi ukuthi ngesikhathi lo mhlanganyeli ehumusha ngendlela enganembi, futhi ekhombisa ukungabi nalo ulwazi ngencazelo yamatemu ezibalo ngolimi lwesiZulu, abafundi bebebonakala bedidekile. Njengoba umhlanganyeli ekade ehumusha ngendlela abangayiqondi, bekugcina kubonakala ukuthi abafundi abasiqondi sonke isifunjwana.

Umhlanganyeli B naye ngithole ukuthi ekufundiseni kwakhe ubekhombisa ukungabi nalo ulwazi nencazelo yamatemu ezibalo ngolimi lwesiZulu. Ngaleso sizathu, lo mhlanganyeli ubegcina esehumusha ngendlela eletha ukudideka kubafundi. Ngezansi ngicaphune amazwi omhlanganyeli B

*Uthisha : Kufanele wenze isiqiniseko sokuthi yonke le nto iba 'nenhlangano', siyezwana yini?*

*Abafundi : (kuba nokuhhumuzela kubafundi)*

*Uthisha : Uyabona uma udweba lo mdwebu, kukhona lapho 'kunemhlanagano' khona*

*Abafundi: (beqhubeka nomsindo)*

*Uthisha : Ubani ukuphi **umhlangano** laphayana?*

*Umfundi : Uku-5*

*Uthisha : Ayi.... Abanye ababoni yini*

Kule nkulumo ecashunwe ngenhla, umhlanganyeli B ubehumusha ethathela ngqo olimini lwesiNgisi. Njengoba ngikade ngiyingxenye yesifunjwana, ngiqaphele ukuthi igama 'inhlangano' ulithathela ngqo egameni lesiNgisi elithi 'meeting point'. Igama elithi 'umhlangano' ngigcine ngicabangela ukuthi mhlawumbe ulisusela egameli 'point of intersection' noma 'crossing lines'. Mhlawumbe ubengasebenzisa igama elithi 'ukulumbana noma ukuphambana kwemigqa' ngoba umhlangano empeleni uletha umqondo ohlukile uma usuyiswa olimini lwesiZulu. Ngokubona kwami, yingakho abafundi bebebonakala benokudideka.

Injulalwazi kaVygotsky yowe-1978 ithi ukuxhumana ngengxoxo phakathi kukathisha nomfundi kufanele kube ngolimi umfundi aluqondayo. Njengoba abafundi bebebonakala bedidekile nje, lokho bekudalwa ukuthi indlela yokufundisa kukathisha (iphedagoji) kanye

nolimi obelusetshenziswa ngabahlanganyeli bekuletha ukudideka kubafundi. Ngaleso sizathu, ulwazi lokubala uthisha abeqonde ukuthi lwedluliseke lugcine lungaqondwa ngabafundi.

#### **4.4 IQOQA LESAHLUKO**

Kulesi sahluko ngiphendule umbuzo omqoka walolu cwaningo othi: Ngabe abafundi abaqeqeshelwa ukufundisa emabangeni ayisisekelo bakulungele yini ukuyofundisa izibalo ngolimi lwesiZulu. Lo mbuzo omqoka wocwaningo uphenduleke ngokuthi ngihlaziye izimpendulo zabahlanganyeli, ngiphinde ngiqoqe ulwazi ngalokho engakuphawula ngesikhathi ngibukela abahlanganyeli benza izifundo zokuzilolongela ukufundisa. Lezi zindlela zokuqoqa ulwazi ngizisebenzise ngesikhathi ngizama ukuphendula imibuzongqangi emithathu yocwaningo, ephendula ngokusonga umbuzo ongqala walolu cwaningo. Ekuhlaziyeni ngiphinde ngasebenzisa injulalwazi nohlaka lwemicabango ukweseka ucwaningo.

# Isahluko 5

---

## UKUFINGQA, ISIPHETHO KANYE NEZINCOMO

Kulesi sahluko ngizokwenza isiphetho ngokutholakale ngesikhathi ngihlaziya ulwazi oluzuzwe yilolu cwaningo. Isahluko sizophinde senze iqoqa lalokho okube yizimpendulo zombuzo omqoka womcwaningo othi: Ngabe abafundi abaqeqeshelwa ukufundisa emabangeni ayisisekelo bakulungele yini ukuyofundisa izibalo ngolimi lwesiZulu?. Ngaphansi kwalo mbuzo omqoka wocwaningo bekunale mibuzongqangi yocwaningo elandelayo:

- ✓ Ngabe abafundi abaqeqeshelwa ukuyofundisa bakuqonda kanjani ukubaluleka kokufundiswa kwezibalo ngolimi lwesiZulu emabangeni ayisisekelo?
- ✓ Ngabe abafundi abasaqeqeshelwa ukuyofundisa amabanga ayisisekelo bakulungele kangakanani ukuyofundisa izibalo besebenzisa isiZulu njengolimi lokufundisa?
- ✓ Kungani laba bafundi bekulungele/bengakulungele ukufundisa izibalo besebenzisa ulimi lwesiZulu?

Isahluko sizokwethula izincomo neziphakamiso sizisusela kokutholakale ngesikhathi kuphendulwa imibuzongqangi engenhla yocwaningo.

### 5.1 UKUFINGQA NGOKUTHOLAKELE KULOLU CWANINGO

Lolu cwaningo luthole ukuthi nakuba iNqubomgomo yoLimi i-*Language in Education Policy* yamabanga ayisisekelo yowe-1997 kanye ne-*Incremental Policy* yowe-2007 kuthi kufanele kula mabanga kufundiswe izibalo ngezilimi zomdabu, kodwa nokho kusabonakala kunobuthaka ekusetshenzisweni kwezilimi zomdabu njengezilimi zokufunda nokufundisa. Noma izinqubomgomo zikusho ngemibhalo ukuthi izilimi zomdabu kufanele zisetshenziswe njengezemfundo ukuze zibe sezingeni futhi zithuthukiswe (*intellectualisation*), kodwa lolu cwaningo luveze ukuthi abafundi abaqeqeshelwa ukuyofundisa amabanga aphansi abakakulungeli ukuyofundisa izibalo ngezilimi zomdabu. Okutholwe yilolu cwaningo kuveza ukuthi abahlanganyeli bantula ulwazi-magama lwesiZulu ngenxa yokungatholi uqeqesho

olwanele. Ngaleso sizathu-ke bagcina bengahumushi kahle, futhi kwesinye isikhathi ekufundiseni kwabo baxuba izilimi. Ukuntuleka kolwazi-magama lolimi lwesiZulu kubahlanganyeli kudalwa ukuthi uma beqeqeshwa ngendlela yokufundisa izibalo (iphedagoji), abacijelwa ukusebenzisa isiZulu njengolimi lokufundisa. Kuvelile futhi ukuthi ulwazi ngendlela yokufundisa izibalo, (*pedagogical content knowledge*) abahlanganyeli bocwaningo banalo. Kodwa, okuyiyona ngqinamba ekufundiseni izibalo ngolimi lwesiZulu ukuthi amakhonsephtsi abhalwe ngolimi lwesiNgisi abakwazi ukuwahumushela olimini lwesiZulu. Isizathu sokuthi bangakwazi ukuhumushela olimini lwesiZulu yiso kanye esokuthi oqeqeshweni lwabo, abacijwa ngendlela yokusebenzisa isiZulu njengolimi lokufundisa. Ngenxa yokungaqeqeshwa nokungacijwa ngendlela yokufundisa izibalo ngolimi lwesiZulu, bagcina sebehumusha ngendlela enganembi nengaqondwa ngabafundi. Ukuhumusha kwabo ngendlela enganembi kwenza ukuxhumana ngengxoxo phakathi kwabo (othisha abasaqeqeshwa) nabafundi kungabi ngokufanayo. Lolu cwaningo luqinisekile ukuthi injulalwazi kaVygotsky yowe-1978 iveza amaqiniso uma ithi ukuxhumana ngolimi kuyingxenye emqoka neholela ekufezekisweni kwezinhlosomfezo zesifundo. Ngenxa yokuthi abafundi bebengaluqondi ulimi olusetshenziswa ngabahlanganyeli, bebecina ngokungaqondi ngisho isifundo sezibalo. Ngaleyo ndlela izinhlosomfezo zesifundo bezingafezekiseki.

Ucwaningo luthole nokuthi ukungabikhona kolwazi lwamatemu ezibalo (*metalanguage*) nakho kunomthelela ekutheni izibalo zingafundiswa ngolimi lwesiZulu oluqondile. Esikhundleni sokusebenzisa amagama esiZulu, abahlanganyeli bafaka amagama anencazelo abayithathela ngqo olimini lwesiNgisi. Kuye kwakhanya ukuthi ukusetshenziswa kwamagama athathelwa ngqo olimini lwesiNgisi kudalwa ukuthi abahlanganyeli kulolu cwaningo abanalo ulwazi-magama kanye nendlela ezwakalayo yokusebenzisa isiZulu lapho befundisa izibalo, futhi abanikezwa uqeqesho olwanele ngendlela yokuhumusha efanelekile. Ngibe sengisonga ngokuthi, ukuhumusha okuthathela ngqo olimini lwesiNgisi mhlawumbe kusengesinye sezizathu ezibangwa ukungacijwa kwabahlanganyeli ngendlela yokufundisa izibalo ngolimi lwesiZulu.

Enye yezimbangela zokuthi abafundi abasaqeqeshwa bangabi ngabakulungele ukusebenzisa ulimi lwesiZulu njengolimi lokufundisa izibalo ukuthi amadokhumenti akhishwa nguhulumeni, ayinkombandlela yothisha, nawo uqobo abhalwe ngolimi lwesiNgisi. Ngenxa yokuthi la madokhumenti abhalwe ngolimi lwesiNgisi, abahlanganyeli bagcina bengathuthuki

olwazini nasendleleni yokufundisa izibalo ngolimi lwesiZulu. Futhi ngifinyelele nasesiphethweni sokuthi abahlanganyeli bagcina bengasiboni ngisho isidingo nokubaluleka kokufundisa izibalo ngolimi lwesiZulu uma ngisho amadokhumenti engolimi lwesiNgisi. Lokhu kuchaza ukuthi empeleni inkinga ayikho kubafundi abasaqeqeshwa kuphela, kodwa futhi nabashicileli bamadokhumenti nabo banomthelela ekutheni izibalo zingafundiswa ngolimi lwesiZulu ngoba amadokhumenti abawashicilelayo abawabhali ngolimi lwesiZulu (noma ngolimi lomdabu, oluqondwa kangcono ngabafundi).

Kuye kwagqama futhi ukuthi abahlanganyeli kulolu cwaningo banalo ulwazi lokuthi isikhungo abaqeqeshelwa kusona sinenqubomgomo eyaziwa nge-*University Language Policy* yowe-2006. Le nqubomgomo ibalula ukuthi kufanele kube wulimi lwesiZulu nolwesiNgisi olusetshenziselwa ukufunda, ukufundisa, kanye nocwaningo kulesi sikhungo. Kodwa lolu cwaningo luthole ukuthi abahlanganyeli abalusebenzisi ulimi lwesiZulu olucolekile lapho befundisa izibalo ngoba ngisho abaqeqeshi babo, uma bebaqeqesha basebenzisa ulimi lwesiNgisi. Ngamanye amagama, kulindeleke ukuthi bafundise ngolimi lwesiZulu uma sebesensimini yokufundisa, kodwa nokho akukho lapho bebukela khona ukuthi isiZulu bengasisebenzisa kanjani njengolimi lokufundisa. Kuphela nje abaqeqeshi babahlanganyeli bagxila ekuqeqesheni ngolwazi lwesifundo sezibalo kuphela (*pedagogical content knowledge*), kodwa abanikezi isibonelo sokuthi ulwazi lolo lwezibalo, lungedluliselwa kanjani kubafundi ngolimi lwesiZulu.

Ngithole nokuthi abanye abahlanganyeli abakhuthazekile ekufundeni ulimi lwesiZulu ngoba abasiphumeleli ngisho esikhungweni abaqeqeshelwa kusona. Ngaleso sizathu, bagcina betheneke amandla, bezibona bengasazi futhi bengeke bakwazi ukusisebenzisa njengolimi lokufundisa izibalo lapho sebesensimini yokufundisa.

Ngenxa yalezi zizathu ezibalulwe ngenhla, okuphawulwa yizinqubomgomo zezemfundo ngokusetshenziswa kwezilimi zomdabu njengezilimi zokufundisa nokufunda izibalo emabangeni aphantsi kugcina ngokungenzeki. Kugcina nje ngokuthi kushicilelwe kwizinqubomgomo kuphela, kodwa kungenzeki. Lolu cwaningo luthole ukuthi ukungafundiswa kwezibalo ngolimi lwesiZulu (okuwulimi lokuqala lwabafundi nabaluoqonda yo) kugcina kuthiya ukuqondwa kwezibalo ngabafundi ababafundisayo, kwenze abanye babafundi bangasithandisisi isifundo sezibalo. Ukungaqondi kwabafundi akudalwa ukuthi

izibalo zinzima, kodwa kudalwa ukuthi izibalo bazifundiswa ngolimi olungesiso isiZulu okuwulimi abalwaziyo nabaluzwa kangcono njengoba besesemabangeni aphansi.

## 5.2 ISIPHETHO SOCWANINGO

Okutholakele kulolu cwaningo kube sekungenza ukuthi ngiphethe ngokubalula lokhu okulandelayo:

Okokuqala, ngibalule ukuthi, ulimi lusemqoka futhi luwumgogodla wokufundisa nokufunda, ngakho-ke kubalulekile ukuthi ulimi olusetshenziswa ukudlulisa ulwazi ngesifundo esithile lube ngoluqondwa nguthisha kanye nomfundi. Kodwa, ngifinyelele esiphethweni sokuthi, uthisha uyena okufanele aqondisise ulimi, futhi akwazi nokulusebenzisa ukwedlulisa ulwazi ngesifundo. Ngakho-ke ngaphambi kokuthi uthisha afundise noma yisiphi isifundo, akaqale aqinisekise ukuthi yena uqobo uyaluqonda ulimi azolusebenzisa ukufundisa isifundo lesi. Lesi siphetho siqinisa okushiwo yinsizakuhlaziya kaVygotsky yowe-1978. Ngiphinde ngaphetha ngokubona ukuthi ukuxhumana ngolimi phakathi kukathisha nomfundi kufanele kube ngokufanayo, ukuze ulwazi olwedluliswayo luzwakale kumfundi (njengoba kusho nensizakuhlaziya kaVygotsky yowe-1978).

Ngiphethe nangokubona ukubaluleka kokuthi, uqeqesho lothisha bamabanga aphansi lungacini nje lugxila ekubanikezeni ulwazi lwesifundo sezibalo. Kodwa, abathi noma sebenikeziwe ulwazi lwesifundo sezibalo, baphinde futhi bahlinzekwe ngezindlela zokufundisa izibalo kusetshenziswa izilimi zomdabu (njengesiZulu) ekufundiseni.

Ngaphambilini bengingaqondi ukuthi ukuxuba izilimi (*code-switching*) kuletha ukudideka kubafundi, kodwa okutholakale kulolu cwaningo kuye kwangenza ngaqonda ukuthi, ukuxuba izilimi kudala izithiyo ekuxhumaneni okuphakathi komfundi nothisha. Uma kunezithiyo ekuxhumaneni ngolimi phakathi komfundi nothisha, imiphumela yesifunjwana ehleliwe igcina ingafezekanga.

Injulalwazi kaVygotsky yowe-1978 eyaziwa nge-*socio-cultural theory* ngiphethe ngokuyibona njengelensi engasetshenziswa lapho kuqeqeshwa othisha, futhi ingaphinde ibe wumhlahlandlela nenkombandlela ebalekelela lapho sebesensimini, sebefundisa. Uma le njulalwazi iyinkombandlela nomhlahlandlela, othisha ikakhulu bamabanga aphansi

bangaqikelela ukuthi ngaso sonke isikhathi ukuxhumana phakathi kwabo nabafundi kuba ngokufanayo.

Njengoba kuvele nokuthi abafundi abasaqeqeshwa bagcina behumusha bethathela ngqo olimini lwesiNgisi lapho befundisa izibalo, ngibe sengiphetha ngokuthi ulimi lokufundisa nokufunda izibalo kufanele ngaso sonke isikhathi kuqikelelwe ukuthi luyehlukaniswa nolimi nje lwesiNgisi olwejwayelekile. othisha, asebesensimini yokufundisa kanye nabasaqeqeshwa, kufanele baqonde ukuthi ulimi lwezibalo lwehlukile olimini lwesiNgisi olwejwayelekile noluncazelo yalo isesichazamazwini.

Isikhathi esiningi kuyaye kubhekwe kakhulu ulimi njengenye yezimbangela zokuthi abafundi bangaziphumeleli izibalo. Kodwa lolu cwaningo lwenze ngafinyelela ekwazini ukuthi okusempeleni akusilo lodwa ulimi oluyimbangela yokungaphunyelelwa kwezibalo. Ziningi nezinye izingxenye ezisemaceleni, kodwa nokho ezithiya ukuqondwa nokuphunyelelwa kwezibalo. Phakathi kwalezo zingxenye singabala ukungabikhona kwezinsizakufundisa nezinsizakufunda, ukuhlukahlukana kwamazinga okuqonda kubafundi (*comprehension abilities*), kanye nendlela abafundi abasibuka ngayo isifundo sezibalo. Kodwa nokho, ngibonile ukuthi imbangela enkulu yokuthi abafundi bangaziphumeleli izibalo emabangeni ayisisekelo ukuthi bafundiswa ngolimi abangaluqondi. Lokho kudala ukuthi noma sebeqhubekela emabangeni athe thuthu bangabi nalo ulwazi lwezibalo, ngoba basuke bengalutholanga besesemabangeni ayisisekelo.

### **5.3 IZINCOMO**

Okutholakele kwenze ukuthi ngigcine ngokufinyelela kulezi zincomo ezilandelayo:

- Njengoba lolu cwaningo luthole ukuthi abafundi abasaqeqeshwa banalo ulwazi nendlela yokufundisa izibalo (*pedagogical content knowledge*), ngiphakamisa ukuthi izifundo ezifundisa ngendlela yokwethula isifundo sezibalo (*methodology modules*) azifundiswe ngolimi lwesiZulu. Ngincoma nokuthi izincwadi ezifundisa ngendlela yokufundisa izibalo (*methodology course packs*) nazo zibhalwe ngolimi lwesiZulu. Lokho kungalekelela ekutheni abafundi abasaqeqeshelwa ukuyofundisa izibalo bathole

ulwazi lwezibalo, amakhonsepthi ezibalo, kanye nendlela yokwethula isifundo sezibalo ngolimi lwesiZulu.

- Kungalekelela futhi ukuthi amadokhumenti akhishwa nguhulumeni, angumhlahlandlela nenkombandlela yothisha basemabangeni aphansi, abhalwe ngolimi lwesiZulu. Lokho kungasiza othisha ekutheni babe namakhonsepthi anembayo ezibalo, angolimi lwesiZulu. Ngaleyo ndlela bangakwazi ngisho ukufundisa nokwedlulisa ulwazi lwezibalo ngolimi lwesiZulu oluzwakalayo nolunembayo.
- Ngincoma ukuthi kube nesichazamazwi sesiZulu, esinamakhonsepthi anembayo ezibalo zasemabangeni aphansi. Ngaleyo ndlela, kungancipha ukuxuba izilimi, ukufaka amagama athathwe olimini lwesiLenge, kanye nokufundisa izibalo ngolimi lwesiNgisi. Izifundo ezifana ne-*Natural Sciences* zinaso isichazamazwi esichaza amakhonsepthi alesi sifundo ngolimi lwesiZulu. Nesifundo se-*Biology* naso sinesichazamazwi saso esingolimi lwesiZulu. Kodwa isichazamazwi esikhona sezibalo sibhalwe saphinde sachaza amakhonsepthi ezibalo ngolimi lwesiNgisi.
- Ngiphakamisa ukuthi osonjulalwazi bake babheke lokhu uma behlaziya ngokufundiswa kwenyumerasi emabangeni aphansi:
  - Uma kubhekwa indlela yokufundisa izibalo ngokwenjulalwazi kaVygotsky yowe-1978 (i-*Socio-Cultural Learning Theory* ) ethi ukuxhumana ngolimi phakathi kukathisha nomfundi kufanele kube ngokufanayo, akuphinde kuqashelwe futhi ukuthi inkinga yokungaqondi izibalo ayincikile olimini kuphela. Le nsizakuhlaziya ayibe isabheka ukuthi kukhona nezinye izimo ezenza umfundi angaziqondi izibalo. Lezo zimo kungaba ukungabikhona kwezinsizakufundisa, ukuhlukahlukana kwamazinga okuqonda kubafundi, ukungabandakanywa kwabafundi esifundweni sezibalo kanye nezinye izimo ezehlukahlukene. Lezi zimo kufanele ziqashelwe nazo lapho kufundiswa izibalo, kungagxilwa nje olimini kuphela.

## IMITHOMBO ESETSHENZISIWE

- Aboingail, G. (2009). Research Balance: a Matter of Choice. *Wiley Journals*, 1-13.
- Adler, J. (2001). *Teaching mathematics in multilingual classrooms*. Dordrecht: Kluwer Academic Publishers.
- Adler, N. (1998). Reflections on an Emerging Field: Researching Mathematics Teacher Education. *Educational Studies in Mathematics*, 359-381.
- Adler, N. (2009). When Knowledge Wins: Transcending the Sense and Nonsense of Academic Rankings. *Academy of Management*, 23-35.
- Alexander, A. (2017). The Convergence of Critical Pedagogy with Art-Based Service Learning. *Convergence of Temporary Art, Visual Culture and Global Civic Engagement*, 1-23. doi: 10.4018/978-1-5225-1665-1.ch001
- Alexander, A. W. (2000). How Service Learning Affects Students. *Journal of Higher Education*, 144-156.
- Alexander, R. (2011). Neither national nor a curriculum ? *White Rose Research Online, ISSN 0963-8253*, 369-384.
- Alexandra, A. (2003). *The African Renaissance and the Use of African languages in Tertiary Education*. Cape Town: PRAESA.
- Alexandra, N. (1990). The Language Question. In R. Schrire, *Critical Choices of South Africa: An Agenda for the late 1990's* (pp. 234-255). Cape Town: Oxford University Press.
- Alexandra, N. (2004). Language Policy: The Litmus Test of Democracy in Post-Apartheid South Africa. *Discourse Journal* 2,32, 7-12.
- Allen, B. (2004). *Mathematics Education: Exploring the culture of learning*. London: Routledge Falmer.
- Allen, N. B. (2008). The Impact of Intensive Mindfulness Training on Attention Control, Cognitive Style, and Affect. (R. Chambers, & B. Chuen, Eds.) *Cognitive Therapy and Research*, 32(3), 303-322.
- Anfara, V., & Mertz, N. (2014). *Theoretical Frameworks in Qualitative Research*. London: SAGE Publications.
- Arkston, B. (1997). Collaborative Testing: Evidence of Learning in a Controlled In-Class Study of Undergraduate Students. *Research and Teaching*, 83-91.
- Aubrey, M., Van Wyk, S., & Feona, A. (2006). Early mathematics development and later achievement: Further evidence. *Mathematics Education Research Journal*, 27-46.
- Balfour, T. (2016). Discourses underpinning rurality and rural education research in South African Postgraduate education research 1994-2004. *South African Journal of Higher Education*, 341-357.

- Bantwini, B. (2009). How teachers perceive the new curriculum reform: Lessons from a school district in the Eastern Cape Province, South Africa. *International Journal of Educational Development*, 30(1), 83-90. doi:<https://doi.org/10.1016/j.ijedudev.2009.06.002>
- Barret, S. (2014). 'My Promise Sent Unto Myself': Futurity and the Language of Obligation in Sidney's Old Arcadia. *The Future Journal*, 3-19.
- Bartillini, S., & Bussi, A. (1995). Mathematics discussion and perspective drawing in primary school. *Educational Studies in Mathematics*, 11-41.
- Barwell, R. (2004). What Is Numeracy. *For the Learning of Mathematics*, 20-22.
- Bell, L. (2002). Decolonising education in Canadian universities: An interdisciplinary, international, indigenous research project. *Journal of Native Languages*, 82-97.
- Bertak, R. (1985). Theoretical Perspectives on Knowledge and Learning and a Student Teacher's Pedagogical Content Knowledge of Dividing and Sequencing Subject Matter. *Human Kinetics Journal*, 284-304.
- Bertram, C. (2006). The career plans of newly qualified South African teachers. *South African Journal of Education*, 26(1), 1-13.
- Bertram, R. (2009). Serendipity in mathematics or How one is Led to Discover that. *The American Mathematical Monthly*, 562-566.
- Bista, B. (2009). Community Schooling in Nepal: A Genealogy of Education Reform Since 1990. (S. Carney, Ed.) *Comparative Education Review*, 189-211. doi:<https://doi.org/10.1086/597394>
- Bista, W. (2011). Multilingualism, Education, English and Development: Whose development. In H. Coleman, *Multilingualism and Development* (pp. 261-280). London: British Council.
- Bobo, T., Yesuf, E. A., & Woldie, M. (2017, December 13). Inequalities in utilization of reproductive and maternal services in Ethiopia. *International Journal for Equity in Health*, 34-46.
- Boughey, C. (2002). 'Naming Students' Problems: An Analysis of Language related Discourses at a South African University. *Teaching in Higher Education* 7,3, 295-307.
- Brown, W., Setati, M., Spaull, N., & Venkat, R. (2002). *The European Union and Africa*. Netherlands: Routledge, 2007.
- Bunyi, G. (1999). Rethinking the place of African indigenous languages in African education. *International Journal of Educational Development*, 19(4-5), 337-350. Retrieved from [https://doi.org/10.1016/S0738-0593\(99\)00034-6](https://doi.org/10.1016/S0738-0593(99)00034-6)
- Busisiwe, G., & Van Lauren, L. (2014, January). Pythagoras-'They say we are creche teachers': experiences of pre-service mathematics teachers taught through the medium of isiZulu: original research. (T. Mkhwanazi, Ed.) *Pythagoras*, 34(1), 1-8. doi:10.4102/pythagoras.v34i1.216

- Buzzan, T. (1988). Mind-Mapping in Planning. *1988 Computational Intelligence Conference* (pp. 78-84). Yan-Lei Zhang: IEEE.
- Campbell, C. (2005). *Preparing for college: identifying the learning and study strategies associated with varying levels of college preparedness in tenth graders*. Austin: University of Texas.
- Campd'onico, H., Caselli, S., & Mesones, M. (2014). An indirect eddect of education on growth. *ScienceDirect*, 31-34.
- Canpolat, N., & Sozbulir, T. (2006). Students Understanding of Mathematical concepts. *J. Math Educ*, 896-947.
- Carbin, B., & Strauss , R. (2008). Investigating The Teaching Methods Based On The Development of Studies In Higher Education. *International Journal of Advanced Research and Publications*, 193-217.
- Carnoy, M. (2007). Lessons from the past Two decades:Investment Choices for Education and Growth. *Sourthen African Review of Education*, 13-24.
- Carnoy, M., & Marshall, J. H. (2007). *Cuba;s academic disadvantage:Why students in Cuba do better in school*. Starnford: Stanford University Press.
- Carnoy, M., Brodziak, I., Luachei, T., Beteille, T., & Loyalka, P. (2012). Teacher Education and Development Study in Mathematics (TEDS-M): Do Countries Paying Teachers Higher Relative Salaries Have Higher Student Mathematics Achievement? *ERICA*, 182-117.
- Carnoy, M., Chisholm , L., & Chilisa, B. (2012). *The Low Achievement Trap: Comparing Schooling n Botswana and South Africa*. Cape Town: HSRC.
- Chaille, S., & Brian, G. (1997). *Alternative Forms of Knowing in Mathematics*. (W. Micheal-Roth, Ed.) Queensland: SensePublishers.
- Chisholm , L. (2000). *A South African curriculum for the twenty-first century: Report of the review committee on Curriculum 2005*. Pretoria: Ministry of Education.
- Chisholm, J. S. (2013). *Clifford Algebras and Their Applications in Mathematical Physics* (2nd ed., Vol. 183). (A. K. Commons, Ed.) Canterbury, Kent, United Kingdom: Mathematical Institute.
- Chisholm, L. (2013). Batustan education history: The "progressivism" of Bophutatswana's Primary Education Upgrade Programme. *South African Hoistorical Journal* 65(3), 403-420.
- Christie, P. (1999). OBE and unfolding policy trajectories: Lessons to be learned. In J. Jansen, *Changing Curriculum:studies on Outcomes-Based Education in South Africa* (pp. 134-157). Cape Town: Juta.
- Cohen, L., & Morrison, K. (2007). *Research Methods in education. (6th ed)*. London: Routledge.

- Costello, J., & Saville, N. (2017). Do Participatory Learning and Action Women's Groups Alone or Combined with Cash or Food Transfers Expand Women Agency in Rural Nepal. *The Journal of Development Studies*, 55,2019, 1670-1686.
- Cresswell, J. (2012, September 24). Including social discourses in research on refugees, race, and ethnicity. *Discourse & Society*, 23(5,2012), 50-62. Retrieved November 23, 2019, from <https://doi.org/10.1177/0957926512455885>
- Cresswell, J. M. (2005). *educational Research: Planning, conducting and evaluating quantitative and qualitative research*. Thousand Oaks NJ: Pearson Prentice Hall.
- Cresswell, T. (2014). *Place An Introduction* (3rd ed.). Oxford: John Wiley & Sons Ltd.
- Cresswell, T., & Nieuwenhuis, M. (2008). Fitting the Mold of Graduate School: A Qualitative Study on Socialization in Doctoral Education. *Innovative Higher Education*, 125-138.
- Crotty, M. (1998). The foundations of Social Research: Meaning and perspective in the research process. *Sage*, 134-154.
- Crowly-Henry, M. (2009). Ethnography: Visions & Versions. In R. Webb, *Approaches to Qualitative Research* (pp. 261-282). Ireland: Oak Tree Pres Cork.
- Cummins , J. (2000). *Language, Power and Pedagogy: Bilingual Children in the Crossfire*. Clevedon: Multilingualism Matters.
- Da Costa, D. (2005). Correlation in POedagogical Content Knowledge and Mathematical Content. *Journal of Affective Learning*, 31-40.
- Da Costa, D., & Jansen, L. (2012). *Afrikaans vs Zulu Row Brewin g at Schools*. Johannesburg: Mercury.
- Dalvit, L. (2010). *Multilingualism and ICT Education at Rhodes University*. Unpublished Ph.D. thesis. Makhanda: Rhodes University.
- Davilla, R. (2016). White Children's Talk About Tace and Culture: Family Communication and Intercultural Socialisation. In T. Socha, & R. C. Diggs (Ed.), *Race and Family: Exploring Communication in Black, White, and Biracial Families* (pp. 130-145). London: Lawrence Erlbaum Associates.
- Davis, R. B. (1990). Constructivist Views on the teaching and Learning of Mathematics. *Journal for Research in Mathematics and Science Education*, 13, 94-105.
- Davis, R. B. (1992). *Reflections on where mathematics education now stands and where it may be going* . Virginia: Library of cataloging in Publication Data.
- De Klerk , G. (1995). Slaves of English. In K. Heugh, *Multilingual education for South Africa* (pp. 37-41). Johannesburg: Heinemann.
- De Villiers , M. (1997). The future of secondatry school geometry. *Pythagoras*, 44, 37-54.
- De Villiers , M. (2010). An alternative approach to proof in dynamic geometry. *New directions in teaching and learning geometry*, 369-393.

- De Villiers, M. (2007). Experimentation and Proof in Mathematics. *Explanation and Proof in Mathematics*, 205-221.
- De Vos, R. (2005). Relational Contract Theory as Sociology: A Reply to Professor Lindernberg. *Journal of Institutional and Theoretical Economics*, 272-290.
- Devies, P. (2009). *mathematics and Democracy: the case for quantitative literacy*. Boston: Houghton Mifflin.
- Djite, P. (2005). From Liturgy to Technology: Modernising the Languages of Africa. *Language Problems and Language Planning* 32,2, 133-152.
- Djite, P. (2008). *The Sociolinguistics of Development in Africa*. Tonawanda: Multilingual Matters Ltd.
- Dougherty, B., & Tunis, H. (2005, March). Equity in School Mathematics Education: How Can Research Contribute? *Journal for Research in Mathematics Education*, 36, No.2, 92-100.
- Draper, K., & Spaul, N. (2015). examining noral reading fluency among Grade 5 rural ESL learners in South Africa: An analysis of NEEDU 2013. *South African Journal of Childhood Education*, 447-77.
- Department of Basic Education. (1997). *Language of Assesment for Grade 1-3*. Pretoria: Government Printers.
- Department of Basic Education. (2009). *Numeracy Stratergy*. Pretoria: Government Printers.
- Department of Basic Education. (2010). *Analysis of Numeracy Results for Grades R-3*. Pretoria: Government Printers.
- Department of Basic Education. (2011). *Numeracy Stratergy*. Pretoria: Government Printers.
- Edwards, J. (1991). Person-job fit: A conceptual intergration, literature review and methodological critique. In C. Cooper, & T. Robertson, *International review of industrial and organisational pyschology* (pp. 283-357). London: American Psychological Association.
- Ehrenberg, A. S. (1977). Rudiments of Numeracy. *Journal of the Royal Statistics Society*, 277-297. doi: <https://doi.org/10.2307/2344922>
- Elugbe, B. O. (1990). National Languages and National development. In L. Moshi, & 1st (Ed.), *language Pedagogy and Language use in Africa* (pp. 39-46). London: Adonis&Abbey Publishers Ltd.
- Elugbe, B. (1990). *Getting learning Right: Report of the President's Education Initiative Research Project*. Cape Town: Pearson.
- Erasmus, J., & Mda, T. (2008). *Scarce and Critical Skills: Educators'!*. Unpublished Report prepared for the Department of Labour Project on Scarce and Critical Skills. Pretoria: HSRC.
- Fargelin, T. (2007). Using theory to develop an educational intervention. *White Rose Journals*, 98-115.

- Filmer, D., & Pritchett, L. (2019, January 23). *Popul.Dev.* 25. Retrieved from The effect of household wealth on educational attainment: evidence from 35 countries: <http://dx.doi.org/10.1111/j.1728-4457.1999.00085.x>.
- Fleck, C. (2000). The Reception of the Epistemology for Research in Science Education. *SciELO*, 123-156. doi:<http://dx.doi.org/10.1590/1983-21172011150311>
- Fleisch , B. (2012). Who is out of school? Evidence from the Statistics South Africa Community Survey. *International Journal of Educational Development*, 32 (4), 529-536.
- Fleisch, B. (2007). School participation from 'Birth-to-Twenty': Patterns of schooling in an urban child. *UKFIET Conference* (pp. 1-16). UK: Oxford University Press.
- Fleisch, B. (2008). *Primary education in crisis*. Capetown: Juta&Co.
- Fleisch, E. (2010). What is the internet of things? Economic Perspective. In A. Scherly, *Economics, Management, and Financial Markets* (pp. 125-157). Cape Town: Addleton Academic Publishers.
- Flesich, B. (2008). *Primary Education in Crisis: Why South African School Children underachieve in reading and mathematics*. Capetown: Juta&Co.
- Freeland, J. (2010). Increasing teacher intervention implementation in general education settings through consultation and performance feedback. (D. Gibertson, Ed.) *APAsyncNET*, 77-88. doi:<https://doi.org/10.1037/h0088949>
- Frith, S. (2000). Comprehension tests in mathematics. *Educational Studies in Mathematics*, 42(3), 225-235.
- Frith, S. (2011). Having an impact? Academics, the music industries and the problem of knowledge. *International Journal of Language Policy*, 459-474.
- Galabawa, J. (2008). Funding, selected issues and trends in Tanzania higher education. *Higher Education Journal*, 21(1), 49-61.
- Garcia, O. (2005). *Imagining Multilingual Schools: Language in Education and Globalisation*. New Delhi: Orient BlackSwan.
- Gautam, T. (2005). Conditions for Successful Local Collective Action in Forestry: Some Evidence From Hills of Nepal. *Society & Natural Resources*, 153-171.
- Gautam, T. R., & Bhattarra, B. (2005). Migration and the Problem of Old Age People in Nepal. *Sociology and Anthropology*, 145-160. doi:[doi:/doi.org/10.3126/dsaj.v2i0.1361](http://doi.org/10.3126/dsaj.v2i0.1361)
- Glewwe, P. (2002). Schools and Skills in Developing Countries: Education Policies and Socioeconomic Outcomes. *American Economic Association*, 40 (2), 436-482. doi: 10.1257/00220510232016125
- Goba , B., & Van Laren, L. (2013). *The Volatile Issue of the Language(s) of Instruction in the Foundation Phase Mathematics Teacher Education in a Multilingual Context*. Durban: University of KwaZulu-Natal.

- Grage, B. (2017). The Social Power Relations of Algorithms. *Information, Communications & Society*, 1-13.
- Gray, D. (2013). *Doing Research in the Real World*. London: SAGE.
- Gray, E. M. (1994). Duality, ambiguity and flexibility: a proceptual view of simple arithmetic. *The journal for research in Mathematics Education*, 26(2), 115-141.
- Gray, S. W. (2013). Students' interpretation in learning derivatives in a university mathematics classroom. *19th Annual Congress of the Association for Mathematics Education of South Africa* (pp. 183-193). Cape Town: AMESA.
- Green, D. (2014). *Literacy for the 21st Century*. Melbourne: Pearson.
- Hameso, S. (1997). The Language of education in Africa: The key issues. *Language, Culture, and Curriculum*, 10, 1997(1), 1-13. Retrieved from <https://doi.org/10.1080/07908319709525237>
- Hansen, D. T. (1997). *John Dewey and Our Educational Prospect: A Critical Engagement with Dewey*. New York: State University of New York Press.
- Hanushek, E. (2012). The Distribution of Teacher Quality and Implications for Policy. *Annual Review of Economics*, 4:131-157, 131-157. Retrieved January 10, 2017, from <https://doi.org/10.1146/annurev-economics-080511-111001>
- Hanushek, E. A. (2003). The failure of input based schooling policies. *Econ. J.* 113, 12-23.
- Hayden, M., & Lee, L. (2009). Newton: An Interactive Environment for Exploring Mathematics. *Journal of Algebra*, 25(2), 195-212. Retrieved from <https://doi.org/10.1006/jasco.1997.0172>
- Henning, E., van Rensburg, W., & Smith, B. (2005). Finding your way in qualitative research. *Info-center*, 32-47.
- Hesse-Biber, S., & Leavy, P. (2011). *The Practice of qualitative research* (2nd ed.). London: SAGE.
- Heugh, S. (1995). The Dilemma of the Mother Tongue: Prospects for Bilingual Education in South Africa. *Language, Culture and Curriculum*, 51-66.
- Hobden, S. (2009). A study of the transition pathways of school level scholarship recipients into work and tertiary education. *South African Journal of Education*, 35(3 (2009)), 123-156.
- Hobden, S. (2009). Foundations of Complexity, the Complexity of Foundations. *Sage Journals*, 50-62.
- Hobden, S. (2011). *Framework for Classroom assesment in Mathematics*. Utrecht: national center for Improving Student Learning and Achievement in Mathematics and Science.
- Hobden, S. (2011). Maths and me: Using mathematics autobiographies to gain insight into the breakdown of mathematics learning. *Education as Change*, 15, 2011(1), 33-46. Retrieved June 2, 2018, from <https://doi.org/10.1080/16823206.2011.566572>

- Hobden, S. (2012). Memories of their mathematics teachers: Implications for pedagogy. *Journal of Education no. 54*, 1-16.
- Hoepfl, M. (1997). Choosing Qualitative Research: A Primer for Technology Education Researchers. *Journal of Technology Education*, 17-29.
- Holton, M. (1997). *The relative risk-percentage equity index: Measuring equity in reading and numeracy achievement across PIRLS 2006 countries*. Hamburg: International Association for the Evaluation of Education.
- Holtzhausen, D. (2005). Public relations practice and political change in South Africa. *The European Journal of Development Research*, 43-58.
- Howie, S. (1997). *Mathematics and Science performance in the Middle School Years in South Africa: A summary report on the performance of South African Students in the Third International Mathematics and Science Study*. Pretoria: Human Sciences Research Council.
- Howie, S. (2002). *English Language Proficiency and Contextual Factors Influencing Mathematics Achievement in Secondary School Pupils in South Africa*. Ipskamp: Euschele Partners.
- Ipara, E., & Mboro, M. (2009). Oral History and the development of Indigenous irrigation. Methods and examples from Kilimanjalo, Tanzania. *Norsk Geografisk Tidsskrift*, 9-22.
- Jansen, J. (2004). Autonomy and Accountability in the Regulation of the Teaching Profession: A South African Case Study. *Research Papers in Education*, 57-66.
- Jokweni, M. (2004). Problems Associated With Creation of IsiXhosa terms in Special Subjects: The Case of Geography and Social Sciences. In B. Brock-Utne, Z. Desai, & M. Qorro, *Researching the languages of Instruction in Tanzania and South Africa* (pp. 99-113). Cape Town: African Minds.
- Jones, K. (2000). Trainee primary teachers' knowledge of geometry for teaching. *Proceedings of the British Society for Research into Learning Mathematics*, 22(2), 95-100.
- Jones, R. (2009). Beyond 'listen and repeat': Pronunciation teaching materials and theories of second language acquisition. *ScienceDirect*, 103-112.
- Jourbert, I., Bester, M., & Meyer, E. (2008). *Literacy in the Foundation Phase*. Pretoria: Van Schaik Publishers.
- Kajoro, P. A. (2003). Educational Exigencies of the 21st century: Implications for teacher education programmes in East Africa. *Journal of Teaching and Learning (Vol 9 No 2013)*, 134-150.
- Kamwendo, G. (2006). No Easy Walk to Linguistic Freedom: A Critique of Language Planning during South Africa's First Decade of Democracy. *Nordic Journal of African Studies* 15,1, 53-70.
- Kamwendo, G. (2010). Denigrating the Local, Glorifying the Foreign: Malawian Language Policies in Era of African renaissance. *International Journal of Renaissance Studies* 5,2, 270-282.

- Kansakar, S. (2004). Spatial pattern in the precipitation regime of Nepal. *International Journal of Climatology*, 8-23. Retrieved from <https://doi.org/10.1002/joc.1098>
- Kaplan, R., & Baldauf, R. (2003). Language-in-Education Policy and Planning. In E. Hinkel, *Handbook of Research in Second Language Teaching and Learning* (1st ed., pp. 22-30). New York: Routledge.
- Kochan, T. (1971). Conflict: Toward Conceptual Clarity. *Administrative Science Quarterly*, 359-370.
- Kotjaas, P. (2010). Early development and later achievement. *Early Numeracy Bulletin*, 7-46.
- Kotze, G. S., & Strauss, J. P. (2007). An investigation into mathematical performance of Grade 6 learners in South Africa. *Pythagoras*, 65, 24-31.
- Language in Education Policy. (1997). *Language In Education Policy for grade 1-3*. Pretoria: Government Printers.
- Lantolf, J. (2000). Socio-Cultural Theory and Second Language Development. In B. VanPatten, & Jessica Williams, *Theories of Second Language Acquisition* (pp. 209-234). Routledge: Pretoria.
- Lantolf, J., & Thorne, S. (2007). A linguistics of Communicative Activity. In S. Makoni, & A. Pennycook (Ed.), *Disinventing and Reconstituting Languages* (pp. 170-181). Tonawanda: Multilingual Matters.
- Leach, J., & Scott, P. (113). Individual and Sociocultural Views of Learning in Science Education. *Journal of Science Education*, 12(1), 91-113.
- Lebeloane, O. (2018). 'You can train us until we are blue in our, we are still going to struggle': The teacher professional learning in a full-service school. *Education as Change*, 18, 2014, 319-333.
- Lee, E., & Ormrod, L. (2005). Framework of Problem-Based Research: A Guide for Novice Researchers on the Development of a Research-Worthy Problem. *Informing Science: the International Journal of an Emerging Transdiscipline*, 11-28.
- Leuman, G. (2008). A model of metacognition, achievement goal orientation, learning style and self efficacy. *Learning Environments Research*, 131-151.
- Lewin, K. (2007). Transitions and Equity. Improving Access, Equity and Transitions in Education. *Creating A Research Agenda*, 134-146.
- Lewin, K. M. (2009). Access to education in Sub-Saharan Africa: patterns, problems and possibilities. *Comparative Education*, 151-174.
- Lewin, K. M. (2011). Access to education revisited: Equity, drop out and transitions to secondary schools in South Asia and Sub-Saharan Africa. *International Journal of Educational Development*, 333-337.
- Lewis, C. (1981). Skill in algebra. In J. R. Anderson, *Cognitive skills and their acquisition* (pp. 85-110). USA: Lawrence Erlbaum Associates.

- Lin, M., & Mackay, C. (2004). *Thinking Through Modern Languages*. (D. Leat, Ed.) Cambridge: Chris Kington Publishing.
- Lincoln, Y., & Guba, E. (1985). Judging the quality of case study reports. *International Journal of Qualitative Studies*, 53-59. doi:<https://doi.org/10.1080/0951839900030105>
- Madiba, M. (2010). Towards multilingual higher education in South Africa: the University of Cape Town's experience. *The Language Learning Journal*, 327-346.
- Madziba, A. (2010). Legislating Manners, Insolence and Contemptuous Behaviour in Southern Rhodesia. *Journal of Southern African Studies*, 653-672.
- Malimela, K. (2013). Intergration of African Indigenous Knowledge Systems into Higher Education in South Africa: Prospects and Challenges. *Race, Power and Indigenous Knowledge Systems*, 134-147.
- Malla, L. (2000). Current Ethical Issues in Teacher Education: A critical Analysis on Pre-service and In-service Emerging Teachers. (R. R. Puhan, Ed.) *American Journal of Education Research*, 2(12a), 1-7. Retrieved from <http://pubs.sciepub.com/education/2/12A/1>
- Marshall , B. (1987). *Learning to be modern*. (1st, Ed.) New York: Routledge. doi:<https://doi.org/10.4324/9780429499272>
- Marshall, C. (2007). *Designing a qualitative research*. (2nd ed). Thousand Oaks: Sage.
- Mbenga, B., & Giliomee, A. (2007). Barriers to participation and retention: engaging and returning 'out of school' children in the Gambia. *International Journal of Primary, Elementary and Early Years Education*, 181-196.
- McCormick, K. (1995). Code-switching, code-mixing and convergence in Cape Town. In R. Mesthrie, *language History and social history* (pp. 193-208). cape Town : David Philip.
- McCrocky, R. (1987). The Van Hiele model of goemetric thoughts. In M. M. Lindquist, *learning and Teaching Geometry, K-12. 1987 year Book* (pp. 54-67). Reston: National Council of Teachers of Mathematics .
- McCroskey, R. (2002). The Scholarship of Teaching and Learning: Contributions from the Discipline of Communications. *Communication Education*, 383-391. doi:<https://doi.org/10.1080/03634520216521>
- McGregor, M. (1997). ideas about symbolism that students bring to algebra. *Mathematics Teacher*, 90(2), 110-113.
- McTaggart, A. (2015). Global citizenship education, technology and being. *Globalisation, Societies and Education*, 268-281. doi:<https://doi.org/10.1080/14767724.2017.1405342>
- Merten, B. (2014). Three Basics of Research. *The Astrophysical Journal*, 786-835.
- Mesathrie, R. (2002). South Africa: A Sociolinguistic overview. *Language in South Africa*, 449-475.

- Mhlongo, B.Y. (2017). *Ukusetshenziswa Kwenzulalwazi Yokwethulwa Kwamagama njengesu Lokwakha Abalingiswa: Kubuyekwezwa Imibhalo Eqokile Ebhalwe Emva Kokuzuzwa Kwenkululeko* (Unpublished doctoral dissertation). University of Zululand, KwaDlangezwa, South Africa
- Mignolo, W. D. (2016). Sustainable Development or Sustainable Economies? Ideas Towards Living in Harmony and Plentitude. *DOC Research Institute*, 124-145.
- Minedu, I. (2015). *Teacher Education as a Future-moulding Factor*. (J. Jussila, & S. Saari, Eds.) Finland: Finnish Higher Education Evaluation Council.
- Mkhwanazi, T., Bansilal, S., & Brijlall, D. (2014, March). Perspectives in Education-An exploration of the common content knowledge of high school mathematics teachers. *Perspectives in Education*, 32(1), 34-50.
- Moloi, M., & Chetty, M. (2011). *The SACMEQ III Project in South Africa: A study of the conditions of Schooling and Quality of Education*. Pretoria: Department of Basic Education.
- Morgan, H., Craig, S., & Wagner, S. (2014). Developing Mathematical Language Proficiency in Pre-service Teacher Education: A Case Study. *R&E Source*, 145-156.
- Motshekga, A. (2013). *Statement on the Release of Annual National Assesments Results for 2013*. Atteridgeville: Delivered at Mahlahle Primary School.
- Motsitsi, S. (2001). Anxiety in Mathematics Learning Among Secondary School Learners: A Comparative Study between Tanzania and Malaysia. *Procedia-Social and Behavioral Sciences*, 498-504. doi:<https://doi.org/10.1016/j.sbspro.2010.12.068>
- Mufanechiya, M. (2011). Using mother tongue as a medium of instruction in the teaching of mathematics in the South African junior schools: Desirable or feasible. *Journal of Asian Scientific Research*, 194-203.
- Murray, S. (2002). *Language issues in South African education: An overview*. Cambridge: Cambridge University Press.
- Naidoo, I. (2010). *Mathematical Attitudes and Achievement Strategies Of Successful Mathematics Learners* (Unpublished masters). University of KwaZulu-Natal, Durban, South Africa
- Naidu, F. (2002). *Research at grass root for the social sciences and human service professions*. Pretoria: Schaik Publishers.
- Nakasa, S. (2000). The relationship between identity, language and teaching and learning in higher education in South Africa. (A. Van der Merwe, & B. Leibowitz, Eds.) *Per Linguam*, 23-37.
- Nakpan, P. (1993). *Advances in Pattern Recognition*. London: World Scientific Publishing.
- National Curriculum Statement. (2011). *Revised Curriculum Statement Grades R-3*. Pretoria: Government Printers.

- National Curriculum Statement. (2008). *Revised Curriculum Statement Grades R-3*. Pretoria: Government Printers.
- Ndabakurane, J. (2002). Language Supportive Teaching and Textbooks (LSTT) for Bilingual Classrooms Mathematics Teaching and Learning in Tanzania. *AJOTE African Journal of Teacher Education*, 123-132. doi: <https://doi.org/10.21083/ajote.v6i0.3946>
- Nieuwenhuis, R. (2008). Qualitative Research Designs and Data Gathering Techniques. In K. Maree, *First Steps In Research* (pp. 88-94). Pretoria: Van Schaik Publishers.
- Nieuwenhuis, R. (2008). *Academic Leadership in Higher Education: A Participative Perspective From One Institution*. Fort Hays State: Fort Hays Press.
- Nkomo, S. M. (1990). Invisible men and women: A status report on race as a variable in organisation behavior research. *Journal of Organisational Behaviour*, 419-431.
- Nkosi, Z.P. (2011). *An Exploration Into The pedagogy Of Teaching Reading In selected Foundation Phase isiZulu Home Language Classes In Umlazi Schools* (Unpublished doctoral dissertation). University of KwaZulu-Natal, Durban, South Africa.
- Nomlomo, V. (2007). *Science Teaching and Learning Through The Medium of English and IsiXhosa: A Comparative Study at Two Primary Schools in the Western Cape. Unpublished Doctoral Thesis*. Cape Town: University of the Western Cape.
- Nomlomo, V. (2014). Reflections on the Use of African Languages in Science Teaching and Learning in the Intermediate Phase: A Case Study of Two Western Cape Primary Schools. *African languages in South Africa's Dispensation of Freedom and Democracy*, 209-229.
- Ntsebeza, L. (2004). Democratic decentralisation and traditional authority: Dilemmas of land administration in rural South Africa. *The European Journal of Development Research*, 71-89.
- O'Campo, P. (2004). Socioeconomic Position and Major Mental Disorders. *Epidemiologic Reviews*, 53-62.
- O'Campo, V. (1995). Learning through problem solving. In A. Olivier, & K. Newstead, *Proceedings of the Twenty second International Conference for the Psychology of mathematics Education* (pp. 124-137). Routledge: London.
- Odora-Hoppers, C. (2001). Education, culture and society in a globalizing world: Implications for comparative and international education. *Compare: A Journal of Comparative and International Education*, 601-614. Retrieved September 23, 2019, from <https://doi.org/10.1080/03057920903125628>
- Ogg, J. (2003). Active Ageing and Universities: Engaging older learners. *ERIC*, 56-68.
- Ohta, B. (2000). Challenges Facing Asian Students: Pedagogical Considerations in Higher Education. *Journal of International Students*, 24-39.
- Oke, J. (2009). Teacher Educationalization. *African Journal of Teacher Education*, 1202-1204. Retrieved from <http://www.academicjournals.org/AJBM>

- Oke, K. (1999). Quest for a better operation system in education: Privatisation and teacher educationalization. *African Journal of Business Management*, 1202-1214.
- Olivier, C. (2016). Explaining the spread of temporary jobs and its impact on labour turnover. *International Economic Review*, 533-572.
- Oprah, S. (2003). Neoliberalism and race. *A journal offeminist theory*, 25-41. Retrieved from <https://doi.org/10.1080/07407700801902809>
- Palkinghorne, D. (1989). Phenomenological Research Methods. *Existential Phenomenological Perspectives in Psychology*, 217-222.
- Parrila, R. (1995). Vygotskian Views on Language and Planning in Children. *School Pyschology International*, 57-84.
- Paulston, C. (1994). *Linguistic Minorities in Multilingual Settings: Implications for Language Policies*. Philadelphia: John Benjamins Publishing Company.
- Pinnock, H. (2009). *Language and Education: The Missing Link*. London: CfBTEducation Trust and Save The Children Alliance.
- Pitchet , L., & Beaty, A. (2012). *The Rebirth of Education: Schooling Ain't learning*. Washington : Center for Global Development.
- Potton, S. (1990). *The case of teacher education in post-apartheid South Africa: Politics anbd Priorities*. Johannesburg: JET Education Trust.
- Praddahan, S. (2012). Towards Robust Linguistic Analysis using OntoNotes. *Seventh Conference on Computational Natural Language Learning* (pp. 50-67). Sofia: Association for Computational Linguistics.
- Prah, K. (2005). Langauge of Instruction for Education, Development, and African Emancipation. In B. Brock-Utne, & K. R. Hopson, *Languages of Instruction for African Emancipation: Focus on Postcolonial Context and Considerations* (pp. 123-147). Cape Town: CASAS.
- Pretorius , E. (2014). Supporting Trnasion or PLayering Catch-up in Grade 4: Implications for Standards in Educatioj and Training. *Perspectives in Education* 32,1, 157-173.
- Pretorius, E. J. (2015). Failure to launch: Matching language policy with literacy accomplishment in South African Schools. *International Journal for the Sociology of Language*, 47-76.
- Pretorius, E., & Spaul, N. (2016, January 04). *About Us: Maths Coporation*. Retrieved from Maths Corporation Web site: <http://dx.doi.org/10.1007/s11145->
- Pretorius, J. E. (2009). Putting reading in Sotho on track in the early years: Changing resources, expectations and practices in a high poverty school. *South African Journal of African Languages*, 54-73.
- Prinsloo, E. (2005). Socio-Economic Barriers to Learning in Contemporary Society. In E. Landsberg, *Addressing Barriers to Learning: A South African Perspective* (pp. 34-55). Pretoria: Van Schaik Publishers.

- Pritchett, q., & Beatty, S. (2012). Observational Tests of Cosmological Inflation. *NATO Advanced Research Workshop on Observational Tests of Inflation* (pp. 23-46). Durham: Springer Science+Business Media, BV.
- Qorro, M. (2004). *Parents' View on the Medium of Instruction in Post Primary Education in Tanzania*. Dae es Salaam: KAD Associates.
- Rajend, S. (2002). A Sociolinguistic Overview in Language in South Africa. In R. Mesthrie, *Langauge in South Africa* (pp. 234-278). Cambridge: Cambridge University Press.
- Rajesh, T. (2011). Decolonization of knowledge, epistemicide, participatory research and higher education. *Ingenta Connect*, 6-19.
- Ramani, R. (2011). English with or without G(u)ilt. *Language and Education*, 254-272. Retrieved from <https://doi.org/10.1080/09500789808666753>
- Reddy, V. (2003). *Mathematics & Science Achievement at South African Schools in TIMMS 2003*. Cape Town: Human Sciences Research Council Press.
- Riley, R. (2009). Research Designs. *American Accounting Association*, 23(2), 113-147. doi:<https://doi.org/10.2308/aud.2004.23.2.169>
- Rojas, F. (2009). *Students' Perspective of the Role of Facebook in Their Studies Of Successful Mathematics Learners* (Unpublished masters). University of KwaZulu-Natal, Durban, South Africa.
- Rubagumya, C. (2014). English-Medium instruction in Tanzania secondary schools: A conflict of aspiraions and achievements. *Language, Culture and Curriculum*, 107-105. Retrieved from <https://doi.org/10.1080/07908318909525059>
- Rugemalina, S. (2005). Sustainable development in Africa. *Public Law Journal*, 23-45. Retrieved from <http://hdl.handle.net/11394/1851>
- Rwabantabagu, S. (2011). Transformational and transactional leadership effects on teachers job satisfaction, organisational commitment, and organisational citizenship behavior in primary schools: The Tanzanian case. *An International Journal of Research, Policy and Practice*, 17(2011), 145-177. Retrieved from <https://doi.org/10.1080/09243450600565746>
- Saricoban, G. (2012). Foreign Language Education Policies in Turkey. *Procedia-Social and Behavioral Sciences*, 2642-2648.
- Saull, F. (1972). Establishing a culture: The role of education. *Maths Education Today*, 95-102.
- Schleicher, D. (2010). *An Invitation to Mathematics*. (M. Lackmann, Ed.) Bordesholm, Germany: Springer, Berlin, Heidelberg. doi:<https://doi.org/10.1007/978-3-642>
- Seidel, C. (1998). Analysing Qualitative Data. In A. Kathleem, & M. Don (Ed.), *Research Methods in Social Sciences* (pp. 115-156). New York: Routledge.
- Selvi, K. (1996). Teachers Competencies. *Cultural International Journal of Philosophy of Culture and Axiology*, 167-175.

- Setati, M. (2000). Between languages and discourses: Language practices in primary multilingual mathematics classrooms. *educational Studies in Mathematics*, 128-149.
- Setati, M. (2000). Incomplete journeys: Code-switching and other language practices in mathematics classroom. *Educational Studies in Mathematics*, 243-269.
- Setati, M. (2008a). Access to mathematics versus access to the language of power: the struggle in multilingual mathematics classrooms. *South African Journal of Education Vol , 28: 103-116*, 104-116.
- Setati, M. (2008b). *Innovative Language Practice in Multilingual Mathematics Classrooms*. Johannesburg: Joint Education Trust.
- Setati, M. (2012). Mathematics Education Across Two Language Contexts. In O. Skovsmose, *Opening the Cage. New Directions in Mathematics and Science Education* (pp. 167-186). Johannesburg: Sense Publishers.
- Setati, M. (2013). *Political and Ethical Issues of Doing Research in Mathematics Classrooms*. Cape Town: University of the Western Cape.
- Setati, M. (2014) Code-switching in a Senior Primary Class of Second Language Mathematics Learners). *For the Learning of Mathematics*, pp. 34-40.
- Setati, M., Molefe, T., Duma, B., Nkambule, T., Mpalami, N., & Langa, M. (2008, April 23). Using language as a transparent resource in the teaching and learning of mathematics in grade 11 multilingual classroom. *Third Annual Symposium on teaching and learning in multilingual classrooms*, pp. 50-62.
- Sherman, J., & Webb, R. (1998). Qualitative Research: An Introduction. Purposes, Methodology, Criteria for Judgement and a Rationale for Mixed Methodology. *ERIC*, 16-38.
- Shretha, M. (2009). *Fake Literacy*. New York: United Nations.
- Sibayan, L., & Ganzalez, A. (1995). Career Education Practice in Tanzania. *The advancement for Vocational and Technical Education* (pp. 1-34). Columbus: Eric Clearinghouse.
- Singh, A. (2009). Language Policy and Communication in Post Apartheid Education-Towards a Theory of 'Linguicide'. *Journal of Socil Science*, 127-136.
- Skutnabb-Kangas, T. (2000). *Lingistic genocide in education-Or worldwide diversirty and human rights*. Hillsdale: Lawrence Erlbaum Associates.
- Skutnabb-Kangas, T. (2004). Multilingualism for all. In O. Garcia, *European Issues of multilingualism* (pp. 78-90). Lisse: Swets & Zeitlinger.
- Skutnabb-Kangas, T. (2013). *Multilingual Classroom Ecologies* (1st ed.). (C. Angela, Ed.) Clevendon: Multilingual Matters.
- Spaull, N. (2008b). Politics of Schooling. *Eric, 162988*, 116-202.
- Spaull, N. (2009, January). Disentangling the language effect in South African schools: measuring the impact of language assesment in grade 3 literacy and numeracy. *South African Journal of Childhood Education*, 6, 1-20.

- Spaull, N. (2011). Primary school performance in Botswana, Mozambique, Namibia and South Africa: A comparative analysis of SACMEQIII. *SACMEQ Working papers*, 1-74.
- Spaull, N. (2011a). Low Quality Education as a Poverty Trap. *Stellenbosch Economic Working Papers No.25/2011*, 1-22.
- Spaull, N. (2012). "Effective enrolment" - Creating a composite measure of. *Stellenbosch Economic Working Papers*, 115-134.
- Spaull, N. (2013). Poverty and privilege: Primary school inequality in South Africa. *International Journal of Educational Development*, 33, 436-447.
- Spaull, N. (2015). *Education quality in South Africa and Sub-Saharan Africa: An economic approach*. Capetown: Stellenbosch University.
- Spaull, N. (2015). *Education quality in South Africa and sub-Saharan Africa: An economic approach (unpublished doctoral thesis)*. South Africa: Stellenbosch University.
- Spaull, N. (2016). Exploring Relationships between oral reading fluency and reading comprehension amongst English second readers in South Africa. *Reading and Writing*, 1449-1471.
- Spaull, N., & Kotze, J. (2015). Starting behind and staying behind in South Africa: the case of insurmountable learning deficits in mathematics. *International journal of Educational Development*, 12-24.
- Spaull, N., & Taylor, S. (2015). Access to What? Creating a Composite Measure of Educational Quantity and Educational Quality for 11 African countries. *Comparative Education Review*, 133-165.
- Spaull, N., & Venkat, C. (2008). Language and other background factors affecting secondary school pupil's performance in Mathematics in South Africa. *African Journal of Research in Mathematics, Science and Technology Education*, 1-20.
- Spaull, N., & Vithal, R. (2009). Re-imagining mathematics and mathematics education for equity and social justice in the changing South African university. (K. le Roux, Ed.) *Critical Studies in Teaching and Learning*, 123-147.
- Steen, H. (1990). Spatial and Temporal Patterns of Mathematics. *esa*, 50-62.
- Swanson, P. (1997). Models and super-models: ways of thinking about professional knowledge in mathematics teaching. *Res. Math.*, 101-114.
- Sztajn, P. (1995). Mathematics Reform: Looking for Insights from Nineteenth Century Events. *Wiley Journals*, 377-383.
- Taylor, E., & Howie, S. (2008). The effect of multilingual policies on performance and progression in reading literacy in South African primary schools. *Educational Research and Evaluation: The International Journal on Theory and Practice*, 14, 2008(6), 551-560. Retrieved from <https://doi.org/10.1080/13803610802576775>

- Taylor, N. (2011). *Priorities for addressing South Africa's Education and Training Crisis: A review commissioned by the National Planning Commission*. Johannesburg: Joint Education Trust.
- Taylor, N. (2014). *Thinking, language and learning in initial Teacher Education*. Johannesburg: University of the Witwatersrand.
- Taylor, N., & Howie, W. (2008). *Thinking, Language and Learning in Initial Teacher Education*. Johannesburg: University of Witwatersrand.
- Terreblanche, M. (2006). *Research in Practice: Applied Methods for Social Sciences*. Cape Town: UCT Press.
- Terry, E., & Irving, B. (2010). Beyond the Text: Contemporary Writing on Distance Education. *ERIC*, 342-415.
- Tibategeza, E. R. (2010). Implementation of Bilingual Education in Tanzania: The Realities in the Schools. *Nordic Journal of African Studies*, 19 (4), 227-249.
- Third International Maths and Science Study. (2003). *Percent of Responses by Math item categories-fifth Grade*. Boston: TIMSS and PRLS International Study Center.
- Third International Maths and Science Study. (2011). *Percent of Responses by Math item categories-Eighth Grade*. Boston: TIMSS and PRLS International Study Center.
- Tobin, T. (2011). *Foundations of Bilingual Education and Bilingualism. 4th edition*. Clevedon: Multilingual Matters.
- Tollefson, J., & Tsui, A. (2007). *Medium of Instruction Policies*. London: Lawrence Erlbaum Associates Publishers.
- Training, D. O. (1997). *Higher Education Act of 1997*. Pretoria: Department of Education.
- University of KwaZulu-Natal. (2018, November 1). *University of KwaZulu-Natal Language Policy*. Retrieved from Ukzn Homepage: [http://registra.ukzn.ac.za/libraries/policies/language\\_Policy-CO02010906](http://registra.ukzn.ac.za/libraries/policies/language_Policy-CO02010906).
- Valdiviezo, L. (2013). Vertical and horizontal approaches to ethnography of language policy in Peru. (C. Florian, & A. Duchene, Eds.) *International Journal of the Sociology of Language*, 234-244. doi:<https://doi.org/10.1515/ijsl-2013-0003>
- Van der Walt, G. (2009). Study Orientation and Knowledge of Basic Vocabulary in Mathematics in the Primary School. *Suid-Afrikaanse Tydskrif vir Natuurwetenskap en Tegnologie* 28, 378-392.
- Van Lauren, L. (2013). *The Psychology of Mathematics for Instruction* (2nd ed.). Mahwah: Lawrence Erlbaum Associates, Inc.
- Venkat, B. (2011). *Mechanism to correlate the presence of worms in a network*. Chicago: Cambridge University Press.
- Venkat, C. (2013). The impact of the transition to the outcomes-based teaching on university preparedness in mathematics in South Africa. *Mathematics Education Research Journal*, 57-70.

- Venkat, C. (2016a). The Convex Geometry of Linear Inverse Problems. (B. Recht, A. Pablo, & A. S. Willsky, Eds.) *Foundations of Computational Mathematics*, 12(6), 805-849.
- Venkat, H. (2009). Mathematics and Science education research, policy and practice in South Africa: What are the relationships. *African Journal of Research in Mathematics, Science and Technology Education*, 13(sup1), 5-27.
- Venkat, H. (2012). Analysing coherence for conceptual learning in a Grade 2 numeracy lesson. *Educ. Change* 16(1), 21-33.
- Venkat, H., & Spaull, N. (2013). What do we know about primary teachers' mathematical content knowledge in South Africa: An Analysis of SACMEQ 2007. *International Journal of Education*, 121-130.
- Venkat, H., & Spaull, N. (2015). What do we know about primary teachers' mathematical content knowledge? An Analysis of SACMEQ 2007. *International Journal of Educational Development*, 121-130.
- Vinjevold, L. (2006). South Africa: access before quality and what to do now? *Demography* 38, 85-120.
- Vinjevold, P. (2013). *Getting schools working: Research and Systematic Reform in South Africa*. Cape Town: Maskew Miller Longman (Pty) Ltd.
- Vinjevold, P. (2017). Mathematical error made by high performing candidates writing the National Benchmark Tests. *Pythagoras-Journal of the Association for the Mathematical Education of South Africa*, 1-10.
- Vithal, R. (2013). *University of KwaZulu-Natal Pioneers the Introduction of IsiZulu in Undergraduate Degrees*. UKZN, Durban: UKZN Teaching and Learning.
- Vithal, R. (2016). *Designing your First Research Proposal*. (2nd, Ed.) Sommerset West: Juta and Company Ltd.
- Vithal, R., & Jansen, J. (2009). Curriculum Reform in South Africa: a critical analysis of outcomes-based education. *Cambridge Journal of Education*, 321-331.
- Vorster, M., & Hanneljie, M. (2008). Investigating a Scaffold to Code-switching as Strategy in Multilingual Classrooms. *Pythagoras* 67, 33-41.
- Vygotsky, L. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge: Harvard University Press.
- Watson, A. (2002). What does it mean to understand something and how do we know when it has happened? In L. Haggarty, *Teaching mathematics in secondary schools: a reader* (pp. 46-53). London: Routledge Falmer.
- Watson, W. (2009). *Mathematics as a Constructive Activity* (1st ed.). (J. Mason, Ed.) Milton Keynes: Lawrence Erlbaum Associates Publishers.
- Webb, G. (2002). *Supporting Student Learning Case Studies, Experience & Practice from Higher Education*. (G. Crosling, Ed.) London: Stylus Public Inc.

- Wertz, F. (1983). From Everyday to Psychological description: Analysing the moments of qualitative data analysis. *Journal of Phenomenological Psychology*, 197-213.
- Williams, A. M. (2002). Experimenting with quasi-variables in teaching of algebra. In T. J. Cooper, *Communities of practice: Learnign, meaning and identity* (pp. 275-287). New York: Harper.
- Wolff, L. (2002). Primary Education in Tanzanian Languages. *Sustainable Development Technical Papers* (pp. 10-26). Washington: Publications, Education Unit.
- Yin, A., & Robson, A. (2000). *Research Methods in Educational Leadership and Management*. Washington: SAGE Publications Ltd.
- Yin, R. (1994). *Case Study Research: Design and Methods, Applied Social Research Methods. 2nd Edition*. London: Sage Publications.
- Yin, R. (2011). *Applications of Case Study Research*. Carlifornia: SAGE.
- Zavala, G. (2007). Innovative Training of In-service Teachers for Active Learning: A Short Teacher Development Course Based on Physics Education Research. *Journal of Science Teacher Education*, 559-572. doi:<https://doi.org/10.1007/s10972-007-9054-7>

## ISITHASISELO SOKUQALA

Grade	3 B
Subject	Mathematics
Topic	Data handling
Content/Concept Area	Data handling
Duration of lesson	30 minutes
Date	1 August 2018

**Specific Outcomes**

Learning mathematics aims to develop a critical awareness of how mathematical relationships are used in social, environmental, cultural and economic relations. Learners will be able to collect, record and interpret data, learn to construct graphs from the information they collect.

**Learning Objectives**

Knowledge (know)	Skills (able)	Value (meaning)
<ul style="list-style-type: none"> <li>- To make sense of information.</li> <li>- accessing and analysing information.</li> <li>- To be able to investigate, collect, present and examine information</li> <li>- describe different types of graphs.</li> <li>- vocabulary (x, y axis)</li> </ul>	<ul style="list-style-type: none"> <li>- problem solving</li> <li>- critical thinking</li> <li>- Identify patterns</li> <li>- Construct a graph using the information given.</li> </ul>	<ul style="list-style-type: none"> <li>- to learn from a young age to organise information.</li> <li>- to learn that people prefer different things to them.</li> <li>- learn to organise their own lives and future.</li> <li>- learning colours and shapes at the same time.</li> </ul>

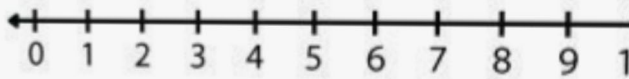
**KZN DEPT. OF EDUCATION & CULTURE**

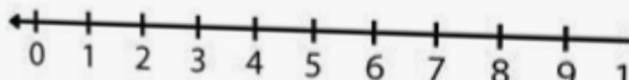
# ISITHASISELO SESIBILI

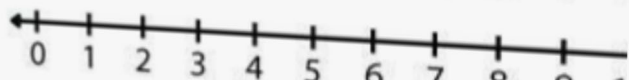


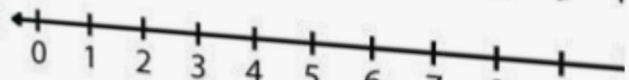
ISITHASISELO SESITHATHU

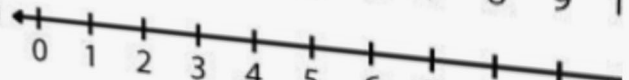
**Number bonds of 10 with Number Lines**  
Use the number lines to answer the math questions below. You can circle or highlight the answer on the number line.

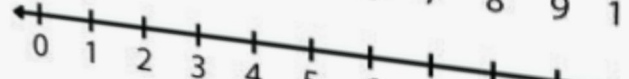
$0-3=\square$  

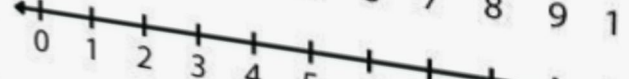
$0-5=\square$  

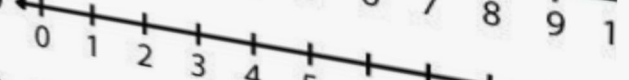
$0-1=\square$  

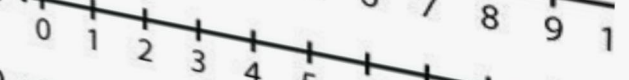
$4+\square=10$  


$4+\square=10$  

$0-2=\square$  

$0-4=\square$  

$4+\square=10$  

$4+\square=10$  

$4+\square=10$  

**ISITHASISELO SESINE (a)**

	p.	Worksheet	Resources	Completed
21	17 (p. 57)		Unifix blocks, counters, number symbol cards (1-10) (see <i>Printable Resources</i> ), flashcards +, minus and = (see <i>Printable Resources</i> )	
22	18 (p. 60)	Worksheet 47 (pp. 98, 99)	Pictures of tricycles/cows/hands (collect from old magazines/newspapers and bring them to the lesson), unifix blocks, counters	
23	19 (p. 63)	Worksheet 46 (pp. 96, 97)	Counters	
24	20 (p. 66)		Scrap paper and crayons	
25	n/a			

**Week 5 Assessment Activity: ORAL**

CAPS: Measurement: Volume and capacity  
 Activity: Use the vocabulary full and empty, order and compare amounts in containers according to capacity and estimate and measure capacity using non-standard measures

Level (percentage)	Criteria
1 (0%–29%)	Use vocabulary such as full and empty
2 (30%–39%)	Use vocabulary such as the same as, full and empty
3 (40%–49%)	Use vocabulary such as more than and less than, same as, full and empty
4 (50%–59%)	Order the amount of liquid that two containers can hold if filled
5 (60%–69%)	Order and compare the amount of liquid that two containers can hold if filled
6 (70%–79%)	Estimate the capacity of containers by using non-standard measures
7 (80%–100%)	Measure the capacity of containers by using non-standard and standard measures

**Reflection:** Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you complete all the work set for the week? If not, how will you get back on track?

*They enjoyed measuring using non std measure. They did addition and subtraction well. They also did doubling well. The problem was in halving they confused doubling and halving.*

What will you change next time? Why?  
*I will give them activities separately. Use doubling only then halving only, because if they do it simultaneously they become confused.*

Date: 21/3

HOD: *[Signature]*

Teacher Toolkit: Planner and Tracker 201

**ISITHASISELO SESITHATHU (b)**

17	Capacity and volume	14 (p. 48)	Worksheet 40 (pp. 84, 85)	Variety of 2 ml containers, a 500 ml jug, some large jugs, sand or water, cups
18	Addition up to 10 – counting on	15 (p. 51)	Worksheet 43 (pp. 90, 91)	Counters, number symbol cards (1–10) (see <i>Printable Resources</i> ), flashcards: and, makes and + (per learner – see <i>Printable Resources</i> )
19	Addition – Building up numbers up to 10	16 (p. 54)	Worksheet 45 (pp. 94, 95)	Unifix blocks, counters, number symbol cards (1–10) (see <i>Printable Resources</i> ), flashcards +, makes and – (see <i>Printable Resources</i> )
20	Learners do written assessment this week	n/a		

**Week 4 Assessment Activity: WRITTEN**

CAP5: Number operations and relationships: Space and shape  
 Activity: Number names and values, comparing numbers, addition and subtraction, number lines, shape recognition

Questions	Assign levels according to the following 1		
	Marks	Percentage	Level
Question 1: 1 mark	0–7	0–29	
Question 2: 3 marks	8–9	30–39	
Question 3: 2 marks	10–12	40–49	
Question 4: 4 marks	13–14	50–59	
Question 5: 4 marks	15–17	60–69	
Question 6: 2 marks	18–19	70–79	
Question 7: 5 marks	20–25	80–100	
Question 8: 2 marks			
Question 9: 2 marks			

**marks: 25**

**Reflection:** Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Do they complete all the work set for the week? If not, how will you get back on track?

Learners did very well in their written assessment, they also did the activities well. They are now used to number lines.

Will you change next time? Why?

**Date:**





UNIVERSITY OF  
KWAZULU-NATAL  
20 September 2019

Mr Siphelele Trueman Mbatha (211515497)

School of Education  
Edgewood Campus

Dear Mr Mbatha,

Protocol reference number: HSS/0517/019M

Project title: **Ukucwaninga Ukulungela kothisha abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu Emabangeni Ayisisekelo: Kugxilwe Olimini LwesiZulu**

Approval Notification — Expedited

Application In response to your application received 30 April 2019, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol has been granted FULL APPROVAL.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 1 year from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.  
Yours faithfully

.....  
Dr Rosemary Sibanda (Chair)

/ms

Cc Supervisor: Dr BY Mhlongo  
cc Academic Leader  
Research: Dr Ansurie Pillay cc  
School Administrator: Ms  
Sheryl Jeenarain

---

Humanities & Social Sciences Research  
Ethics Committee Dr Rosemary Sibanda  
(Chair)

Westville Campus, Govan Mbeki Building  
Postal Address: Private Bag X54001 , Durban 4000

Telephone: +27 (0) 31 260 3587/8350/4557 Facsimile: +27 (0) 31 260 4609 Email: [ximbap@ukzn.ac.za](mailto:ximbap@ukzn.ac.za) | [snvmanm@ukzn.ac.za](mailto:snvmanm@ukzn.ac.za)  
[mohunp@ukzn.ac.za](mailto:mohunp@ukzn.ac.za)

Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)

1910 • 2010



UNIVERSITY OF  
KWAZUW-NATAL  
INYUVESI  
YAKWAZULU-NATALI

17 April 2019

Mr Siphelele Trueman Mbatha (SN 211515497)  
School of Education  
College of Humanities  
Edgewood Campus  
UKZN  
Email: [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za)

Dear Mr Mbatha

RE: PERMISSION TO CONDUCT RESEARCH

Gatekeeper's permission is hereby granted for you to conduct research at the University of KwaZulu-Natal (UKZN) towards your postgraduate studies, provided Ethical clearance has been obtained. We note the title of your research project is:

"Ukucwaninga Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu Emabangeni Ayisisekelo: Kugxilwe Olimini LwesiZulu."

It is noted that you will be constituting your sample by conducting direct observation and/or handing out questionnaires to students in the School of Education on the Edgewood Campus.

Please ensure that the following appears on your notice/questionnaire: ● Ethical clearance number;

● Research title and details of the research, the researcher and the supervisor; ● Consent form is attached to the notice/questionnaire and to be signed by user before he/she fills in questionnaire; ● gatekeepers approval by the Registrar.

You are not authorized to contact staff and students using 'Microsoft Outlook' address book. Identity numbers and email addresses of individuals are not a matter of public record and are protected according to Section 14 of the South African Constitution, as well as the Protection of Public Information Act. For the release of such information over to yourself for research purposes, the University of KwaZulu-Natal will need express consent from the relevant data subjects. Data collected must be treated with due confidentiality and anonymity.

Yours sincerely

**MRS S MOKOENA**

REGISTRAR

---

Office of the Registrar

Postal Address: Private Bag X54001 , Durban, South Africa

Telephone: +27 (0) 31 260 8005/2206 Facsimile: +27 (0) 31 260 7824/2204 Email: [registrar@ukzn.ac.za](mailto:registrar@ukzn.ac.za)

Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)

1910 • 2010

100 YEARS OF ACADEMIC EXCELLENCE

Founding Campus

2% SIMILARITY INDEX  
 1% INTERNET SOURCES  
 0% PUBLICATIONS  
 1% STUDENT PAPERS

## PRIMARY SOURCES

1	Submitted to University of KwaZulu-Natal	Student Paper	<1%
2	repository.nwu.ac.za	Internet Source	<1%
3	alternation.ukzn.ac.za	Internet Source	<1%
4	Submitted to University of Bedfordshire	Student Paper	<1%
5	researchspace.ukzn.ac.za	Internet Source	<1%
6	Submitted to University of Pretoria	Student Paper	<1%
7	tekedergisi.com	Internet Source	<1%
8	www.yumpu.com	Internet Source	<1%

Exclude quotes  OnExclude matches  < 10 wordsExclude bibliography  On



**DEAR PARTICIPANT (OR LEARNER)**

**Child assent letter for lesson observation**

My name is Siphelele Mbatha, I am a Masters in Education student studying at the University of KwaZulu-Natal, at Edgewood campus.

I intend to comparing your understanding of Mathematics when taught in isiZulu, as well as in English. I request to videotape your Mathematics lesson. Moreover, I request to make copies of selected pages of your activity book.

**Please note that:**

- Your confidentiality is guaranteed as your input will not be attributed to you in person, but it will be reported only as population members' work and participation.
- Collected data will be used solely for research purposes.
- Any information attained from your work and from videotaping will not be used against you.
- Data will be stored in a secure storage and destroyed after the period of five years.
- You have a choice to participate, not participate, or stop participating in research. You will not be penalised for taking such an action.
- Your involvement is purely for academic purposes, hence, there are no further financial benefits.

My details are as follows:

Email : [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za)  
Cellphone number : 072 889 4811

My supervisor is Dr B. Mhlongo, her details are as follows:

Email : [mhlongob2@ukzn.ac.za](mailto:mhlongob2@ukzn.ac.za)

Cellphone number :

Research office

HSSREC

Tel: 031 260 8350

Fax: 031 260 3093

Thank you for your contribution in this study.

## **DECLARATION**

I.....(full name of participant) hereby confirm the content of this document. I wish to confirm to participate in the research project. I fully understand that I am free to withdraw from this project at any given time, should I desire.

Signature of participant

Date

---

---

Mfundi

**INCWADI YESICELO SOKUTHI UMFUNDI ABAMBE IQHAZA  
OCWANINGWENI**

Igama lami nginguSiphelele Mbatha. Ngingumfundi weziqu zeMasters in Education enyuvesi yaKwaZulu-Natali, ophikweni lwase-Edgewood.

Ngenza ucwaningo oluhlose ukuqhathanisa ukuqonda kwakho lapho ufundiswa izibalo ngolimi lwesiZulu, nalapho futhi ufundiswa ngolimi lwesiZulu. Ngizocela ukushutha ividiyo yesifunjwana sakho sezibalo. Ngizophinde ngicele ukugaya amakhophi amakhasi athile emsebenzini wakho.

**Ngicela ufunde uphinde uqonde lokhu okulandelayo:**

- Ubuwena (igama, isibongo noma eminye nje imininingwane yakho) giyaqinisekisa ukuthi angizukubeveza. Noma-ke ulwazi mhlawumbe oluthathwe emsebenzini wakho seluvezwa, aluyukuvezwa ukuthi lungolwakho.
- Ulwazi oluzoqoqwa luzosetshenziselwa lolu cwaningo kuphela.
- Ulwazi oluthathwe kwividiyo noma emsebenzini wakho aluyikuba namphumela omubi kuwena.
- Ulwazi oluyoqoqwa luzogcinwa kahle bese lushabalaliswa emva kweminyaka emihlanu.
- Uma uthanda unгахoxa noma yinini kulolu cwaningo, akukho mibuzo futhi oyobuzwa yona.
- Ukuzimbandakanya kwakho kulolu cwaningo akunazo ezinye izinjongo ngaphande kwalezo zocwaningo.

- Akukho mali oyonikezwa yona ngokuzibandakanya kulolu cwaningo.

Nansi imininingwane yami:

Email : [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za)

Cellphone number : 072 889 4811

Umeluleki wami nguDkt B. Mhlongo, yena-ke nansi imininingwane yakho:

Email : [mhlongob2@ukzn.ac.za](mailto:mhlongob2@ukzn.ac.za)

Cellphone number :

IHhovisi locwaningo.

HSSREC

Tel: 031 260 8350

Fax: 031 260 3093

## **UKUQINISEKISA**

Mina.....(umfundi ongumhlanganyeli kulolu cwaningo) ngiyaqinisekisa ukuthi ngiqonde kahle konke okubhalwe ngenhla. Ngiyafisa ukuzinikela ekutheni ngihlanganyele kulolu cwaningo. Ngiyaqonda ukuthi nginelungelo lokuhoxa noma yinini kulolu cwaningo.

Ukusayina

Usuku

---

---

## ISICELO SEMVUME YOMZALI UKUTHI UMNTWANA ABE YINGXENYE YOCWANINGO.

**Isihloko socwaningo:** Ukucwaninga Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo ngezilimi Zomdabu: Kugxilwe Olimini lwesiZulu.

### **Mzali**

Igama lami ngingu **Siphelele Mbatha**. Ngingumfundi owenza iziqu zeMasters in Education enyuvesi yaKwaZulu-Natali, ophikweni lwase-Edgewood. Inombolo yami yokubhalisa ithi 211515497. Ngenza ucwaningo ngesihloko esithi Ukucwaninga Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo ngezilimi Zomdabu: Kugxilwe Olimini lwesiZulu. Kulolu cwaningo ngisebenza nomeluleki wami, u**Dr B. Mhlongo** ([mhlongob2@ukzn.ac.za](mailto:mhlongob2@ukzn.ac.za)) Ngicela ukumema umntwana wakho ukuthi abe yingxenye yalolu cwaningo.

Ucwaningo luhlose ukubheka ukuthi ngabe othisha abasengamathwasa bakulungele kangakanani ukufundisa umntwana wakho izibalo ngezilimi zomdabu. Ngokunjalo futhi, lolu cwaningo ngikholwa ukuthi luyokwelekelela kakhulu ekucijeni nasekuqinisekiseni ukuthi indlela yokufundisa esetshenziswa lapho kufundiswa umntwana wakho ingemlekelela ukuthi aqonde kangcono izibalo.

Ukuzibandakanya komfundi kulolu cwaningo akusiyo impoqo, kodwa:

- Mhlawumbe umfundi engazizwa engakhululekile njengoba ngizosebenzisa isiqopha zithombe ukubheka indlela afunda ngayo izibalo. Kodwa ngizoqinisekisa ukuthi umntwana ngiyamazisa ukuthi angizile ukuzomhlola, kuphela ngizoqoqa ulwazi oluqondene nocwaningo kuphela.
- Akukho nzuzo ezotholwa ngumntwana kuphela nje lolu cwaningo luzokwelekelela ekucijeni nasekuhloleni indlela othisha abasaqeqeshwa abafundisa ngayo izibalo besebenzisa ulimi lwesiZulu.

Ngaphambi kokuthi uvumele umntwana wakho ukuthi abe yingxenye yalolu cwaningo, kubalulekile ukuthi ufundise leli fomu (naye umntwana uzothola elakhe ifomu elicela imvume yakhe). Kungakuhle ukuthi uxoxisane nomntwana wakho ngalolu cwaningo, yikhona naye ezoqonda kahle ngalo. Uma wena noma umntwana wakho ninemibuzo ngalolu cwaningo, ngicela nithintane nami, noma nomeluleki wami.

### **Inhloso yalolu cwaningo**

Ngalolu cwaningo ngihlose ukubheka ukuthi ngabe umntwana ufundiswa ngolimi izibalo ngolimi lwesiZulu yini. Ngikholelwa ekutheni njengoba umntwana wakho ekhuluma isiZulu njengolimi lwasekhaya nje, ukumfundisa ngolimi aluqondayo nalukhulua ekhaya kuyamelekelela ekuqondeni izibalo kangcono. Isikole somntwana wakho singinikezile imvume yokuthi ngenze lolu cwaningo. Ngiyagcizelela nokho ukuthi lolu cwaningo aluyona neze ingxenye yomsebenzi wesikole womfundi, futhi akukho miklomelo umfundi azoyinikezwa ngokuzibandakanya kulolu cwaningo.

### **Ukuqhutshwa kocwaningo**

Uma umntwana evuma, nawe futhi uvuma ukuba abe yingxenye yalolu cwaningo, ngizoqopha ividiyo yesifunjwana sakhe ezibalo naye ekhona lapho egunjini lokufundela. Lokho kuzokwenzeka usuku olulodwa nje vo, uthi angizukuphazamisa ikilasi noma isifunjwana. Lolu cwaningo luzothatha cishe ihora elilodwa nje vo, angizukweqela ngale kwehora elilodwa.

Ukuvikeleka komntwana wakho

Ngizoqinisekisa ukuthi ulwazi oluthinta umntwana wakho ngiyalufihla. Uma sekufike isikhathi sokuthi ngishicilele noma ngethule okutholakele, angizukugagula umntwana wakho ngegama. Ulwazi olutholakele ngizolugcina ehhovisi likameluleki wami isikhathi cishe esiyiminyaka emihlanu. Emva kwaleso sikhathi lolu lwazi luyobe selubhujiswa.

### **Isinxaphezelo**

Umntwana akazukukhokhelwa ngokuba yingxenye yalolu cwaningo.

## **Amalungelo omntwana**

Njengomzali unelungelo lokwenqabela umntwana wakho ukuthi abe yingxenye yalolu cwaningo, futhi unelungelo lokumyalela ukuthi ahoxe kulolu cwaningo noma yinini. Ngokwenza kanjalo ayikho imibuzo wena noma umntwana eniyobuzwa yona.

## **Imibuzo**

Wena nomntwana wakho ningabuza imibuzo uma kukhona enifisa ukukwazi nokucaciseleka ngakho ngalolu cwaningo. Ningaxumana nami kule email address: [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za), noma kule nombolo kamakhalekhukhwini: 072 889 4811.

## **Imvume yomzali**

Uma uvuma ukuthi umntwana wakho abe yingxenye yalolu cwaningo, ngicela usayine kulesi sikhala esingezansi, uphinde ubhale nosuku osayine ngalo. Ngizocina ikhophi yaleli fomu ngakumina.

---

**Igama lomntwana ongumhlanganyeli**

---

**Igama lomzali**

---

**Usuku**

---

**Ukusayina komzali**

---

**Usuku**



## **REQUEST FOR PARENTAL PERMISSION FOR A CHILD TO PARTICIPATE IN RESEARCH STUDY.**

**Title of the study:** Ukucwaninga Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo ngezilimi Zomdabu: Kugxilwe Olimini lwesiZulu.

**Dear parent**

My name is **Siphelele Mbatha**. I am a Masters student in the University of KwaZulu-Natal, Edgewood campus (student number: 211515497). I am doing a research study on the title Ukucwaninga Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo ngezilimi Zomdabu: Kugxilwe Olimini lwesiZulu. I am working with my supervisor, **Dr B. Mhlongo** ([mhlongob2@ukzn.ac.za](mailto:mhlongob2@ukzn.ac.za)) on this research study. I invite your child, with your permission, to participate in this study.

The study seeks to explore the readiness of pre-service educators to teach your child in a language she/he understands better. Likewise, the study will aid in advancing pedagogy that is beneficial to your child.

Participation in research is voluntary, however:

- Discomforts may include videotaping your child during mathematics lessons. However, your child will be re-assured that videotaping is NOT for merit purposes.
- Please note that there is no direct benefit to your child. The results from the study will advancing pre-service teachers to soundly teach Mathematics in isiZulu.

Before you or your child decide whether he/she will be part of this study, it is important to read this form carefully, (your child will receive his or her own assent form). I encourage you to discuss the study with your child. If you or your child has questions about the research, feel free to ask us.

## **Purpose**

The study is done to explore pre-service teachers' readiness to teach mathematics in isiZulu. Since your child is a native isiZulu speaker, teaching him/her in his/her home language helps him /her to understand mathematics better. We are inviting your child because he/she is in a grade where mathematics is taught in indigenous languages, and the school has agreed that we conduct the research here. Please note that this study is NOT part of schoolwork, and will not be graded.

## **Procedures**

If your child decides to participate and you give permission, I will videotape during your child's maths class for ONE day. I will not interrupt the class. The whole study will take about an hour. I will not take any extra time.

## **Confidentiality**

I will keep your child's study data as confidential as possible. If I publish or present, I will not use individual names or other personally identifiable information. To help protect confidentiality, I will store data in my supervisor's office. Such data shall be destroyed after five years.

## **Payment/compensation**

Your child will NOT be paid for being in this study.

## **Rights**

Participation in this study is voluntary. You have rights to decline to allow your child to participate or to withdraw at any particular point, and no questions shall be asked.

## **Questions**

You and your child can ask questions about this study at any time. You contact me on my email address: [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za), or on my cell phone number: 072 889 4811.

**Parent permission**

If you decide to let your child participate in this study, please sign and date below. We will give you a copy of this form to keep for future reference

\_\_\_\_\_  
**Child participant name**

\_\_\_\_\_  
**Parent/guardian's name**

\_\_\_\_\_  
**date**

\_\_\_\_\_  
**Parent/guardian's signature**

\_\_\_\_\_  
**date**

## OKUDINGA UKWAZIWA NGUMHLANGANYELI KULOLU CWANINGO

### Isihloko socwaningo

Ukucwaninga Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu: Kugxilwe Olimini lwesiZulu.

### **Mhlanganyeli**

Niyakumema ukuba ube yingxenywe yocwaningo olusihloko salo sibalulwe ngenhla. Ngaphambi kokuthi ukhethe ukuzibandakanya nalolu cwanningo, kubalulekile ukuthi uqonde ukuthi kungani lolu cwanningo lwenziwa, futhi luzodingani kuwena.

Inhloso yalolu cwanningo ukubheka ukulungela kwakho ukuyofundisa izibalo ngolimi lwesiZulu. Njengoba ungufundi oqeqeshelwa ukuyofundisa emabangeni ayisisekelo nje, kulindeleke ukuthi uma usufundisa izibalo uzifundise ngolimi lwesiZulu (njengoba nawe ungumZulu nje). Lolu cwanningo-ke lubheka ukuthi ngabe ukulungele yini ukuyofundisa izibalo ngesiZulu lapho ususensimini. Ngaphezu kwalokho, lolu cwanningo luhlose ukunikeza usizo nezincomo ngendlela yokufundisa.

Ngikhethe ukuba ube yingxenywe yalolu cwanningo ngoba wethwasela ukuyofundisa emabangeni aphantsi, lapho kulindeleke ukuthi ufundise ngolimi olungolomdabu kubafundi. Ngaphezu kwalokho, lolu cwanningo lugxile kakhulu esiZulwini, okuwulimi oluncele ebeleni, futhi njengoba uzoya ensimini nje, uzobe ufundisa abafundi abaluncele ebeleni lolu limi.

### **Ngiphoqelekile yini ukuba yingxenywe yalolu cwanningo?**

Akuphiqelekile ukuthi ube yingxenywe yalolu cwanningo. Ngizokwenaba kabanzi ngalolu cwanningo ngiphinde ngichaze kabanzi nglolu lwazi ngezansi. Kodwa-ke ungahoxa noma yinini kulolu cwanningo, futhi akukho mibuzo oyobuzwa yona.

## **Ngabe kuyokwenzakalani uma ngikhetha ukuba yingxeny yalolu cwaningo?**

- Ngizoba yingxeny yalolu cwaningo amasonto amathathu.
- Ngizobukelwa ngifundisa esontweni lokuqala, kanye ngesonto. Kuzothi kwelesibili bese ngiba nenhlololwazi, nalokho futhi kuzokwenzeka kanye ngesonto. Kwelesithathu-ke ngizophendula imibuzo emaphepheni anikeziwe (nalokho futhi kuzokwenzeka kanye ngesonto).
- Ngizobukelwa ngifundiswa ihora elinye nje vo, ngibe nenholovo imizuzu engamashumi amane nanhlanu, bese ngiphendulela imibuzo emaphepheni imizuzu eyishuni nanhlanu.
- Igama lami liyovikeleka ngesikhathi socwaningo.

Khumbula ukuthi awuphoqiwe ukuba yingxeny yalolu cwaningo, futhi awuzukunikezwa mali ngokuba yingxeny yalolu cwaningo. Angethembisi futhi ukuthi lolu cwaningo luzoba wusizo kuwena ngqo, kodwa imiphumela yalolu cwaningo ingalekelela ekuthuthukiseni indlela yokufundisa. Uma unemibuzo ngalolu cwaningo, ungabuza umcwaningi, nokunguyena oyokwenza okusemandleni ukuthi uphenduleke.

## **Ngabe ubumina buzofihleka yini?**

Ubuwena kanye nolwazi oluzoqoqwa luzogcinwa luyimfihlo zikhathi zonke.

Uma udinga imininingwane ethe thuthu, ungaxhumana nami noma nomeluleki wami ngalezi zindlela:

Imininingwane yami

Email : [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za)

Cellphone number : 072 889 4811

Umeluleki wami nguDr B. Mhlongo yena-ke nansi imininingwane yakhe:

Email : [mhlongob2@ukzn.ac.za](mailto:mhlongob2@ukzn.ac.za)

Cellphone number :

IHhovisi locwaningo

HSSREC

Tel: 031 260 8350

Fax: 031 260 3093



## PARTICIPANT INFORMATION SHEET

### Study Title

Ukucwaninga Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi  
Zomdabu: Kugxilwe Olimini lwesiZulu.

### Dear participant

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done, and what it will involve of you. Kindly time enough time to read the following information carefully. If there is any unclear information, please do not hesitate to ask questions. Take time to decide whether or not to take part.

The purpose of this research study is to explore your readiness to teach Mathematics in isiZulu. As a pre-service foundation phase teacher, the language of Teaching and Learning (LoLT) to be used both pre and in-service, in accordance to educational policies and pedagogy, is IsiZulu (in your case). This research, hence, seeks to research your readiness to use isiZulu as LoLT in-service. Your readiness shall be explored during your teaching training period. The study further aims in providing assistance and recommendations (if need be) for pedagogical advancement or training methodology.

I have chosen to invite you to form part of the sample for this research because you are training to teach in a foundation phase, where mathematics is to be taught in indigenous languages. Furthermore, since the study focuses mainly on isiZulu, you have been chosen because you are isiZulu Home language speakers, and you are training to teach isiZulu home language learners.

### **Do I have to take part?**

Please note that taking part in this study is voluntary. I will describe the study and go through the information sheet, which I will give you. I will then ask you to sign a consent form to show you agreed to take part. You are free to withdraw at any time, without giving a reason.

### **What will happen to me if I take part?**

- I will be involved in the study for the period of three weeks.
- I will be observed once (in a first week), interviewed once (in a second week), and fill in the questionnaire once (in a third week).
- I will only be observed for an hour, interviewed for about 45 minutes and fill in the questionnaire for about 15 minutes.
- My identity will be protected at all times.

Please note that participation in this study is voluntary, and there are no financial benefits that shall be given unto participants. I cannot promise the study will help you, but the information I will get will improve pedagogy and the perception of indigenous languages. If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do his best to answer your questions.

### **Will my taking part in the study be kept confidential?**

All information about you during the course of the research will be kept strictly confidential.

Should you require further information, do not hesitate to contact me or my supervisor using the following contact details:

My details are as follows:

Email : [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za)

Cellphone number : 072 889 4811

My supervisor is Dr B. Mhlongo, her details are as follows:

Email : [mhlongob2@ukzn.ac.za](mailto:mhlongob2@ukzn.ac.za)

Cellphone number :

Research office

HSSREC

Tel: 031 260 8350

Fax: 031 260 3093



20<sup>th</sup> September 2019

Vezamafa Primary School

School Principal

381 Clermont Road

Clernaville

3610

### **REQUEST FOR PERMISSION TO CONDUCT RESEARCH**

Dear school principal

My name is Sipehele Mbatha (student number: 211515497), student at the University of KwaZulu-Natal. The research I wish to conduct for my Masters in Education degree is titled: **‘Ukulungela kothisha abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu: *Kugxilwe Olimini lwesiZulu*’.**

I am hereby seeking your consent to observe student teachers while teaching, and observing learners (as well as the overall Mathematics)

I have included data collection tools, university gatekeeper’s approval, as well as assent forms for parents and learners.

If you require any further information, please do not hesitate to contact me:

Email address : 211515497@stu.ukzn.ac.za

Cellphone number : 072 889 4811

Thank you for your time and consideration in this matter

Yours sincerely

Sipehele Mbatha

University of KwaZulu-Natal (Edgewood campus)



20<sup>th</sup> September 2019

Nomfihlela Primary School

School Principal

12 Umzomunye Road

Cato-Ridge

3680

## **REQUEST FOR PERMISSION TO CONDUCT RESEARCH**

Dear school principal

My name is Sipehelele Mbatha (student number: 211515497), student at the University of KwaZulu-Natal. The research I wish to conduct for my Masters in Education degree is titled: **‘Ukulungela kothisha abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu: *Kugxilwe Olimini lwesiZulu*’.**

I am hereby seeking your consent to observe student teachers while teaching, and observing learners (as well as the overall Mathematics)

I have included data collection tools, university gatekeeper’s approval, as well as assent forms for parents and learners.

If you require any further information, please do not hesitate to contact me:

Email address : 211515497@stu.ukzn.ac.za

Cellphone number : 072 889 4811

Thank you for your time and consideration in this matter

Yours sincerely

Sipehelele Mbatha

University of KwaZulu-Natal (Edgewood campus)



20<sup>th</sup> September 2019

Insimangwe Primary School

School Principal

Siweni Area, KwaXimba

Cato-Ridge

3680

## **REQUEST FOR PERMISSION TO CONDUCT RESEARCH**

Dear school principal

My name is Sipehelele Mbatha (student number: 211515497), student at the University of KwaZulu-Natal. The research I wish to conduct for my Masters in Education degree is titled: **‘Ukulungela kothisha abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu: *Kugxilwe Olimini lwesiZulu*’.**

I am hereby seeking your consent to observe student teachers while teaching, and observing learners (as well as the overall Mathematics)

I have included data collection tools, university gatekeeper’s approval, as well as assent forms for parents and learners.

If you require any further information, please do not hesitate to contact me:

Email address : 211515497@stu.ukzn.ac.za

Cell-phone number : 072 889 4811

Thank you for your time and consideration in this matter

Yours sincerely

Sipehelele Mbatha

University of KwaZulu-Natal (Edgewood campus)



20<sup>th</sup> September 2019

Mabhila Combined Primary School

School Principal

Kwadenge area

Cato-Ridge

3680

## **REQUEST FOR PERMISSION TO CONDUCT RESEARCH**

Dear school principal

My name is Siphellele Mbatha (student number: 211515497), student at the University of KwaZulu-Natal. The research I wish to conduct for my Masters in Education degree is titled: **‘Ukulungela kothisha abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu: *Kugxilwe Olimini lwesiZulu*’**.

I am hereby seeking your consent to observe student teachers while teaching, and observing learners (as well as the overall Mathematics)

I have included data collection tools, university gatekeeper’s approval, as well as assent forms for parents and learners.

If you require any further information, please do not hesitate to contact me:

Email address : 211515497@stu.ukzn.ac.za

Cellphone number : 072 889 4811

Thank you for your time and consideration in this matter

Yours sincerely

Siphellele Mbatha

University of KwaZulu-Natal (Edgewood campus)



kzn education

Department:  
Education  
KWAZULU-NATAL

21<sup>st</sup> September 2019

Mr Siphелеle Mbatha (student number 211515497)

School of Education

College of Humanities

Edgewood campus

Email: [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za)

Dear Mr Mbatha

Gatekeeper's permission is hereby granted for you to conduct research at **Vezamafa Primary School** towards your postgraduate studies provided the ethical clearance has been obtained. We note the title of your study:

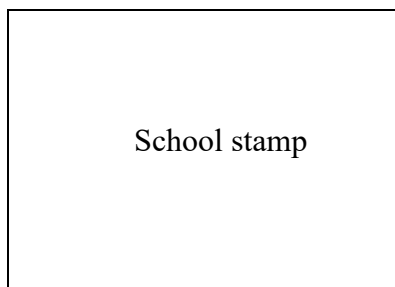
**Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi  
Zomdabu: *Kugxilwe Olimini LwesiZulu***

We note, once more, that obtaining consent from participants in the school is pivotal for you to continue with your study. We have reviewed the learner consent forms, as well as the parents assent forms. As the school, we wish to assist you with your study, and we believe it will be useful in curriculum and policy changes for mathematics in the foundation phase.

Yours Sincerely

\_\_\_\_\_

School principal



21<sup>st</sup> September 2019

Mr Sipehele Mbatha (student number 211515497)

School of Education

College of Humanities

Edgewood campus

Email: [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za)

Dear Mr Mbatha

Gatekeeper's permission is hereby granted for you to conduct research at **Insimangwe Primary School** towards your postgraduate studies provided the ethical clearance has been obtained. We note the title of your study:

**Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi  
Zomdabu:Kugxilwe Olimini LwesiZulu'**

We note, once more, that obtaining consent from participants in the school is pivotal for you to continue with your study. We have reviewed the learner consent forms, as well as the parents assent forms. As the school, we wish to assist you with your study, and we believe it will be useful in curriculum and policy changes for mathematics in the foundation phase.

Yours Sincerely

\_\_\_\_\_  
School principal

School stamp

21<sup>st</sup> September 2019

Mr Siphelele Mbatha (student number 211515497)

School of Education

College of Humanities

Edgewood campus

Email: [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za)

Dear Mr Mbatha

Gatekeeper's permission is hereby granted for you to conduct research at **Mabhila Primary School** towards your postgraduate studies provided the ethical clearance has been obtained. We note the title of your study:

**Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi  
Zomdabu: *Kugxilwe Olimini LwesiZulu***

We note, once more, that obtaining consent from participants in the school is pivotal for you to continue with your study. We have reviewed the learner consent forms, as well as the parents assent forms. As the school, we wish to assist you with your study, and we believe it will be useful in curriculum and policy changes for mathematics in the foundation phase.

Yours Sincerely

\_\_\_\_\_  
School principal

School stamp



kzn education

Department:  
Education  
KWAZULU-NATAL

21<sup>st</sup> September 2019

Mr Siphelele Mbatha (student number 211515497)

School of Education

College of Humanities

Edgewood campus

Email: [211515497@stu.ukzn.ac.za](mailto:211515497@stu.ukzn.ac.za)

Dear Mr Mbatha

Gatekeeper's permission is hereby granted for you to conduct research at **Udumo Primary School** towards your postgraduate studies provided the ethical clearance has been obtained. We note the title of your study:

**Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi  
Zomdabu:Kugxilwe Olimini LwesiZulu'**

We note, once more, that obtaining consent from participants in the school is pivotal for you to continue with your study. We have reviewed the learner consent forms, as well as the parents assent forms. As the school, we wish to assist you with your study, and we believe it will be useful in curriculum and policy changes for mathematics in the foundation phase.

Yours Sincerely

\_\_\_\_\_

School principal

School stamp



UNIVERSITY OF  
KWAZULU-NATAL  
INYUVESI  
YAKWAZULU-NATALI

Usuku: 24<sup>nd</sup> May 2018

### Mhlanganyeli

Igama lami nginguSiphelele Mbatha (student number: 211515497), ngingumfundi owenza iziqu zeMasters kwezeMfundo Education eNyuvesi yakwaZulu-Natali, ophikweni lwase-Edgewood. Ngenza ucwaningo ngesihloko esithi ‘Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu: *Kugxilwe Olimini LwesiZulu*’. *Ngiyabonga ukuthi ubambe iqhaza kulolu cwaningo.*

Ngcicela ukukwazisa lokhu okulandelayo:

- I. Lolu cwaningo luzovikela luphinde lufihle igama lakho
- II. Imibuzo yale nhlobo ayisiyo impoqo. Uma uthanda ungayigwema eminye imibuzo.
- III. Uma ungazizwa kahle ngalolu cwaningo, unelungelo lokuhoxa noma yinini, ayikho imibuzo oyobuzwa yona ngokuhoxa kwakho.
- IV. Ulwazi oluyotholakala kule nhlobo luqondene nalolu cwaningo kuphela.
- V. Njengoba le nhlobo ingevulelekile nje, kungenzeka ubuzwe imibuzo esiselwa ezimpendulweni ozinikezile. Noma kunjalo, awuphoqelekile ukuyiphendula leyo mibuzo.
- VI. Isiqopha-ngxoxo sizosetshenziselwa ukuqinisekisa ukuthi ulwazi olutholakele lunobuqiniso lapho sekubhalwa okutholakele kulolu cwaningo.

Kungithokozisa kakhulu ukuthi uthathe isikhathi sakho waba ingxenye yalolu cwaningo.

Ozithobayo

uSiphelele Mbatha

211515497

1. Ake ungixoxele nje kafishane ngawe, nangendawo okhulele kuyona. Indawo owakhulela kuyona ngabe indawo yasemakhaya, yasemakhaya aphucuzekile, yasedolobheni noma indawo yezicebi?
2. (Umbuzo osuselwa kulona ongenhla) chaza kabanzi ngezikole owafunda kuzona. Ngabe izikole zakobelungu noma izikole zabamnyama kuphela?
3. Ake usho, ngabe wazenza izibalo kwamatikuletsheni? Uma wazenza ngabe waziphumelela kanjani?
4. Kungani wakhetha ukuba nguthisha wezibalo?
5. Kubaluleke kangakanani kuwena ukuthi uthisha wamabanga aphansi abe nguthisha olukhuluma noluqonda kahle ulimi lwasekhaya?
6. Ake usho, uzizwa kanjani nje ngokufundisa izibalo emabangeni ayisisekelo?
7. Ngokubona kwakho, ngabe kufanele yini izibalo zibe yimpoqo kubafundi basebangeni lokuqala?
8. Njengoba wethwasela ubuthishela nje, ngabe yiluphi ulimi olusetshenziswa lapho ufundiswa izifundo zokwethwasela ubuthishela. Ngokubona kwakho, ngabe yisiphi isizathu esenza ufundiswe ngalolu limi?
9. Ngabe usuke wasenza isifundo ngendlela yokufundisa izibalo?
10. Uma wake wasifunda, ngabe sasifundiswa ngaluphi ulimi?
11. Lesi sifundo (esifundisa ngendlela yokufundisa izibalo) ngabe sakusiza ngani?



Date: 24<sup>nd</sup> May 2018

**Dear participant**

I am Sipehelele Mbatha (student number: 211515497), a Masters of Education student at the University of KwaZulu-Natal, Edgewood campus. I am conducting research titled 'Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu: *Kugxilwe Olimini LwesiZulu*'. Thank you for taking part in this research project.

Kindly take note of the following:

- VII. Your identity as far as responses are concerned will be protected.
- VIII. You have a choice to answer, or not to answer the questions asked.
- IX. You may withdraw from this interview at any time, and no questions will be asked for your pulling out.
- X. Information that will be provided will be solely used for research purposes, and nothing else.
- XI. This is a semi-structured interview, hence, additional follow-up questions might be asked. Nonetheless, you have a right not to answer those questions.
- XII. The recording device shall be used to record the interview for accuracy purposes when writing research findings. However, your identity will always be protected.

Once more, I am delighted that you dedicated your valuable time for this research study.

Kind Regards

Sipehelele Mbatha

211515497

12. Tell me briefly about yourself and the environment you grew up in. Was it a deep rural area, semi-rural area, urban area, or a suburb?
13. (Follow up question for those who are from an urban area) Tell me more about your basic schooling; did you attend the former model-c school or a public school?
14. What language do you speak at home?
15. What language do you normally use to speak to your friends?
16. Did you do Mathematics in your matric, if so, how did you pass your Mathematics?
17. Why did you choose teaching as a career?
18. Why did you choose to specialise in the Foundation Phase?
19. How do you feel about teaching Mathematics in the foundation phase?
20. Why do you think Mathematics should be a compulsory subject during the child first years at school?
21. Since you are a pre-service educator, what medium of instruction is used in your modules? Why do you think this is so?
22. Have you done any module(s) in Mathematical pedagogy?
23. In what language was this module(s) conducted?
24. In what way(s) was this module useful to you?
25. Provide three reasons why you chose Foundation Phase as your teaching specialisation.

26. What three adjectives can you use to describe a competent foundation phase teacher?

27. Which, of the four descriptions do you believe is the most important, and why do you think so?



UNIVERSITY OF  
KWAZULU-NATAL  
INYUVESI  
YAKWAZULU-NATALI

August 2018

### Mhlanganyeli

Igama lami nginguSiphelele Mbatha (student number: 211515497), ngingumfundi owenza iziqu zeMasters kwezeMfundo Education eNyuvesi yakwaZulu-Natali, ophikweni lwase-Edgewood. Ngenza ucwaningo ngesihloko esithi 'Ukulungela Kothisha Abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu: *Kugxilwe Olimini LwesiZulu*'. Ngiyabonga ukuthi ubambe iqhaza kulolu cwaningo.

Ngicela ukukwazisa lokhu okulandelayo:

- I. Igama lakho lizovikelela lapho sekwethulwa okutholakale ngesikhathi ngikubukela ufundisa.
- II. Njengoba ngizokubukela ufundisa nje, angizile ukuzohlola indlela ofundisa ngayo. Ulwazi engizoluqoqa luzosetshenziselwa lolu cwaningo kuphela.
- III. Uma ungasazizwa kahle ngalolu ngokuba yingxenye yalolu cwaningo, unelungelo lokuhoxa noma yinini, akukho mbuzo futhi oyoyibuzwa ngesizathu sokuhoxa kwakho.

Kungithokozisa kakhulu ukuthi uthathe isikhathi sakho waba ingxenye yalolu cwaningo.

Ozithobayo

uSiphelele Mbatha

211515497

**Ukubukelwa kothisha abaqeqeshelwa ukufundisa okuyokwenziwa mhla ziyi-18 kuNgcwaba 2018**

Umcwangingi uhlose ukubuka noma ukubheka lokhu **okuyisihlanu** okulandelayo:

1. Umumo nokungaphakathi kwegumbi lokufundela; okungaba amashadi, amathebula ezinombolo kanye nendlela abafundi abahleli ngayo.
2. Ulimi lokufundisa nokufunda oluyobe lusetshenziswa egunjini lokufundela.
3. Ulimi uthisha ayolisebenzisa lapho enikeza izimpendulo emibuzweni yabafundi egunjini lokufundela.
4. Ulimi uthisha ayolisebenzisa ukuchaza amakhonsephti kanye nolimi oluyosetshenziswa lapho kuchazwa ngomsebenzi oyonikezwa abafundi.



August 2018

**Dear participant**

I am Sipehelele Mbatha (student number: 211515497), a Masters of Education student at the University of KwaZulu-Natal, Edgewood campus. I am conducting research titled **‘Ukulungela kothisha abasaqeqeshwa Ukuyofundisa Izibalo Ngezilimi Zomdabu: Kugxilwe Olimini lwesiZulu’**. Thank you for taking part in this research project.

Kindly take note of the following:

- IV. Your identity as far as analyses of the information obtained from this observation is concerned will be protected.
- V. The classroom observation is **NOT** for merit purposes, but the information that will be obtained from this observation will be solely used for research purposes and nothing else.
- VI. You have a right to withdraw from being observed at any given time and no questions will be asked.

Once more, I am delighted that you dedicated your valuable time for this research study.

Kind Regards

Sipehelele Mbatha

211515497

**An observation that will be conducted on the 18<sup>th</sup> of August 2018.**

The following are the **Five (5) main things** the researcher intends to observe:

1. Setting of the classroom environment e.g. Wall charts, number tables, seating plan.
2. Language of Learning and Teaching (LoLT) that will be used in the classroom.
3. The language that will be used by the teacher to respond to learners questions.
4. Language that will be used by the teacher to clarify concepts and to explain exercises that will be given to learners.

## **Ukuhlaziywa kwamadokhumenti okuyokwenziwa mhla ziyi-18 kuNcwaba 2018.**

Umcwaningi uyobe ehlaziya lama dokhyumenti alandelayo:

1. Idokhyumenti eyiNqubomgomo yoHlelo lweziFundo nokuHlola.
1. Izincwadi zabafundi kanye nencwadi kathisha.
2. Izincwadi zomsebenzi ezivela emnyangweni wemFundo eyisisekelo.
3. Idokhyumenti engumhlahlandlela owelekelela uthisha lapho enza uhlelo lwesifunjwana noma efundisa.

Umcwaningi uhlose ukuhlaziya:

1. Ulimi olusetshenziswe kwidokhyumenti eyinqubomgomo yoHlelo LweziFundo nokuHlola.
2. Ulimi olusetshenziswe ezincwadini zabafundi, kanye nasencwadini kathisha.
3. Ukuhleleka kwamazinga okucabanga okusezincwadini zabafundi.
4. Ulimi olusetshenziswe ezincwadini zomsebenzi zabafundi ezivela emNyangweni wemFundo eyiSisekelo.
5. Ulimi olusetshenziswe kwidokhyumenti engumhlahlandlela owelekelela uthisha lapho enza uhlelo lwesifunjwana noma efundisa.
6. Okuhambisana okukhona phakathi kwedokhyumenti engumhlahlandlela owelekelela uthisha lapho enza uhlelo lwesifunjwana kanye nezincwazi zomsebenzi wabafundi ezivela emnyangweni wemFundo eyisisekelo.

## **Document analysis that will be done on the 18<sup>th</sup> of August 2018**

The researcher will be analysing the following documents:

1. CAPS document.
2. Learner textbooks and teachers guides.
3. Department of Basic Education (DBE) workbooks.
4. Teachers' planner and tracker document.

The researcher intends to analyse the:

1. Language used in the CAPS document
2. Language used in learner textbooks and teachers' guides
3. Cognitive levels of textbooks.
4. Language used in the Department of Basic Education (DBE) workbooks.
5. Language used in the teachers' planner and tracker document.
6. Congruency between the teacher tracker and DBE workbooks.

### CONSENT AND INDEMNITY

I, the undersigned (print full name of student) .....

Student No.: ..... Degree.....Identity No.:

.....

AND (IF THE STUDENT IS UNDER THE AGE OF MAJORITY)

Name of Parents/Guardian: Father. .... ID:

..... Mother ..... ID:

..... agree to participate in the research project  
conducted by Sipehelele Mbatha, student number 211515497.

1. I fully understand and accept that participation in this project is voluntary and not mandatory.
2. I understand that the student conducting the study has obtained, or applied for the ethical clearance from the university.
3. I have considered the following ethical considerations:
  - 3.1 My identity as far as responses are concerned will be protected, that is, my responses on the questionnaire, interview, and observation will not be in any way linked to my identity.
  - 3.2 I have a choice to answer, or not to answer the questions asked.
  - 3.3 I may skip some of the questions.
  - 3.4 I have a right to withdraw from this research study at any time, and no questions will be asked.
  - 3.5 Information that will be provided will be solely used for research purposes, and nothing else.

SIGNED AT .....ON THIS .....DAY  
OF.....20.....

.....  
SIGNATURE OF STUDENT

WITNESSES:

\_\_\_\_\_ (FIRST WITNESS)

\_\_\_\_\_ (SECOND WITNESS)

DULY ASSISTED BY PARENT/GUARDIAN

SIGNED AT .....ON THIS .....DAY  
OF.....20.....

WITNESSES:

\_\_\_\_\_ (FIRST WITNESS)

\_\_\_\_\_ (SECOND WITNESS)