

Recommendations towards a self-directed blended learning programme for German Second Additional Language teachers

G - E Wittmann

 **orcid.org / 0000-0002-2445-2314**

Thesis accepted for the degree **Doctor of Philosophy** in
Curriculum Studies at the North-West University

Promoter: Prof. JAK Olivier

Graduation: May 2021

Student number: 22220917

DECLARATION

I the undersigned, hereby declare that the work contained in this thesis is my own original work and that I have not previously in its entirety or in part submitted it at any university for a degree.

A handwritten signature in black ink, consisting of several overlapping, slanted strokes.

Signature

17 December 2020

Copyright © 2021 North-West University (Potchefstroom Campus)

All rights reserved

DEDICATION AND ACKNOWLEDGEMENTS

I dedicate this study to my late father, Mr Rudolf Johan Wittmann. He was a teacher educator at heart and his legacy continues to shape the Namibian education landscape. He was a true academic and a man with integrity. I will always treasure the last text message I received from him; it included a suggestion for the title of my proposed PhD study and it continues to serve as my motivation.

I would like to thank Prof Jako Olivier, my PhD promoter and the current UNESCO Chair on Multimodal Learning and Open Educational Resources, for his continued support, patience and expert guidance. I am also grateful for the inclusion of this study in one of his research projects, which secured partial funding from the National Research Foundation (NRF) of South Africa.

I would therefore also like to thank the NRF for the financial support (Grant number 112143). Furthermore, I would like to thank the NWU for granting me study leave and the Justus-Liebig University in Giessen, where I had the privilege to spend my research leave, for their support and hospitality.

Thank you to Dr Jackie de Vos for her text editing and to Ms Elsa Esterhuizen for the sterling work she did with my in-text referencing and bibliography — your contributions to the final product are highly appreciated. To all the experts and teachers of German SAL who were willing to give up their time to participate in the study – your valuable inputs are highly appreciated.

I would also like to thank Dr Louise Strydom, who initially acted as my PhD co-promoter before she left the service of the NWU, for her continued contributions and support throughout this entire endeavour. Similarly, I would like to convey my gratitude to Dr Cynthia Murray, who expertly ensured that my work adhered to academic writing standards.

Two of my favourite NWU School of Language colleagues, Dr Philip van der Merwe and Dr Carina Grobler, also deserve mention. Dr Van der Merwe's support in the form of encouragement, kindness, and his shouldering of many of my responsibilities in the Subject Group German during this time, were invaluable. It is a privilege to work with him. Dr Grobler, thank you for your support, advice, and thoughtfulness, particularly in the last few weeks before submission.

Regular online research meetings with Dr Doret Jordaan from the Stellenbosch University and Mrs Trudie Strauss of the University of the Free State served to keep me focused and motivated. I look forward to continuing our close and fruitful collaboration. My gratitude also extends to South African author Bettina Wyngaard, for her encouragement and objective feedback.

Lastly, but most importantly, I am truly privileged to have such a supportive family. A heartfelt thank you to my sister Helene Theunissen for constantly being on standby to listen and motivate, as well as to my brother Wilhelm Wittmann and my brother-in-law Andrew Theunissen for assisting with graphics, technology, and formatting. The biggest driving factor and inspiration behind my PhD was my mother, Elisabeth Marika Wittmann. Well-versed in the academic field herself, her dedication and support extended far beyond reading all my drafts, contributing valuable input, holding me to internal deadlines, and inspiring me to do my best. I have truly been blessed by having parents so dedicated to the education, well-being, and success of their children. I am eternally grateful to my mother for accompanying me on this journey, as I am to my father whose legacy I hereby wish to honour.

ABSTRACT

Recommendations towards a self-directed blended learning programme for German Second Additional Language teachers

The expectation on teachers in South Africa to be lifelong learners is emphasised in relevant policies and the importance thereof has often been reiterated in the literature. In practice, various factors hamper the opportunities for teachers, but especially for teachers of German Second Additional Language (SAL) in South Africa to remain lifelong learners. All too often these teachers are faced with professional development programmes that are based on a one-size-fits-all approach and do not take into account the specific teaching and learning contexts of teachers of German SAL work in in South Africa.

While the field of teacher professional development for German as a Foreign Language (Deutsch als Fremdsprache / DaF) has enjoyed much attention internationally, only very limited research has been conducted in South Africa. Existing studies remained descriptive and are currently rather outdated. This study therefore aims to address this shortcoming by establishing teachers' exact context-specific developmental needs before designing a theoretically founded professional development model for teachers of German SAL in South Africa.

A needs analysis was conducted in various steps. Results of the needs analysis were consolidated from qualitative data from expert interviews, a questionnaire answered by teachers of German SAL, relevant policies and scholarly literature. Results showed that a professional development programme for teachers of German SAL should focus on sufficient individualisation to allow for the heterogeneity of the teaching population, while encouraging SDL and collaborative learning (CL).

Based on these findings, an initial three-cycle model was designed, which was informed by Van Merriënboer's Four Component Instructional Design Model (4C/ID model) for instructional design. The model was informed by collaborative learning (CL) and blended learning (BL) as approaches in support of self-directed learning (SDL). A practice environment was developed on *Moodle*. A panel of international panel of experts on DaF and German SAL evaluated the practice environment to establish its ease of use, relevance and suitability for the professional development of teachers of German SAL. Certain adaptations were made, after which participants of the initial needs analysis were invited to participate in a trial run of the programme. After completion, participants evaluated the programme in terms of its usefulness, relevance to their contexts and their likelihood to use the programme for further their professional development.

Conclusions were drawn based on all data and recommendations for the development of a professional development programme, which focuses on SDL, BL, CL and individualisation were made. These conclusions can serve as a point of departure for professional development facilitators and researchers who wish to develop a context-specific professional development programme, which focuses on individual participants' need, while encouraging collaborative learning.

Keywords: blended learning, collaborative learning, needs analysis, self-directed learning, teacher professional development, teachers of German SAL.

OPSOMMING

Aanbevelings ten opsigte van 'n selfgerigte vervlegteleerprogram vir Duits Tweede Addisionele Taal-onderwysers

Die verwagting dat onderwysers in Suid-Afrika lewenslange leerders moet wees, word beklemtoon in toepaslike beleidsdokumente, terwyl die belangrikheid daarvan telkens beklemtoon word in die literatuur. In die praktyk word die verwagting van lewenslange leer, veral van Duits Tweede Addisionele Taal (TAT), deur verskeie faktore belemmer. Hierdie onderwysers word heel dikwels gekonfronteer met professionele ontwikkelingsprogramme wat 'n een-grootte-pas-almaal-benadering volg. So 'n benadering neem nie die spesifieke onderrigleerkonteks van onderwysers van Duits TAT in Suid-Afrika in ag nie.

Terwyl die studieveld van onderwyserontwikkeling van Duits as Vreemde Taal (Deutsch als Fremdsprache / DaF) internasionaal baie aandag geniet, is slegs beperkte navorsing in hierdie veld in Suid-Afrika gedoen. Bestaande studies is grootliks beskrywend en ook redelik verouderd. Hierdie studie onderneem dus om tekortkominge in hierdie veld aan te spreek, deur die presiese samehang van ontwikkelingsbehoefte van Duits TAT vas te stel voordat 'n teoreties-gefundeerde professionele ontwikkelingsmodel vir onderwysers van Duits TAT in Suid-Afrika voorgestel word.

'n Behoeftebepaling is aan die hand van verskillende stappe uitgevoer. Die bevindings van die behoeftebepaling is gekonsolideer uit die kwalitatiewe data van die onderhoude met kundiges, 'n vraelys wat deur onderwysers van Duits TAT beantwoord is, relevante beleide en die vakliteratuur. Die resultate toon aan dat 'n professionele ontwikkelingsprogram vir onderwysers van Duits TAT moet fokus op voldoende individualisering en ook voorsiening moet maak vir die heterogene onderwyserspopulasie terwyl selfgerigte leer en samewerkinge leer aangemoedig word.

'n Driesiklusmodel gebaseer op Van Merriënboer se *Four Component Instructional Design Model (4C/ID model)* vir instruksionele ontwerp is geskep. Die model se ontwerp is ingelig deur samewerkende en vervlegte leer as benaderings om selfgerigte leer te ondersteun. 'n Toepassingsomgewing is in Moodle ontwikkel. 'n Paneel van internasionale kenners op Duits as Vreemde Taal en Duits TAT het die toepassingsomgewing geëvalueer omtrent die gebruiksgemak, relevansie en geskiktheid vir professionele ontwikkeling van onderwysers van Duits TAT. Bepaalde aanpassings is gemaak waarna die deelnemers van die aanvanklike behoeftebepaling uitgenooi is om aan 'n proeflopie van die program deel te neem. Na die afloop hiervan het deelnemers die program geëvalueer rakende die bruikbaarheid, relevansie tot hul

kontekste en die mate waartoe hulle hierdie program vir verdere professionele ontwikkeling sou kon gebruik.

Gevolgtrekkings is uit die data onttrek en aanbevelings is vir die ontwikkeling van 'n professionele ontwikkelingsprogram gemaak wat fokus op selfgerigte leer, vervlegte leer, samewerkende leer en individualisering. Hierdie gevolgtrekkings kan dien as vertrekpunt vir die professionele ontwikkeling van fasiliteerders en navorsers wat 'n konteksspesifieke professionele ontwikkelingsprogram wil ontwikkel wat spesifiek op die individuele deelnemers se behoeftes fokus terwyl samewerkende leer ook aangemoedig word.

TSHOBOKANYO

Ditshitshinyo tse di diretsweng barutabana ba ba rutang Puo ya Bobedi e Go Okeditsweng ka Yone ya Sejeremane tsa go ikaela mo lenaneothutong la mekgwa-tswakano ya go ithuta

Go lebelela gore barutabana mo Aforika Borwa e nne baithuti botshelo jotlhe jwa bone go a gatelelwa mo dipholising tse di maleba e bile botlhokwa jwa teng bo gatelelwa gantsi thata mo teng ga padi. Fa barutabana ba dira tiro eno ya bone, segolobogolo ba ba rutang Puo ya Bobedi e Go Okeditsweng ka Yone ya Sejeremane (German Second Additional Language [SAL]), go tlhaga dilo tse di ba kgoreletsang go bona tšhono ya go tswelala e le baithuti botshelo jotlhe jwa bone mo Aforikaborwa. Gantsi barutabana bano ba iphitlhela ba dirisiwa mananeo a seporofešenale a tlhabololo ya dikgono tsa bone tsa tiro mme e le mananeothuto a kakaretso fela a a sa direlwang go akaretisa barutabana ba ba rutang SAL ya Sejeremane mo Aforikaborwa.

Le fa serutwa sa tlhabololo ya dikgono tsa tiro tsa barutabana ba ba rutang Sejeremane jaaka puo ya Seeng (Deutsch als Fremdsprache / DaF) se ratwa thata ke dinaga tsa boditšhabatšhaba, go dirilwe patlisiso e nnye fela ka sone mo Aforikaborwa. Dithutopatlisiso tsa ga jaanong jaana di tlhalosa serutwa seno bontle thata mme ga se dirisiwe. Ka jalo boikaeleo jwa thutopatlisiso eno ke go rarabolola bothata jono ka go naya barutabana katiso e e tsamaisanang le mathata a bana ba nang le one pele go tlhamiwa mokgwa wa tlhabololo ya seporofešenale wa barutabana ba ba rutang SAL ya Sejeremane mo Aforikaborwa.

Go ne ga tsewa dikgato tse di farologaneng tsa tshekatsheko ya go bona gore dilo tse di tlhokegang ke dife. Dipholo tsa tshekatsheko ya go bona gore dilo tse di tlhokegang ke dife di ne tsa kopanngwa go tswa go tshedimosetso ya boleng e e tserweng mo dipotsolotsong tsa bomankge, lenaane la dipotso tsa patlisiso tse di neng tsa arabiwa ke barutabana ka SAL ya Sejeremane, go tswa mo dipholising tse di maleba le dikgatiso tsa bakanoki. Dipholo di bontshitse gore lenaneo la tlhabololo ya seporofešenale la barutabana ba SAL ya Sejeremane le tshwanetse go tsepa mogopolo go ditlhoko tsa barutabana ka bongwe gore e nne le le kgonang go fetofetoga gore le tshwanele morutabana mongwe le mongwe, le gore le rotloetse SDL le go ithuta ka go dirisana mmogo le ba bangwe (collaborative learning [CL]).

Ka ntlha ya diphitlhelelo tseno, go ne ga tlhamiwa mokgwa wa medikologo e meraro, o o simolotsweng ke Van Merriënboer's Four Component Instructional Design Model (4C/ID model) wa leanothuto. Mokgwa ono o tlhametswe gore go ithutwe ka go dirisana mmogo (CL) le ka tiriso ya mekgwa-tswakano ya go ithuta e e tshegetsang thulaganyo ya go ithuta ka go ikaela (self-directed learning [SDL]). Go ne ga tlhamiwa tikologo ya felo ga boikatisetso mo go mo *Moodle*.

Phanele ya bomankge ba phanele ya boditšhabatšhaba ya DaF le ya SAL ya Sejeremane e ne ya sekaseka boleng jwa felo ga boikatisetso go bona gore ke lefelo le le motlhofo go le go kana kang go le dirisiwa, gore a le maleba e bile le tshwanela tlhabololo ya seporofešenale ya barutabana ba SAL ya Sejeremane. Go ne ga dirwa diphetogo di le mmalwa, morago ga moo ga lalediwa batsayakarolo ba ditlhoko tsa ntlha tse di lemogilweng gore ba tseye karolo mo go ikatisediweng ga lenaneothuto leno. Fa ba sena go fetsa, batsayakarolo ba ne ba sekaseka boleng jwa lenaneothuto leno gore le mosola go le go kana kang, a le tshwanela ditlhoko tsa bone le gore a ke lenaneo le go ka kgonegang gore le dirisediwe tlhabololo ya boporofešenale jwa bone.

Go ne ga dirwa ditshwetso tse di neng di theilwe mo tshedimosetsong yotlhe le mo ditshitshinyong ka ga lenaneothuto leno la tlhabololo ya seporofešenale, le le tsepang mogopolo mo go SDL, BL, CL e bile le ne la dirwa gore le tshwanele morutabana mongwe le mongwe. Ditshwetso tseno ke tse batlhatlheledi le babatlisisi ba tlhabololo ya boporofešenale jwa barutabana, ba ba batlang go tlhama lenaneothuto la tlhabololo ya seporofešenale le le tlamelang batsayakarolo ka ditlhoko tsa bone ba ka simololang ka tsone ka go di tsenya tirisong, le go ba rotloetsa go ithuta ka go dirisana mmogo le ba bangwe.

ABSTRACT

Empfehlungen für Deutsch als Zweite Zusatzsprache-Lehrkräfte bezüglich eines selbstgesteuerten Blended-Learning-Programms

Die Politik und Wissenschaft erwarten von südafrikanischen Lehrkräften, dass sie lebenslange Lernende bleiben. In der Praxis jedoch erschweren unterschiedliche Faktoren es den Lehrkräften, vor allem für Deutsch als Zweite Zusatzsprache, diesen Erwartungen gerecht zu werden. Die Lehrkräfte werden mit generischen Fort- und Weiterbildungsprogrammen konfrontiert, die weder ihre Lehr- und Lernbedingungen, noch ihren Arbeitskontext berücksichtigen.

Während das Feld *Deutsch als Fremdsprache (DaF)* sich international an großem wissenschaftlichen Interesse erfreut, bleibt es in Südafrika noch weitgehend unerforscht. Südafrikanische Studien im Bereich DaF bleiben zumeist deskriptiv und sind oft veraltet. Diese Studie soll die bestehende Forschungslücke überbrücken, indem die kontextspezifischen Weiterbildungsbedürfnisse der Lehrkräfte festgestellt werden, bevor ein theoretisch fundiertes Weiterbildungsprogramm für Lehrkräfte für Deutsch als Zweite Zusatzsprache in Südafrika konzipiert wird.

Eine Bedarfsanalyse wurde in verschiedenen Schritten durchgeführt. Das Ergebnis der Bedarfsanalyse entstand aus einer Kombination von Daten aus Experteninterviews; einem Fragebogen, der von Lehrkräften für Deutsch als Zweite Zusatzsprache ausgefüllt wurde; diversen von der südafrikanischen Regierung erlassenen Richtlinien; und der Analyse wissenschaftlicher Literatur. Es wurde aus den Ergebnissen deutlich, dass ein Weiterbildungsprogramm für Lehrkräfte für Deutsch als Zweite Zusatzsprache genügend Raum für Individualisierung lassen sollte, um die Heterogenität der Lehrerschaft zu berücksichtigen, während gleichzeitig autonomes und kollaboratives Lernen gefördert werden müssen.

Anhand obengenannter Ergebnisse wurde ein Drei-Zyklus-Modell entwickelt, welches auf Van Merriënboer's *Four Component Instructional Design Model (4C/ID model)* beruht. Dieses Modell wurde des weiteren stark von kollaborativem Lernen, *Blended learning* und autonomem Lernen beeinflusst. Ein digitaler Arbeitsraum wurde auf der Lernplattform *Moodle* eingerichtet. Internationale Expert*innen im Bereich DaF und Deutsch als Zweite Zusatzsprache begutachteten dieses Modell in Bezug auf dessen Gebraucherfreundlichkeit, Relevanz und Angemessenheit für die professionelle Weiterbildung von Lehrkräften für Deutsch als zweite Zusatzsprache. Gewünschte Veränderungen wurden umgesetzt, bevor die Teilnehmenden zur Bedarfsanalyse eingeladen wurden, um an einer Erprobung des Programmes teilzunehmen. Nach Abschluss der Erprobung evaluierten Teilnehmende das Programm in Bezug auf dessen

Nutzen und Relevanz für ihren Kontext, als auch in Bezug auf die Wahrscheinlichkeit, mit der sie das Programm weiterbenutzen würden.

Schlussfolgerungen, die gezogen wurden, berücksichtigten alle erhobenen Daten und es wurden Empfehlungen für die Entwicklung eines Weiterbildungsprogramms, welches autonomes Lernen, *Blended Learning*, kollaboratives Lernen und Individualisierung in den Vordergrund stellt, ausgesprochen. Diese Empfehlungen können als Basis für Trainer*innen und Wissenschaftlicher*innen dienen, die ein kontextspezifisches Weiterbildungsprogramm mit einem Schwerpunkt auf den Lernbedürfnissen individueller Teilnehmenden entwickeln möchten, während gleichzeitig kollaboratives Lernen unterstützt wird.

LIST OF ACRONYMS AND ABBREVIATIONS

BL	Blended learning
CAPS	Curriculum and Assessment Policy Statement
CEFL	Common European Framework of Reference for Languages
CL	Collaborative learning
DAAD	Deutscher Akademischer Austauschdienst
DaF	Deutsch als Fremdsprache
DBE	Department of Basic Education
DHET	Department of Higher Education and Training
DoE	Department of Education
DLL	Deutsch Lehren Lernen
DLV	Deutschlehrerverband im Südlichen Afrika
DoE	Department of Education
DSD	Deutsches Sprachdiplom
4C/ID	Four-Component Instructional Design Model
NDLT	Nationale Deutschlehrertagung
PASCH	Schulen: Partner der Zukunft
PBL	Problem-based learning
SACE	South African Council of Educators
SAGV	Germanistenverband im Südlichen Afrika
SAL	Second additional language
SDL	Self-directed learning
ZfA	Zentralstelle fürs Auslandsschulwesen

TABLE OF CONTENTS

DECLARATION	I
DEDICATION AND ACKNOWLEDGEMENTS.....	II
ABSTRACT	IV
OPSOMMING	VI
TSHOBOKANYO	VIII
ABSTRACT	X
LIST OF ACRONYMS AND ABBREVIATIONS	XII
CHAPTER 1 INTRODUCTION AND CONTEXTUALISATION	1
1.1 Background to the study.....	1
1.2 Clarification of terms	3
1.3 Problem statement and research motivation	5
1.4 Research question and aim	7
1.4.1 Research questions	7
1.4.2 Research aims	8
1.5 Research design and methodology	9
1.5.1 Philosophical orientation	9
1.5.2 Research design	10
1.5.3 Research method.....	11
1.5.3.1 Research population and sampling.....	11

1.5.3.2	Data collection.....	12
1.5.3.3	Data analysis.....	15
1.6	Ethical aspects	15
1.7	Role of the researcher	16
1.8	Contribution of the study	16
1.9	Chapter outline.....	17
1.10	References.....	21

CHAPTER 2	PROFESSIONAL DEVELOPMENT IN FOSTERING SELF-DIRECTED LEARNING IN GERMAN SECOND ADDITIONAL LANGUAGE TEACHERS	29
2.1	Abstract.....	29
2.2	INTRODUCTION.....	29
2.3	Teacher professional development in South Africa	32
2.4	The need to enhance self-directed learning in teacher professional development.....	37
2.5	Recommendations towards developing SDL in South African teachers.....	40
2.6	Conclusion.....	45
2.7	References.....	45

CHAPTER 3	BLENDED LEARNING AS AN APPROACH TO FOSTER SELF- DIRECTED LEARNING IN TEACHER PROFESSIONAL DEVELOPMENT PROGRAMMES.....	56
3.1	Abstract.....	56
3.2	Keywords	56
3.3	Introduction	56
3.4	Understanding blended learning	59
3.5	Classification of blended learning models	61
3.6	Pedagogical approaches towards and models of blended learning	62

3.7	Blended learning in support of self-directed learning.....	63
3.8	Blended learning to enhance self-directedness in teacher professional development programmes	66
3.9	Conclusion.....	69
3.10	References.....	70
CHAPTER 4 PROFESSIONAL DEVELOPMENT NEEDS OF TEACHERS OF GERMAN SECOND ADDITIONAL LANGUAGE IN SOUTH AFRICA		78
4.1	Abstract.....	78
4.2	Keywords	78
4.3	Introduction	78
4.4	Research design	79
4.4.1	Published and unpublished literature: scholarly research.....	80
4.4.2	Published and unpublished literature: Expectations of German SAL teachers regarding professional development	82
4.4.3	Research methodology	84
4.4.3.1	Sampling	85
4.4.3.2	Data Collection.....	85
4.4.3.3	Data Analysis	85
4.4.4	German SAL Teachers	88
4.4.4.1	Sampling	88
4.4.4.2	Data collection.....	89
4.4.4.3	Data analysis.....	89
4.4.5	Existing teacher development programmes.....	92
4.5	Results	94
4.6	Conclusion.....	95

4.7	Acknowledgements	96
4.8	Bibliography	96
4.9	Addendum A: Questionnaire	102

CHAPTER 5 COLLABORATIVE SELF-DIRECTED LEARNING FOR TEACHERS OF GERMAN SECOND ADDITIONAL LANGUAGE TEACHER PROFESSIONAL DEVELOPMENT IN SOUTH AFRICA: PUTTING THEORY INTO PRACTICE 107

5.1	Abstract.....	107
5.2	Keywords	107
5.3	Introduction	107
5.4	Theoretical/pedagogical principles	109
5.4.1	Collaborative learning	109
5.5	Collaborative learning and its interplay with SDL	111
5.6	Instructional design	112
5.6.1	Underlying principles of instructional design for this study.....	112
5.6.2	Applying 4C/ID to SDL and CL.....	114
5.6.3	Applying the three-cycle model in practice.....	114
5.7	Guidelines for the instructional design of a teacher professional development programme focusing on self-direction and CL	121
5.8	Conclusion.....	121
5.9	Acknowledgements	122
5.10	References.....	122

CHAPTER 6 IMPLEMENTING AN ONLINE COLLABORATIVE LEARNING TEACHER PROFESSIONAL DEVELOPMENT PROGRAMME FOR TEACHERS OF GERMAN SAL IN SOUTH AFRICA 129

6.1	Abstract.....	129
-----	---------------	-----

6.2	Keywords	129
6.3	Introduction	129
6.4	Background: German SAL teaching in South Africa	131
6.5	Design and Theory Underpinning a Professional Development Model: Self-directed and Collaborative Learning	132
6.6	The Design Process	133
6.7	The Underlying Learning Theory	134
6.8	Implementing and Evaluating the Model in Practice: Methodology	136
6.8.1	Sampling Strategy	136
6.8.2	Data Collection	136
6.8.3	Data Analysis	137
6.9	Discussion and Findings	138
6.9.1	Time Constraints	139
6.9.2	Ease of Access	140
6.9.3	Collaboration	142
6.10	Synthesis	145
6.11	Recommendations	145
6.11.1	Recommendations for Individualisation	146
6.11.2	Recommendations for SDL	146
6.11.3	Recommendations for CL	147
6.12	Conclusion	148
6.13	Acknowledgements	148
6.14	Conflict of interest	148
6.15	Ethics approval	148
6.16	Reference list	148
6.17	Addendum A: Expert Evaluation Questionnaire	156

6.18	Addendum B: Participant Evaluation Questionnaire.....	160
CHAPTER 7	SUMMARY, CONCLUSIONS AND RECOMMENDATIONS.....	165
7.1	Introduction	165
7.2	Chapter / article overview.....	166
7.2.1	Chapter 2/ Article 1: “Professional development in fostering self-directed learning in German Second Additional Language teachers”	167
7.2.2	Chapter 3 /Article 2: “Blended learning as an approach to fostering self-directed learning in teacher professional development programmes”	168
7.2.3	Chapter 4/ Article 3: “Professional development needs of teachers of German Second Additional Language in South Africa”	168
7.2.4	Chapter 5/ Article 4: “Collaborative self-directed learning for teachers of German Second Additional Language teacher professional development in South Africa: Putting theory into practice”	169
7.2.5	Chapter 6/ Article 5: “Implementing a collaborative online teacher professional development programme for teachers of German SAL in South Africa”	170
7.3	Conclusions.....	171
7.3.1	Conclusions from the literature review	171
7.3.2	Conclusions from the empirical chapters	172
7.4	Recommendations for the development of a teacher professional development programme for teachers of German SAL	174
7.5	Significance and implications of the research.....	175
7.6	Limitations of the study.....	176
7.7	Suggestions for future research.....	177
7.8	Conclusion.....	178
7.9	References.....	178

ADDENDUM A: INTERVIEW SCHEDULE	215
ADDENDUM B CONSENT FORM AND QUESTIONNAIRE: NEEDS ANALYSIS	217
ADDENDUM C: EVALUATION FORM: EXPERT PARTICIPANTS	228
ADDENDUM D: PARTICIPANT EVALUATION FORM	232
ADDENDUM E: ETHICAL CLEARANCE.....	237
ADDENDUM F: DEPARTMENTAL PERMISSION FREE STATE	239
ADDENDUM G: DEPARTMENTAL PERMISSION GAUTENG	241
ADDENDUM H: DEPARTMENTAL PERMISSION WESTERN CAPE	243
ADDENDUM I: PERMISSION FORM PRINCIPALS	244
ADDENDUM J: PROOF OF ACCEPTANCE: ARTICLE 2.....	249
ADDENDUM K: PROOF OF ACCEPTANCE: ARTICLE 3	250
ADDENDUM L: PROOF OF SUBMISSION: ARTICLE 4.....	251
ADDENDUM M: PROOF OF SUBMISSION: ARTICLE 5.....	252
ADDENDUM N: PROOF OF TEXT EDITING	253
ADDENDUM O: PROOF OF QUALITY CONTROL OF REFERENCING	254

LIST OF TABLES

Table 1-1: Data collection phases	12
Table 1-2: Overview of chapters / articles	17
Table 2-1: Research on self-directed learning	31
Table 2-2: Personality aspects and skills required for self-directed learning	41
Table 6-1: Summary of quantitative ratings.....	138

LIST OF FIGURES

Figure 2-1: Design phases in a professional development programme focussing on SDL	44
Figure 3-1: Teacher professional-development opportunity in the ‘virtually enriched’ spectrum of Staker and Horn (2012)	67
Figure 5-1: Learning task model.....	119

CHAPTER 1 INTRODUCTION AND CONTEXTUALISATION

1.1 Background to the study

In the South African schooling system, the teaching of the subject *German as a Foreign Language*¹ is currently approached within the context of the *Language in Education Policy* (Department of Basic Education [DBE], 1997) as a Second Additional Language (SAL). The SAL level is regulated in the *Curriculum and Assessment Policy Statement (CAPS)* of 2011 (DBE, 2011b). While theoretically allowing for SALs to be taught from Grade 4, “[s]chools offering an optional language or at least [at SAL] level may do so [only] if they can make an arrangement for the allocation of additional time to the allocated 27.5 hours” (DBE, 2011b, p. 8).

Moreover, CAPS (DBE, 2011b, p. 7) instructs that

[t]he allocated time per week may be utilised only for the minimum required NCS² subjects as specified above, and may not be used for any additional subjects added to the list of minimum subjects. Should a learner wish to offer [*sic*] additional subjects, additional time must be allocated for the offering of these subjects.³

In practice, the above-stated rule translates to teachers having to offer SAL outside of regular school hours, either early in the morning, or in the afternoon.

While not playing a dominant role in the South African education system, German, as well as the other non-official SALs, does have the potential to play a role in learners’ education (Baker, 2011). For instance, as regards teaching SALs, the promotion of multilingualism and social cohesion is among the overarching aims in CAPS (DBE, 2011b). However, teaching SALs turns out to be a challenge to teachers, not only due to the time constraints but also the fact that the content and assessment requirements for all SALs have been conceptualised for English, thereby allowing this language to shape the curricula for all other languages taught in South Africa at SAL level (Murray, 2013). As South African pupils are often exposed to English in their natural environment,

¹ In this study, the term “German as a Foreign Language” refers to the general teaching of this discipline worldwide. “German Second Additional Language” (SAL) refers to the school subject as it exists in South Africa.

² National Curriculum Statement.

³ In the reading of this quote, the interpretation of Mbohwa-Pagels and Rode (2014) is followed. It is assumed that schools are allowed to offer additional subjects only outside regular school hours.

it seems like a daunting task for teachers of languages to which learners are not exposed outside the classroom to cover the same content as is covered in English.

In an endeavour to gain an overview of the teaching and learning of German SAL and the challenges German teachers face in South Africa, the Goethe-Institut⁴ Johannesburg conducted a nationwide survey amongst teachers of German in South Africa in 2013 (Mbohwa-Pagels & Rode, 2014). Results of the survey showed that, in spite of it not being afforded a place in timetables, German was taught in varying forms in selected secondary schools in all South African provinces except Limpopo. In the North West province, for example, German SAL is taught by selected individuals in private classes. Learners can still write their Grade 12 examination in German SAL despite it not being a school subject anymore.

While German studies continue to decline at universities (Annas, 2016), a positive trend could be identified at secondary school level. In 2008, only 7 407 secondary school pupils studied German SAL in school; however, the study by Mbohwa-Pagels and Rode (2014) showed that this number rose to 7 908 in 2013. In the same study (Mbohwa-Pagels & Rode, 2014), it was further deemed to be significant that 33% of the German teachers reported an increase in their number of learners, while 45% of the teachers estimated that the number of learners remained stable. In spite of this promising development in 2013 and 2014, the positive trend did not continue in schools. In 2020, a report published by the German Federal Foreign Office every five years showed that 7 330 learners are currently learning German as a Foreign Language at schools. Compared to 2015, the number of learners of German in schools in South Africa has thus decreased by 578 (Auswärtiges Amt, 2020).

In order to design a teacher professional development programme, the educational backgrounds of teachers of German SAL and the challenges they are facing should be taken into account. In 2014, only Stellenbosch University and the University of Pretoria provided training for teachers of German SAL (Mbohwa-Pagels & Rode, 2014). According to Augart (2012), teacher training, students at Stellenbosch University have a choice between completing a postgraduate teacher's diploma and doing a master's degree in German as a Foreign Language, which is offered in cooperation with the *Herder Institut* of the University of Leipzig. However, completing this master's

⁴ The Goethe-Institut is a cultural institute, which falls under the auspices of the Federal Republic of Germany. It operates worldwide. The Institute's most important mandate is to promote the teaching and learning of German as a Foreign Language outside Germany, but it also fulfils various other roles, mostly related to cultural exchange.

degree does not formally qualify students as German SAL teachers (Mbohwa-Pagels & Rode, 2014).

More than half of the current practising German SAL teachers are non-mother-tongue speakers of German (Mbohwa-Pagels & Rode, 2014) whose only official opportunity to specifically improve their language proficiency is through language course bursaries awarded by the Goethe-Institut or the *Zentralstelle für das Auslandsschulwesen*⁵ (Mbohwa-Pagels & Rode, 2014). This low level of support for the improvement of teachers' language proficiency seems to stand in direct contrast to research done on the importance of the language proficiency of German teachers. Krumm and Legutke (2001) bemoan the worldwide lack of a measurable acceptable language proficiency level for German teachers that would allow for the setting of a certain standard and minimum requirements for teachers of German as a Foreign Language. Similarly, Vollmer and Butzkamm (1998) argue that, for a teacher, a sufficiently high level of language proficiency might be more important than didactic skills. Christ (2002) concurs, arguing that sufficiently high language proficiency should be the first requirement set for a language teacher. In spite of the fact that no consensus exists as to the exact language level that teachers of German SAL should reach in order to teach effectively, there does seem to be consensus that a fairly high language level in German would be required.

As mentioned earlier, the trend in 2014 showed a growth in the number of German SAL learners in South Africa (Mbohwa-Pagels & Rode, 2014). However, this growth was temporary, and in more recent times, the trend seems to have reversed (Auswärtiges Amt, 2020). While Mbohwa-Pagels and Rode (2014) attributed this temporary growth to the commitment of teachers of German SAL to the subject, they also found that a definite need for more effective teacher support already existed in 2014. The exact nature of the need for supportive professional development for teachers of German SAL, specifically suited to the South African context, is described in more detail under the methodology section (cf. §1.4).

1.2 Clarification of terms

In this section, important terms are defined in the context of this study to facilitate a clear and unambiguous understanding of the topic under discussion.

⁵ The 'Zentralstelle für Auslandsschulwesen' is an agency for the Federal Republic of Germany tasked with overseeing German teachers at German schools worldwide.

Blended learning: Various definitions for blended learning exist. In this study, however, blended learning is regarded as a combination of online and face-to-face instruction (Akyol et al., 2009; Gleason, 2013; Osguthorpe & Graham, 2003) “in such a way that the strengths of each are blended into a unique learning experience” (Garrison & Vaughan, 2008, p. 5). Online instruction is seen to include synchronous and asynchronous interaction on the learning platform (Wang, 2010) involving both the facilitator and other course participants (Comas-Quinn, 2011; Rösler & Würffel, 2014) as well as interactions on social media and non-online computer-mediated instruction (Bonk & Graham, 2006). During synchronous learning, participants work in the face-to-face or online setting simultaneously (Wang & Huang, 2018), while during asynchronous learning, participants work anytime (Yoon et al., 2020).

Second Additional Language: The term Second Additional Language (SAL) in this study is understood in light of the South African Curriculum and Assessment Policy Statement (CAPS) English Second Additional Language of 2011 (DBE, 2011b). While the CAPS specifies English, it refers in practice to any non-official language (DBE, 2011b) of which learners are not assumed to have any prior knowledge (DBE, 2011b) and which must be taught outside regular teaching hours (DBE, 2011b). In the context of this study, German SAL refers to the school subject as it exists in South Africa, while the term German as a Foreign Language applies to the general teaching of German as a foreign language.

Self-directed learning: Self-directed learning (SDL) is a concept used predominantly in adult education (Du, 2012). For the purposes of this study, SDL is seen, in accordance with Knowles (1975), as a process whereby students determine their own learning needs, goals, materials, strategies and outcomes. SDL depends strongly upon participants’ active engagement in dividing up tasks, managing time and setting goals (Shea & Bidjerano, 2010). For the efficient facilitation of SDL, participants were motivated to assume responsibility and control of cognitive as well as contextual processes in order to construct meaningful learning outcomes.

Teacher professional development: According to Richter et al. (2011), teacher professional development involves both structured, formal learning opportunities and unstructured individual- or group-related informal learning opportunities that “deepen and extend teachers’ professional competence with regard to knowledge, beliefs, motivation and self-regulatory skills” (Richter et al., 2011, p. 116). Professional development opportunities are therefore not limited to formal workshops and courses and also include structured and unstructured interactions with other teachers (Murray et al., 2009), peer coaching (Zwart et al., 2007) and the independent use of self-

enrichment opportunities. In this study, the approach is to facilitate self-directed teacher professional development (cf. §1.3).

Teaching competence: Teaching competence is the summation of competencies that effective teachers show, such as professional competence, didactic competence, organisational competence, conversational competence, relational competence, and self-competence (Schocker-von Dittfurth, 2002). As this study focuses on foreign-language teachers, language proficiency is also considered a competence (Jessner, 2008). While not prescribing a certain level of proficiency for SAL teachers, CAPS (DBE, 2011b, p. 9) does require learners to master their SAL at a “level of proficiency to prepare them for further or higher education or the world of work”. It can therefore be assumed that SAL teachers’ level of proficiency needs to be significantly higher than the level prescribed for learners.

1.3 Problem statement and research motivation

In analysing the professional development needs of teachers of German SAL in order to design a professional development programme for teachers of German SAL that is specifically suited to the South African context, one has to consider that time and resources for professional development are limited in many cases. Furthermore, in designing this development programme, several factors should be kept in mind, namely time constraints in the teaching of the SAL, other responsibilities teachers have at their respective schools (Mbohwa-Pagels & Rode, 2014) and the very high requirements set by CAPS (DBE, 2011b). While some research has been done on the situation regarding German and German teaching in South Africa (Augart, 2012; Mbohwa-Pagels & Rode, 2014; Von Maltzan, 2009), existing research remains mostly descriptive without proposing solutions other than policy change to the challenges that teachers of German SAL are facing (Mbohwa-Pagels & Rode, 2014). This study sets itself apart from existing descriptive research (Augart, 2012; Baker, 1997; Baker, 2011; Mbohwa-Pagels, 2011; Mbohwa-Pagels & Rode, 2014; Von Maltzan, 2009) by focusing on the professional development of teachers of German SAL in South Africa.

Extensive research has been conducted on the professional development of teachers of German as a Foreign Language internationally (cf. Dos Santos et al., 2019; Legutke & Scharf, 2016). While certain principles emerging from these studies could be applied to the professional development of teachers of German SAL, no comparable studies have been conducted in recent years on this specific target group in South Africa. The current study therefore differs from existing studies in

that it focuses specifically on teachers of German SAL and proposes SDL (Shea & Bidjerano, 2010) as a process that allows participants to work on fulfilling their self-determined learning aims (George-Walker & Keeffe, 2010) while also assisting one another in certain cooperative learning tasks (Garrison, 2009). Participants' needs and experiences therefore play a significant role in the dynamic learning design process, as suggested by McLoughlin and Lee (2010).

The learning design proposed in this study falls within the realm of SDL. Guglielmino (2013) has described SDL as one of the essential skills of the 21st century. SDL is a process in which participants' self-development is the focal point of learning. This implies that participants take responsibility for their own learning (Brockett & Hiemstra, 1991; Knowles, 1975; Tough, 1971), which requires not only a high level of motivation, but also skilled behaviour in information seeking and goal setting to ensure that learning is not dominated by the instructor (researcher) (Frambach et al., 2012). Taking into account the heterogeneity of South African German SAL teachers (Mbohwa-Pagels & Rode, 2014), SDL lends itself to individualisation through its focus on the individual's autonomy (Murray, 2014) within a social setting (Cooker & Benson, 2013). Matheos et al. explicate, that individualised learning is characterised by self-individualised content, and may be achieved through a thorough "understanding of individual learning preferences, and how learners chose technology to enhance their learning" (Matheos et al., 2012, p. 57). A more detailed discussion on the interconnection between individualised learning and SDL will follow in Chapters 2 and 6. Participants are enabled to work on achieving their own problem-based learning aims (Loyens et al., 2008) collaboratively (Loyens & Gijbels, 2008). The aforementioned focus on learning within a social setting is highly relevant in collaborative learning, which understands knowledge to be "something people construct by talking together and reaching agreement" (Bruffee, 1993, p. 3) and is said to occur when learners or participants cooperate in order to reach a shared learning goal (Labonté & Smith, 2019). A more concise discussion of the term 'collaborative learning' will be provided in Chapter 6.

The above-described approach is informed by Vygotsky's socio-constructivism (Vygotsky et al., 2012), which emphasises the relevance of interaction in learning. Learning is assumed to take place as a result of social interactions and participants' experiences both inside and outside the learning environment, as well as participants' personal critical thinking process, as advocated by Powell and Kalina (2009). The approach thus "emphasises the interdependence of social and individual processes in learning, and attributes the quality of the conversations in which participants engage a central role in education" (Escobar Urmeneta, 2013, p. 336). It is thus assumed that personal development and learning are dependent on the possibilities and

experiences embodied in interactions with others. Ballweg et al. (2013) illustrate how interaction can aid language learning by increasing the motivation of learners of a language should they want to speak, write and read increasingly complex texts. Through the immediate feedback given in the interactions with others, they realise that they are understood, which gives them the self-confidence to attempt increasingly complex interactions (Ballweg et al., 2013). Considering the above-mentioned principles and approaches, as well as the working conditions and backgrounds of teachers of German SAL in South Africa, it seems prudent not to come SDL, CL and individualised learning, in order to design a holistic professional development for teachers of German SAL. More information on the concrete professional development needs of aforementioned teachers and how these needs were established, will be provided in Chapter 4.

SDL, which also focuses strongly on interaction with others and on collaborative learning, may be facilitated through blended learning, as blended learning allows for individualised learning (Matheos et al., 2012). While distance teaching and online teaching can be perceived as isolating and lacking in human interaction (Fee, 2009; Irani et al., 2014), blended learning offers the added advantage of face-to-face sessions in combination with online elements (Neumeier, 2005; Rösler & Würffel, 2014). As demonstrated by Graham (2006), a blended-learning programme offers the benefit of access to teaching materials and pedagogical practice in a systematic manner (Anderson & Dron, 2010) while also allowing for the flexibility of synchronous and asynchronous phases. This enables the programme to facilitate a self-directed approach in which participants play a major role in determining their own learning (Rösler & Würffel, 2014).

1.4 Research question and aim

1.4.1 Research questions

The main research question was as follows:

- How can the principles of blended, collaborative and self-directed learning be applied so as to enable and promote individualised learning in the professional development of teachers of German SAL?

The subquestions were as follows:

- How can SDL benefit the professional development of teachers of German SAL?
- How can blended learning enhance SDL in teachers of German SAL?

- What are the most pressing developmental needs for German SAL teachers?
- How can collaborative learning address existing needs within a teacher professional development programme focusing on SDL, taking into consideration existing German SAL teacher support structures, as well as internal and external limitations on German SAL teacher development?
- What content and skills should be focused on in a professional development programme designed to equip teachers of German SAL to become self-directed learners?

1.4.2 Research aims

The main research aim of this study was to:

- determine how the principles of blended learning, collaborative and self-directed learning can be applied so as to enable and promote individualised learning in the professional development of teachers of German SAL.

The following sub-aims support the main aim above, as this study aimed to:

- from the literature determine how SDL benefit the professional development of teachers of German SAL;
- determine by means of a literature review how blended learning can enhance SDL in teachers of German SAL;
- empirically investigate what the most pressing developmental needs are for German SAL teachers;
- establish how collaborative learning can address existing needs within a teacher professional development programme focusing on SDL, taking into consideration existing German SAL teacher support structures, as well as internal and external limitations on German SAL teacher development; and
- conclude what content and skills should be focused on in a professional development programme designed to equip teachers of German SAL to become self-directed learners.

In this article-based PhD-study, German SAL teachers' most pressing developmental needs, as well the limiting factors posing a challenge to fulfilling these needs in the context of teaching and learning, are analysed. The study therefore has a dual focus in applying the theory of SDL, collaborative learning and blended learning to the practice of professional development of teachers of German SAL in South Africa. The researcher intends to investigate how collaborative learning can be embedded in a professional development programme that promotes SDL so as

to satisfy the above-mentioned needs and complement existing teacher support structures. The researcher further establishes what elements should be included in a professional development programme that equips German SAL teachers to become self-directed learners and explores ways to allow participants to support each other's individual learning.

Based on these preliminary investigations, it was recommended that a professional development programme be developed that takes into account the external as well as internal limiting factors (Hufeisen, 2003) for German teachers in their development in South Africa. Such a programme would draw heavily on the approach used in the *Deutsch Lehren Lernen (DLL)*⁶ programme employed by the Goethe-Institut worldwide, which facilitates blended learning and collegial exchange, and would be designed in such a way that it can be used and adapted by teacher trainers of all SALs in South Africa, thereby addressing a real need among South Africa's foreign language teachers. The study sets itself apart from DLL through its approach to fostering SDL and its focus on South African German SAL teachers and their specific contexts.

1.5 Research design and methodology

1.5.1 Philosophical orientation

This study was guided by a constructivist epistemology, which proposes that truth and meaning are created by the subject's interaction with the world (Gray, 2004). Constructivism denies the existence of an objective reality (Mills et al., 2006) and asserts instead "that realities are social constructions of the mind" (Guba & Lincoln, 1989, p. 43). Guba and Lincoln (1989), furthermore, explicate that, even though certain constructions might be shared amongst groups of individuals, these constructions remain essentially individual.

Constructivism and the underlying principle thereof were complemented by interpretivism, which seeks "culturally derived and historically situated interpretations of the social life-world" (Crotty, 1998, p. 67). In this study, it was assumed that the laws of science stand in contrast to social reality and that research in social sciences should depend on different methods of analysis from those employed in research in the natural sciences (Gray, 2004). The researcher and the participants are seen as being interdependent and mutually interactive (Hudson & Ozanne, 1988). While the researcher had prior insight into and knowledge of the context, the specific content of

⁶ 'Deutsch Lehren Lernen' (DLL) is not deemed to be a workable development option for the general population of South African German SAL teachers due to its large volume of course content (six basic modules with further add-on modules) and its high cost.

the programme was determined by the participants' needs and interests. The researcher formulated learning goals in close cooperation with the participants (i.e., teachers of German SAL) so as to draw on their existing knowledge and experience in the design and evaluation of a context-specific professional development programme suitable to their (participants) individual needs.

1.5.2 Research design

Integrated methodology, in line with the framework proposed by Plowright (2011), was used, rejecting the traditional dichotomy between qualitative and quantitative methods. In this framework, the main focus in gathering data is the appropriateness of the data in answering the research question (Plowright, 2011). Furthermore, this study drew on elements of design-based research, as it intended to produce “new theories, artefacts, and practices that account for and potentially impact learning and teaching” (Barab & Squire, 2004, p 2).

During the learning process itself, participants in this study achieved group outcomes by synthesising their different learning styles and preferences. The underlying assumption was that participants would work together to learn but that they remained responsible for their own learning (Slavin, 1991). Blended learning was considered an appropriate tool⁷ for this learning approach, as it provides the benefit of multiple perspectives on the content, cognitive rehearsal, and various functionalities that encourage social learning, as well opportunities for tacit and unstructured SDL (Masie, 2006).

The main role of the facilitator (in this case, the researcher) was to “set the scene for learning” (McArdle, 2010, p. 184). The instructor was therefore responsible for constructing an environment in which participants could work on acquiring the ability to meet their own developmental goals (Garrett, 1991). The developmental goals were established in the needs analysis, after which the researcher developed the tools necessary to achieve these goals. During implementation of the professional development programme, the participants learnt to use the tools at hand to reach their individual goals by means of collaborative learning. The researcher moderated the learning phase at all times, and in the role of instructor, initiated the learning process, created a conducive

⁷ Even though blended learning was found to be a suitable tool in theory, the approach to implementing and evaluating the concept professional development opportunity was adapted to online learning in order to adhere to Government regulation concerning COVID-19. This change in approach is discussed in greater detail under *Limitations of the Study*.

learning environment and/or negotiated a learning aim. The participants needed to be self-motivated to acquire new knowledge (Ballweg et al., 2013). All teachers participating in the study were seen as individuals who influenced their own learning by drawing on their specific interests, needs and prior learning experiences.

1.5.3 Research method

The study commenced with a literature review, for which relevant literature was found by using the following keywords: SDL; blended learning; collaborative learning; teacher professional development; German as a Foreign Language; needs analysis; German in South Africa. The databases ERIC, EBSCOhost, Nexus, and Google Scholar were consulted.

Next, a brief overview is provided of the methodology and the way the predominantly qualitative data were collected and analysed.

1.5.3.1 Research population and sampling

The study commenced with interviews with three information-rich participants, who were selected by means of purposeful sampling on the grounds that they were “especially knowledgeable about or experienced with a phenomenon of interest” (Palinkas et al., 2015, p. 534)⁸. The first interviewee was a retired teacher and teacher educator who had worked as a subject advisor for a provincial department of education for many years. The second interviewee, a university lecturer, shared insights into the development of teacher training at universities in the country. The third, a prominent member of the South African German Teachers Association – the DLV (Deutschlehrerverband im Südlichen Afrika) – gave a perspective on teaching German SAL in South Africa and the challenges it posed to teachers. These interviews were conducted via e-mail.

After the e-mail interviews, purposive sampling was employed to select participants from the German SAL teacher population that were eager to benefit from a professional development programme and evaluation. As the current German SAL teacher population is small (Mbohwa-Pagels & Rode, 2014), all willing participants could be accommodated.

⁸ Due to the researcher’s prolonged engagement with and early familiarity in the field, it was possible to identify four particularly knowledgeable and influential interviewees (Shenton, 2004, p. 65).

A panel of seven local and international experts was requested to evaluate the first phase of the professional development programme, after which certain changes to the design were effected. These experts were especially knowledgeable in the field of the professional development of teachers of German as a Foreign Language or teaching German as a Foreign Language.

All participants in the needs analysis were invited to participate in testing and evaluating the programme itself. The participants were “good key informants who contributed to the researcher’s understanding of the phenomenon under investigation” (Gay et al., 2011, p. 142). In this study, the phenomenon in question is a professional development programme designed to suit the specific development needs of teachers of German SAL in South Africa. By means of an evaluation questionnaire, further qualitative data on their perceived specific developmental needs were gathered.

1.5.3.2 Data collection

Before commencement of the data collections, a consultation session with the NWU’s Statistical Consultation Service took place. Due to the small total population of teachers of German SAL in South Africa, it was decided to focus on qualitative data collection.

Data collection took place in four phases as is shown in Table 1-1.

Table 1-1: Data collection phases

Phase	Population group	Way of collection	Purpose
1	Information-rich participants	E-mail interview (Addendum A)	Gaining an overview of the professional development needs of teachers of German SAL in South Africa

2	Practising teachers of German SAL in South Africa	<i>Google Forms</i> questionnaire (Addendum B)	In-depth analysis of the perceived professional development needs of teachers of German SAL in South Africa
3	Expert participants	Questionnaire distributed both via e-mail and as link to Google forms (Addendum C)	Expert evaluation of the first cycle of the programme in order to redesign before implementation
4	Original participants of the needs analysis, German SAL teachers, who were willing to participate in the programme and to evaluate said programme	<i>Google Forms</i> (Addendum D)	Evaluation of the programme by the participants of the needs analysis to establish whether the identified needs have been met.

Based on the qualitative data gathered in the interviews with information-rich participants, a basic, non-standardised profiling questionnaire was compiled, and this was completed by as many practising German SAL teachers as possible, using *Google Forms* to gather descriptive. As not all German SAL teachers could be assumed to have had the technology available for submission via *Google Forms*, special provision was made to distribute the questionnaire through postal services as well. However, none of the participants chose to make use of this option.

Questions in the questionnaire were formulated in a way to gather comprehensive data on:

- where and how German is taught in South African schools and under what conditions;
- the language profiles of South African German teachers, as well as their level of education of and the technology available to them; and

- professional development needs, as perceived by German SAL teachers.

Based on the collected data, profiles of German SAL teachers with regard to their educational backgrounds, their home languages, teaching environments and their access to and knowledge about technology were drawn up.

After establishing the teachers' needs, the researcher designed a development programme based on a cognitive constructivist approach, which "rests on the assumption that knowledge is constructed by participants as they attempt to make sense of their experiences" (Driscoll, 2005, p. 376). Constructivism focuses on the individual by asserting that "an individual generates his own *mental models*, which he uses to make sense of his experiences" (Brown & Green, 2015, p. 29). Brooks and Brooks (1999, p. 4) explain the learning process as follows:

Each of us makes sense of our world by synthesizing new experiences into what we have previously come to understand. Often, we encounter an object, an idea, a relationship, or a phenomenon that doesn't quite make sense to us. When confronted with such initially discrepant data or perceptions, we either interpret what we see to conform to our present set of rules for explaining and ordering our work, or we generate a new set of rules that better accounts for what we perceive to be occurring. Either way, our perceptions and rules are constantly engaged in a grand dance that shapes our understandings.

The above-mentioned approach shares certain key elements like the emphasis in participants' experiences and participants' own mental processes. In the preparation of the professional development programme, a combination of learning strategies and methods was therefore made available on the learning platform, allowing for sufficient individualisation to meet each participant's unique learning needs (Schart & Legutke, 2012).

While the details of the programme were dictated by the teachers' needs, one of its focus areas was improved applied teaching competence, defined by Richter et al. (2011, p. 116) as "uptake of formal and informal learning opportunities that deepen and extend teachers' professional competence, including knowledge, beliefs, motivation and self-regulatory skills".

Before implementation of the programme, local and international experts evaluated the first cycle of the programme. These experts submitted questionnaires comprising both closed quantitative questions and open-ended qualitative questions. As was done with the participants'

questionnaires for the needs analysis, qualitative data were coded inductively. Changes to the programme were effected based on the collected data.

After implementation, the programme was tested and re-evaluated by practising teachers of German SAL, who suggested further changes to be implemented should the programme be made available to a larger group of participants in the future.

1.5.3.3 Data analysis

As both quantitative and qualitative data were collected in this study, different methods of data analysis were applied. All qualitative data were analysed by inductive coding. While the interviews with information-rich participants and the qualitative parts of the initial questionnaires relied strongly on value coding (Saldaña, 2009), evaluation coding (Saldaña, 2009) was the dominant coding system of the evaluation phase. Coding was done by the researcher with the aid of an additional coder so as to ensure trustworthiness of the data analysis (Turner & Daniel, 2010). This also facilitated the determination of inter-rater reliability (Saldaña, 2009) and hence strengthened the conclusions drawn from the qualitative data.

Quantitative data was limited and mostly descriptive. Likert-scale rating was used in the evaluation questionnaires, and averages were calculated.

1.6 Ethical aspects

Even though the research project was categorised as “low risk” by the North-West University’s Faculty of Education Research Ethics Committee, information was collected from human participants and, therefore, it remained imperative to protect the participants’ right and interests throughout the process (McMillan & Schumacher, 2001).

Data collection commenced after ethical clearance had been issued by the North-West University’s Faculty of Education Research Ethics Committee (cf. Addendum E). After project approval, each individual questionnaire was submitted to the aforementioned committee for an extension of the existing approval. Permission to conduct research was sought from the relevant provincial Departments of Education and was granted (cf. Addenda F, G, H). School principals’ approval was obtained to contact the teachers employed at their schools (cf. Addendum I).

Participation was strictly voluntary. Participants were protected from any potential physical, psychological, social, economic, or legal harm, and it was guaranteed that the research data

would remain confidential at all times (Creswell, 2013). Data will be safely stored for a period of seven years and will be used only for the purposes stipulated in the consent forms.

Written consent forms were signed by all participants (cf. Addendum A), but it was made clear to them that they were free to withdraw from the research at any point without losing access to the knowledge generated. Freedom to withdraw further increased the likelihood of honest answers, and could therefore have a positive effect on the credibility of the study (Shenton, 2004).

Irrespective of their participation in the study, all teachers of German SAL will be given the opportunity to benefit from the knowledge generated in the study should they so wish through the learning material made available online.

1.7 Role of the researcher

Due to the small size of the community of individuals involved with German as a Foreign Language, both as a SAL at secondary schools and as a subject at university level, it was unavoidable that the researcher and the participants would know each other even before commencement of the study. Furthermore, due to her longstanding and active involvement in the field, the researcher is well-known in the field of professional development for teachers of German SAL. However, special precautions were taken to ensure that this did not imply any coercion or had any effect on their participation and/or data analysis.

The researcher furthermore identified a possible conflict of interest, as she played a dual role being the facilitator as well as the researcher. However, it was made clear to all participants that the programme would be part of a collaborative learning experience for both the researcher and for them (Bruffee, 1995) and that relationships between participants and the facilitator would be progressively renegotiated. Furthermore, the researcher put checks and balances in place to ensure that she would not influence the data.

1.8 Contribution of the study

The study falls within the *Research Unit Self-Directed Learning*, as it aims to create new knowledge and insight into SDL. Its unique contribution to existing scholarship lies in the proposal that collaborative and blended learning be used as a means of professional development for teachers of German SAL in the South African context through a programme that employs collaborative learning and SDL. As explained under §1.3, little research has been conducted in the field of teacher professional development for teachers of German SAL in South Africa. This

study therefore does not only offer practical recommendations towards the further development of professional development opportunities but also makes a theoretical contribution to an under-researched field.

Although this teacher development programme was developed for German SAL, the principles of the programme are applicable to other SALs in South Africa. The design and evaluation of this programme were studied theoretically using existing models that were adapted where necessary. The study makes a theoretical, methodological and contextual contribution to the scholarship of SDL.

1.9 Chapter outline

This study takes the form of an article-model PhD. The Faculty of Education requires that, for the purposes of such a PhD, four articles must be submitted to accredited peer-reviewed journals. Of the four submitted articles, one article must be accepted. A brief overview of the details of submission for this thesis is given below in Table 1-2. After this overview, the content of each chapter is summarised.

Table 1-2: Overview of chapters / articles

Article number	Title	Journal	Status
1	Professional development in fostering self-directed learning in German Second Additional Language teachers	Per Linguam	Published in 2019
2	Blended learning as an approach to foster self-directed learning in teacher professional development programmes	Independent Journal of Teaching and Learning	Accepted for publication in 2020 (Addendum J for Proof of Acceptance)
3	Professional development needs of teachers of German	Acta Germanica	Published in 2020 (Addendum K for

	Second Additional Language in South Africa		Proof of Acceptance)
4	Collaborative self-directed learning for teachers of German Second Additional Language teacher professional development in South Africa: Putting theory into practice	Africa Education Review	Submitted in 2020 (Addendum L for Proof of Submission)
5	Implementing an online collaborative learning teacher professional development programme for teachers of German SAL in South Africa	International Journal of Computer-Supported Collaborative Learning	Submitted in 2020 (Addendum M for Proof of Submission)

While the articles were submitted to the journals in question in the format and styles required by said journals, all articles were adapted to be style of this template to allow for uniformity and easier reading. Similarly, addenda to the articles are displayed as they were submitted, but are also displayed at the end of this study under 'ADDENDA' for easier reference for the reader. Furthermore, each Chapter will be ended off with a list of references, while a list of all references will be displayed at the end of the study. The researcher and promoter were co-authors for all these articles, as per Faculty guidelines. The researcher was acknowledged as main author of the articles while the promotor, in addition to supervision, was involved in the conceptualisation and editing of the articles.

Chapter 1 provides a general overview of this research study, its aims and the methodology. In order to base the research on a solid theoretical foundation, chapter 2 (article 1) (Wittmann & Olivier, 2019) and chapter 3 (article 2) (Wittmann & Olivier, in press) take the form of literature reviews.

In chapter 2 (article 1) – **“Professional development in fostering self-directed learning in German Second Additional Language teachers”** – theories on SDL are considered and applied to relevant policies on teacher professional development policies and guidelines. The purpose of

this is to show that, theoretically, in a professional development programme for teachers of German SAL, fostering the characteristics of self-directed learners would be a feasible option.

Similarly, chapter 3 (article 2) – **“Blended learning as an approach to foster self-directed learning in teacher professional development programmes”** – takes the form of a literature review on blended learning. This review is once again applied to policies on teacher professional development, especially those policies on e-Education and the ICT skills that teachers are expected to develop and nurture in themselves and their learners. Different models of blended learning are considered, and a model which might support the professional development of teachers of German SAL is proposed. After a largely theoretical discussion in Chapters 2 and 3, a shift in focus towards the implementation of aforementioned theory will be observed in Chapter. 4.

Chapter 4 (article 3) – **“Professional development needs of teachers of German Second Additional Language in South Africa”** (accepted for publication) – takes the form of a comprehensive needs analysis of the professional development needs of teachers of German SAL. In this needs analysis, relevant scientific literature, policies, expert opinions and the results of a survey conducted among teachers of German SAL are synthesised to generate a number of recommendations on what a professional development programme for teachers of German SAL should include.

Chapter 5 (article 4) – **“Collaborative self-directed learning for teachers of German Second Additional Language teacher professional development in South Africa: Putting theory into practice”** (submitted for publication) – examines self-directed, collaborative and cooperative learning, which were identified in article 4 as addressing the professional development needs of teachers of German SAL in light of different instructional models. In this chapter, the 4C/ID model is identified as suitable for the purpose of this research, and a possible teacher professional development model is suggested and evaluated by experts.

In chapter 6, (article 5) – **“Implementing a collaborative online teacher professional development programme for teachers of German SAL in South Africa”** – details are provided about participants’ perceptions, and recommendations are made for enhancing the proposed programme.

In the conclusion of the study, chapter 7, the research question and sub-questions are answered through a summary of the theoretical and practical findings of the study. This chapter reports on

how the principles of collaborative learning and SDL can be applied to the professional development of teachers of German SAL and suggests the benefits of presenting the online professional development programme as a blended learning professional development opportunity. Recommendations are made for the development of a comprehensive professional development programme for teachers of German SAL which focuses on SDL, collaborative learning and blended learning, and can be applied to professional development programmes for teachers of other SALs in South Africa.

1.10 References

- Akyol, Z., Garrison, D. R., & Ozden, M. Y. (2009). Online and blended communities of inquiry: Exploring the developmental and perceptual differences. *International Review of Research in Open and Distributed Learning*, 10(6), 65-83.
<https://doi.org/10.19173/irrodl.v10i6.765>
- Anderson, T., & Dron, J. (2010). Three generations of distance education pedagogy. *The International Review of Research in Open and Distributed Learning*, 12(3), 80-97.
<https://doi.org/10.19173/irrodl.v12i3.890>
- Annas, R. (2016). Deutsch an Universitäten im südlichen Afrika Zur Entwicklung des Fachs seit 2003: Afrika schreiben/writing Africa. *Acta Germanica: German Studies in Africa*, 44(1), 105-118. <https://hdl.handle.net/10520/EJC194887>
- Augart, J. (2012). (Süd-)Afrikanische Germanistik – Zur Positionierung und Professionalisierung der Germanistik im südlichen Afrika. *eDusa*, 7(1), 7-22.
<http://repository.unam.edu.na/handle/11070/972>
- Auswärtiges Amt. (2020). *Deutsch als Fremdsprache weltweit*. Datenerhebung 2020. Retrieved October 1, 2020, from <https://www.auswaertiges-amt.de/blob/2344738/b2a4e47fdb9e8e2739bab2565f8fe7c2/deutsch-als-fremdsprache-data.pdf>
- Baker, J. (1997). The importance of the role of language in fostering multilingualism in educational contexts in South Africa. *Per Linguam*, 13(2), 50-58. <https://doi.org/10.5785/13-2-188>
- Baker, A. (2011). Teaching German as a foreign language in a multilingual South African context. *Per Linguam*, 23(1), 30-44.
- Ballweg, S., Drumm, S., Hufeisen, B., Klippel, J., & Pilypaityt, L. (2013). *Wie lernt man die Fremdsprache Deutsch?* (Vol. 2). Klett-Langenscheidt.
- Barab, S., & Squire, K. (2004). Design-based research: Putting a stake in the ground. *Journal of the Learning Sciences*, 13(1), 1-14. https://doi.org/10.1207/s15327809jls1301_1
- Bonk, C. J., & Graham, C. R. (2006). *The handbook of blended learning – Global perspectives, local designs*. Pfeiffer.

- Brockett, R. G., & Hiemstra, R. (1991). A conceptual framework for understanding of self-direction in adult learning. In R. G. Brockett, & R. Hiemstra (Eds.), *Self-direction in adult learning: Perspectives on theory, research, and practice* (pp. 18-33). Routledge.
- Brooks, J. G., & Brooks, M. G. (1999). *In search of understanding: The case for constructivist classrooms*. ASCD.
- Brown, A. H., & Green, T. D. (2015). *The essentials of instructional design: Connecting fundamental principles with process and practice*. Routledge.
- Bruffee, K. A. (1995). Sharing our toys: Cooperative learning versus collaborative learning. *Change: The Magazine of Higher Learning*, 27(1), pp.12-18.
<https://doi.org/10.1080/00091383.1995.9937722>
- Christ, I. (2002). Die Ausbildung von Lehrkräften für Fremdsprachen und bilingualen Unterricht in der Sicht der Kultusverwaltungen. *Fremdsprachen Lehren und Lernen*, 31, 42-63.
<http://pascal-francis.inist.fr/vibad/index.php?action=getRecordDetail&idt=14859958>
- Comas-Quinn, A. (2011). Learning to teach online or learning to become an online teacher: An exploration of teachers' experiences in a blended learning course. *ReCALL*, 23(3), 218-232. <https://doi.org/10.1017/S0958344011000152>
- Cooker, L., & Benson, P. (2013). *The applied linguistic individual: Sociocultural approaches to identity, agency and autonomy*. Equinox.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage.
- Department of Basic Education (DBE) (South Africa). (1997). *Language in Education Policy in Terms of Section 3 (4) of the National Education Policy Act, 1996 (Act 27 of 1996)*. Government Printers. Retrieved March, 20, 2020, from <https://www.education.gov.za/Portals/0/Documents/Policies/GET/LanguageEducationPolicy1997.pdf?ver=2007-08-22-083918-000>
- Department of Basic Education. (2011b). *Curriculum and Assessment Policy Statement English as a Second Additional Language*. Retrieved September 30, 2020, from

https://www.education.gov.za/Portals/0/CD/National%20Curriculum%20Statements%20and%20Vocational/CAPS%20FET%20%20SAL%20%20ENGLISH%20GR%2010-12%20%20Web_1BB7.pdf?ver=2015-01-27-155020-433

- Dos Santos, Y., Kleinbing, H., Scribelk, L., & Voerke, P. (2019). Platz zum Denken!? Praxis und Reflexion als entscheidende Impulse in der brasilianischen Deutschlehrerbildung. *Pandaemonium Germanicum*, 22(36), 178-206. <https://doi.org/10.11606/1982-88372236178>
- Driscoll, M. P. (2005). *Psychology of learning for instruction*. Pearson.
- Du, F. (2012). Using study plans to develop self-directed learning skills: Implications from a pilot project. *College Student Journal*, 46(1), 223 - 232.
- Fee, K. (2009). *Delivering e-learning: A complete strategy for design application and assessment*. Kogan Page Publishers.
- Frambach, J. M., Driessen, E. W., Chan, L. C., & Van der Vleuten, C. P. (2012). Rethinking the globalisation of problem-based learning: How culture challenges self-directed learning. *Medical Education*, 46(8), 738-747. <https://doi.org/10.1111/j.1365-2923.2012.04290.x>
- Garrett, N. (1991). Technology in the service of language learning: Trends and issues. *Modern Language Journal*, 75(1), 74-101. <https://doi.org/10.2307/329836>
- Garrison, R. (2009). Implications of online and blended learning for the conceptual development and practice of distance education. *International Journal of E-Learning & Distance Education*, 23(2), 93-104.
- Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. John Wiley.
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2011). *Educational research: Competencies for analysis and applications*. Pearson Higher Education.
- George-Walker, L. D., & Keeffe, M. (2010). Self-determined blended learning: A case study of blended learning design. *Higher Education Research & Development*, 29(1), 1-13. <https://doi.org/10.1080/07294360903277380>
- Gleason, J. (2013). Dilemmas of blended language learning: Learner and teacher experiences. *CALICO Journal*, 30(3), 323 - 341. <https://www.jstor.org/stable/calicojournal.30.3.323>

- Graham, C. R. (2006). Blended learning systems. In C. J. Bonk, & C. R. Graham, (Eds.), *The Handbook of Blended Learning* (pp. 3-21). Pfeiffer.
- Gray, D. (2004). *Doing research in the real world: Qualitative and quantitative approaches*. Sage.
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Sage.
- Guglielmino, L. M. (2013). The case for promoting self-directed learning in formal educational institutions. *SA-eDUC*, 10(2), 1-18.
- Hudson, L. A., & Ozanne, J. L. (1988). Alternative ways of seeking knowledge in consumer research. *Journal of Consumer Research*, 14(4), 508-521. <https://doi.org/10.1086/209132>
- Hufeisen, B. (2003). L1, L2, L3, L4, Lx - alle gleich? Linguistische, lernerinterne und lernerexterne Faktoren in Modellen zum multiplen Spracherwerb. In N. Baumgarten, C. Böttger, M. Motz, & J. Probst (Eds.), *Übersetzen, Interkulturelle Kommunikation, Spracherwerb und Sprachvermittlung - das Leben mit mehreren Sprachen Festschrift für Juliane House zum 60. Geburtstag. Zeitschrift für Interkulturellen Fremdsprachenunterricht* [Online], 8(2/3), 97-109. <http://www.ualberta.ca/~german/ejournal/Hufeisen.pdf>
- Irani, T. A., Wilson, S. B., Slough, D. L., & Rieger, M. (2014). Graduate student experiences on- and off-campus: Social connectedness and perceived isolation. *International Journal of E-Learning & Distance Education*, 28(1), 1-16.
- Jessner, U. (2008). Teaching third languages: Findings, trends and challenges. *Language Teaching*, 41(1), 15-56. <https://doi.org/10.1017/S0261444807004739>
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Association Press.
- Krumm, H.-J., & Legutke, M. (2001). Ausbildung und Fortbildung von Lehrerinnen und Lehrern für Deutsch als Fremd-und Zweitsprache: Inhalte und Formen. In G. Helbig (Ed.), *Deutsch als Fremdsprache. Ein internationales Handbuch* (pp. 1123-1139). Walter de Gruyter.
- Legutke, M. K., & Schart, M. (2016). Fremdsprachliche Lehrerbildungsforschung: Bilanz und Perspektiven. In M. Legutke, & M. Schart, (Eds.), *Fremdsprachendidaktische Professionsforschung: Brennpunkt Lehrerbildung* (pp. 9-46). Narr.

- Loyens, S. M., & Gijbels, D. (2008). Understanding the effects of constructivist learning environments: Introducing a multi-directional approach. *Instructional Science*, 36(5), 351-357. Doi: [10.1007/s11251-008-9059-4](https://doi.org/10.1007/s11251-008-9059-4)
- Loyens, S. M., Magda, J., & Rikers, R. M. (2008). Self-directed learning in problem-based learning and its relationships with self-regulated learning. *Educational Psychology Review*, 20(4), 411-427. Doi: [10.1007/s10648-008-9082-7](https://doi.org/10.1007/s10648-008-9082-7)
- Masie, E. (2006). The blended learning imperative. In C. Bonk & C. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 22-27). Pfeiffer.
- Matheos, K., Daniel, B. K., & McCalla, G. I. (2012). Dimensions for blended learning technology: Learners' perspectives. *Journal of Learning Design*, 1(1), 56-76. <https://eric.ed.gov/?id=EJ1066473>
- Mbohwa-Pagels, K., & Rode, R. (2014). DaF im SA Schulsystem. *eDusa*, 9(1), 13-19.
- McArdle, G. E. (2010). *Instructional design for action learning*. American Management Association.
- McLoughlin, C., & Lee, M. J. (2010). Personalised and self-regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. *Australasian Journal of Educational Technology*, 26(1), 28-43. <https://doi.org/10.14742/ajet.1100>
- McMillan, J., & Schumacher, S. (2001). *Research in education: A conceptual introduction*. Longman.
- Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, 5(1), 25-35. <https://doi.org/10.1177%2F160940690600500103>
- Murray, S. (2013). The challenges of designing a common, standards-based curriculum for all South Africa's languages. *Per Linguam*, 28(2), 84-94. <https://hdl.handle.net/10520/EJC133552>
- Murray, S., Ma, X., & Mazur, J. (2009). Effects of peer coaching on teachers' collaborative interactions and students' mathematics achievement. *Journal of Educational Research*, 102(3), 203-212. <https://doi.org/10.3200/JOER.102.3.203-212>

- Neumeier, P. (2005). A closer look at blended learning—parameters for designing a blended learning environment for language teaching and learning. *ReCALL*, 17(2), 163-178. Doi: [10.1017/S0958344005000224](https://doi.org/10.1017/S0958344005000224)
- Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning environments: Definitions and directions. *Quarterly Review of Distance Education*, 4(3), 227-233. <https://www.learntechlib.org/p/97576/>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. <https://doi.org/10.1007/s10488-013-0528-y>
- Plowright, D. (2011). *Using mixed methods: Frameworks for an integrated methodology*. Sage.
- Powell, K. C., & Kalina, C. J. (2009). Cognitive and social constructivism developing tools for an effective classroom. *Education*, 130(2), 241–50. <https://eric.ed.gov/?id=EJ871658>
- Richter, D., Kunter, M., Klusmann, U., Lüdtke, O., & Baumert, J. (2011). Professional development across the teaching career: Teachers' uptake of formal and informal learning opportunities. *Teaching and Teacher Education*, 27(1), 116-126.
- Rösler, D., & Würffel, N. (2014). *Lernmaterialien und Medien*. Klett-Langenscheidt.
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Sage.
- Schart, M., & Legutke, M. (2012). *Lehrkompetenz und Unterrichtsgestaltung*. Langenscheidt.
- Schocker-von Ditfurth, M. (2002). *Unterricht verstehen. Medienpaket zur Förderung reflektierter Unterrichtspraxis. Modul 1: Erfahrungswissen reflektieren und den eigenen Unterricht weiter entwickeln*. Goethe-Institut.
- Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments. *Computers & Education*, 55(4), 1721-1731. <https://doi.org/10.1016/j.compedu.2010.07.017>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63-75. Doi: [10.3233/EFI-2004-22201](https://doi.org/10.3233/EFI-2004-22201)

- Slavin, R. E. (1991). Synthesis of research of cooperative learning. *Educational Leadership*, 48(5), 71-82.
- Tough, A. M. (1971). *The adult's learning projects: A fresh approach to theory and practice in adult learning*. Ontario Institute for Studies in Education. Retrieved October 26, 2020, from <http://ietl.org/tough/books/alp.htm>
- Turner, I., & Daniel, W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15(3), 754 -760.
<http://nsuworks.nova.edu/tqr/vol15/iss3/19?>
- Urmeneta, C. E. (2013). Learning to become a CLIL teacher: Teaching, reflection and professional development. *International Journal of Bilingual Education and Bilingualism*, 16(3):334-353. <https://doi.org/10.1080/13670050.2013.777389>
- Vollmer, H. J., & Butzkamm, W. (1998). Denkschrift zur Neuorientierung der Fremdsprachenlehrausbildung in der Bundesrepublik Deutschland. In W. Zydati (Ed.), *Fremdsprachenlehrausbildung–Reform oder Konkurs* (pp. 19-70). Langenscheidt.
- Von Maltzan, C. (2009). Sprachenpolitik und die Rolle der Fremdsprachen (Deutsch) in Südafrika. *Stellenbosch Papers in Linguistics PLUS*, 38, 205-214.
<https://hdl.handle.net/10520/EJC143430>
- Vygotsky, L. S., Hanfmann, E., & Vakar, G. (2012). *Thought and language*. MIT Press.
- Wang, M. (2010). Online collaboration and offline interaction between students using asynchronous tools in blended learning. *Australasian Journal of Educational Technology*, 26(6), 830-846. <https://doi.org/10.14742/ajet.1045>
- Wang, Q., & Huang, C. (2018). Pedagogical, social and technical designs of a blended synchronous learning environment. *British Journal of Educational Technology*, 49(3), 451-462. <https://doi.org/10.1111/bjet.12558>
- Wittmann, G.-E., & Olivier, J. (2019). Professional development in fostering self-directed learning in German Second Additional Language teachers. *Per Linguam*, 35(3), 125-142. <https://dx.doi.org/10.5785/35-3-870>

- Wittmann, G.-E., & Olivier, J. (2020). Professional development needs of teachers of German second additional language in South Africa. *Acta Germanica* (in press).
- Wittmann, G.-E., & Olivier, J. (Forthcoming). Blended learning as an approach to foster self-directed learning in teacher professional development programmes. *Independent Journal of Teaching and Learning*.
- Wittmann, G.-E., & Olivier, J. (Submitted for publication). Collaborative self-directed learning for teachers of German Second Additional Language teacher professional development in South Africa: Putting theory into practice. *Africa Education Review*.
- Yoon, S. A., Miller, K., Richman, T., Wendel, D., Schoenfeld, I., Anderson, E., & Shim, J. (2020). Encouraging collaboration and building community in online asynchronous professional development: Designing for social capital. *International Journal of Computer-Supported Collaborative Learning*, 15, 351-371. <https://doi.org/10.1007/s11412-020-09326-2>
- Zwart, R., Wubbels, T., Bergen, T. C., & Bolhuis, S. (2007). Experienced teacher learning within the context of reciprocal peer coaching. *Teachers and Teaching: Theory and Practice*, 13(2), 165-187. <https://doi.org/10.1080/13540600601152520>

CHAPTER 2 PROFESSIONAL DEVELOPMENT IN FOSTERING SELF-DIRECTED LEARNING IN GERMAN SECOND ADDITIONAL LANGUAGE TEACHERS

2.1 Abstract

Teaching is a value-laden profession, and certain demands regarding lifelong learning are put on teachers worldwide. Requirements for entry-level qualifications and professional development of South African teachers are stipulated in the National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for teacher education qualifications (DHET, 2015) and the CPTD Management System Handbook of the South African Council for Educators (SACE, 2013). However, teachers in general, and German Second Additional Language (SAL) teachers in particular, struggle to meet these requirements.

In line with international teacher development tendencies, this article recommends for a shift in teacher professional development programmes towards a more participant-centred approach. Theories of self-directed learning (SDL) are considered, and it is recommended that teacher professional development programmes focus on fostering the characteristics of SDL in South African teachers (especially German SAL teachers), which would enable these teachers to be active participants in their learning. The article strives to motivate the need for a professional development programme fostering SDL to support the existing developmental shortcomings. Recommendations are made on how SDL can be sensibly fostered in teacher professional development programmes in order to enable teachers to become self-directed learners. Practical recommendations are also made on how teachers can be empowered to become self-directed learners.

Keywords: German Second Additional Language (SAL), life-long learning, self-directed learning, teacher professional development,

2.2 INTRODUCTION

Teaching is a value-laden profession (Hong, 2012) in which certain demands have to be met while operating under suboptimal conditions (Modisaotsile, 2012). While research has been done on the shortcomings of the South African schooling system (Lam et al., 2011; Spaull, 2013a; Spaull, 2013b; Yamauchi, 2011) and on the expectations placed on teachers (Gabela, 2004), few solutions to teachers' perceived shortcomings and their developmental needs have been offered to date (Minott, 2010; Ono & Ferreira, 2010:59).

This article adheres to Coldwell's (2017, p. 189) rather broad definition of teacher professional development as 'formal and informal support and activities that are designed to help teachers develop as professionals. This includes taught courses and in-school training, as well as activities such as coaching, mentoring, self-study and action research.' While Coldwell does not directly

refer to self-directed learning (SDL), many of the aspects of teacher professional development he mentions do correlate with SDL, as part of which, according to Mentz (2014), the facilitator⁹ designs and uses instructional strategies to enable participants to direct their own learning. Coldwell's definition can be supplemented by the view of Minott (2010), who stresses the developmental aspect, thereby defining teacher professional development as an ongoing process that ensures teachers have the practical and work-related knowledge to continuously function in their designated roles as teachers. The professional development of teachers and the role that teacher educators play did not receive much research attention in the past (Berry, 2009; Murray, 2008). This situation is ascribed to the fact that teaching about teaching was for a long time not regarded as a specialised academic expertise (Berry, 2009: 305), sometimes even being positioned as 'semi-academics' (Murray, 2008, p. 18)

More recently, teacher professional development has been studied in various different ways (Coldwell, 2017; Smith, 2017). Research usually focuses on how teachers learn, how they learn to improve their learning, and how they transform their skills and knowledge into practice to offer their own learners an improved educational experience (Avalos, 2011).

As participants in professional development activities, teachers and teacher educators play a dual role, as teachers remain educators who will transfer their newly acquired knowledge and skills to their learners, but also assume the learners' role by acquiring new skills (Beavers, 2009). Similarly, teacher educators face a paradox in the sense that their role as teacher educators demands a focus on knowledge about teaching and learning, while they remain aware that the knowledge they bring, which is often based on personal experiences and activities, cannot simply be transferred to the thinking and experiences of their participants (Berry, 2009). Malcolm Knowles' (1968) description of andragogy – in which he emphasises that adult learners have preconceived ideas for what and how they need to learn based on existing knowledge and previous experiences (Merriam & Brockett, 2011) – can be considered as a means to overcome this paradox. Considering existing experiences, it would make sense to propose enabling teachers to play a more active role in their professional development by fostering self-directed learning (SDL) among South African teachers in general, and German Second Additional Language (SAL) teachers in particular, so as to overcome challenges posed to their professional development. For these purposes, the article initially investigates and defines the expectations placed on South African teachers in general and considers the challenges placed on German

⁹ For clarity's sake, the term *facilitator* is used in this article to refer to the person presenting the professional development activity, while teachers are deemed to be participants.

SAL teachers by policies governing the teaching and learning of SALs in South Africa. The article then strives to motivate the need for a professional development programme fostering SDL as a possible solution to the existing developmental shortcomings.

As is demonstrated by Van der Walt (2016, p. 3), research into SDL might be seen as focusing on three major categories, namely: research into the 'self', which focuses on the individuality of the learner; research into the 'directedness' of the learner, which focuses on purposefulness; and research into the 'learning' itself. While by no means exhaustive, a list of examples of such research is provided in Table 2-1.

Table 2-1: Research on self-directed learning

Self	
Author	Topic
Banerjee (2011)	Learning effectiveness and student satisfaction
Guglielmino (1978)	Self-directed learning readiness
Long (2000)	Dimensions of the self-directed learner

Directed	
Bagheri et al. (2013)	Effects of learning strategies on self-directed learning skills
Teo and Lee (2010)	Fostering self-directed learning
Knowles (1975)	Learner's actions to master making decisions regarding learning material
Thornton (2010)	Management phases of the self-directed learner
Learning	
Lee et al. (2014)	Learner action in and perceptions of self-directed learning
Nepal and Stewart (2010)	Relationship between self-directed readiness factors and learning outcomes

For the purposes of this article, emphasis is placed on the first two aspects, namely 'self' and 'directed' - fostering the characteristics of a self-directed learner in teachers as active participants in professional development programmes. Fostering the characteristics of SDL in teachers would follow suit of international developments in teacher professional development that have shown a

move away from the traditional in-service teacher training model towards the acceptance that teacher development is a complex process which combines a multitude of internal as well as external factors (Avalos, 2011: 17). Participants are now actively viewed as unique learners (Beavers, 2009: 28). This implies that teachers are not only seen as members of a workforce needing upskilling (Smith, 2017, p. v), but also as active co-creators of knowledge. This shift is shown in the research of various authors: Berry (2009), who explained that many teacher educators themselves are successful teachers with high levels of self-awareness and self-understanding; Girvan et al. (2016), who used reflections to study teachers' experiences in experiential learning; or Ermeling (2010), who traced the effects of collaborative inquiry on individual classroom practice, to name but a few examples.

In an attempt to narrow the gap between theoretical requirements set to teachers, which will be elaborated on later in this article, and teaching practice in classrooms, this article takes the form of a critical literature review, considering not only existing literature on SDL and teacher development, but also relevant government policies outlining regulations regarding the teaching and learning of SALs as well as general professional development requirements set to teachers. There is, therefore, a strong theoretical focus supplemented by a document analysis of the identified relevant policies. The article seeks to propose that fostering SDL characteristics in South African teachers might greatly assist these teachers in taking responsibility for their professional development. For these purposes, policy documents on the education and training of South African teachers are considered so as to establish the educational and developmental expectations placed on South African teachers. Thereafter, challenges faced by South African teachers, and German SAL teachers in particular, are highlighted. Finally, recommendations regarding teacher professional development are made as were drawn from theories of SDL. In this regard, it is proposed that certain characteristics fostering SDL, which are described in the article, be cultivated in teachers to aid these professionals to attain their own developmental goals.

2.3 Teacher professional development in South Africa

In order to establish how value-laden the teaching profession is and how much pressure rests on teachers, it would seem relevant to define a teacher and what values are attached to the profession. A cursory survey of the various definitions of *teacher* yielded varied and disparate results. While Gabela (2004) views a teacher as a specialised person who has undergone a

rigorous and relevant education programme, the South African Department of Education (2005, p. 6) sets specific standards in its definition of the term:

[A teacher is] a person with the educated competences and abiding commitments needed to engage successfully in the professional practice of teaching. A professional teacher is characterised more by a commitment to the ideals of the profession, and flexible competences to pursue those ideals in a variety of circumstances, than by mere obedience to the legitimate requirements of an employer.

In this definition, a commitment to the ideals of an educator and the competence to pursue those ideals seem to stand out in defining a teacher as a person not only committed to teaching but also to lifelong learning (Bolhuis, 2003) in an attempt to keep up to date with changing requirements set to teachers and learners alike. The Department of Basic Education, in Goal 16 of the *Action Plan 2014: Realisation of Schooling 2025* (DBE, 2011a, p. 107) expressly requires teachers to remain lifelong learners, as it regards teaching as an ongoing learning process and requires that teachers' professionalism, teaching skills and subject knowledge are improved upon throughout their careers so that they can equip their learners with the knowledge and skills required for their respective learning levels (DHET, 2015). This focus on lifelong learning implies a degree of self-direction in terms of taking charge of one's own learning and setting specific outcomes (Knowles, 1975).

However ideal these theoretical requirements set for teachers in South Africa seem, popular media blames learners' low literacy levels on under-qualified teachers (Hawker, 2013; Savides, 2017; Silva, 2017). Furthermore, reports such as the PIRLS 2016 (Progress in International Reading Literacy Study) found that 60% of participating South African schools experienced problems with the absenteeism of teachers and failure to complete the curriculum (Howie et al. 2017). This situation gives rise to the belief that the set requirements are not met in practice. Upon closer investigation of national and international reports on literacy in South Africa, it becomes apparent that there does indeed seem to be a crisis in the South African education system. This crisis is especially severe in rural areas, as is indicated in the Annual National Assessments Report (DBE, 2014). Similarly, in a report commissioned by the Centre for Development and Enterprise, Spaul (2013b) comes to the conclusion that the South African education system is in an ongoing crisis and is failing the South African youth. He bases this claim on findings like those of the Western Cape Learner Assessment Study (Taylor et al., 2008) and the National School

Effectiveness Study (Taylor, 2011). Unfortunately, even though these findings are largely focused on learners at primary school level, the situation does not seem to improve at higher education levels, as is demonstrated by authors such as Van Dyk and Van de Poel (2013) and Dreyer and Nel (2003), who found in their research that first-year university students enter university with *sub-par* literacy levels.

German SAL teachers, which is the specific context of this research, face the additional challenge that, in the South African schooling system, the subject *German as Foreign Language* is currently regulated by the *Language in Education Policy*, (DBE, 1997, p. 1) as a SAL. The CAPS (DBE, 2011b, p. 12) assumes 'that learners do not necessarily have any knowledge of the language when they arrive at school. The focus upon exposure to Second Additional Language is on developing learners' ability to understand and speak the language - basic interpersonal communication skills.' While theoretically allowing for SALs to be taught from Grade 4, '[s]chools offering an optional language or at least Second Additional Language level may do so [only] if they can make an arrangement for the allocation of additional time to the allocated 27.5 hours' (DBE, 2011b, p. 8). The CAPS (DBE, 2011b, p. 7) goes even further, instructing that '[t]he allocated time per week may be utilised only for the minimum required NCS¹⁰ subjects as specified above, and may not be used for any additional subjects added to the list of minimum subjects. Should a learner wish to offer [sic] additional subjects, additional time must be allocated for the offering of these subjects.'¹¹ In practice, this translates to teachers having to offer SALs outside of regular school hours, either early in the morning or in the afternoon, while having to teach other subjects during regular school hours. This puts German SAL teachers under great time constraints, which have the potential to be a major obstacle to these teachers' professional development. For the purposes of this theoretical Chapter, only policies relating to the professional development of teachers of German SAL were considered. A more detailed description of teachers of German SAL's professional needs as perceived by themselves will be established by means of a comprehensive needs analysis in Chapter 4.

While teachers cannot be held solely responsible for low literacy and achievement rates – which seem to be exacerbated by factors like poverty levels, low parental literacy rates, poor school governance, and lack of resources (Pretorius & Klapwijk, 2016) – teachers do play a leading role in providing learners with knowledge, skills and understanding of the subject matter at hand

¹⁰ National Curriculum Statement

¹¹ In the reading of this quote, the interpretation of Mbohwa-Pagels and Rode (2014) is followed. It is assumed that schools are only allowed to offer additional subjects outside regular school hours.

(Arkoudis, 2003: 162; Webb, 2009). Short (2002: 18) concurs and argues that learners are far more probable to achieve academic success if teachers have received adequate training. It therefore seems imperative for a country to have highly qualified teachers if learners are to achieve success (Bransford et al., 2005; Christ, 2002).

According to the *National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for Teacher Education Qualifications* (DHET, 2015), the four-year Bachelor of Education (BEd) degree and the professionally-focused Postgraduate Certificate in Education (PGCE) are the two official Initial Teacher Education Programmes (ITEs).¹² German SAL teacher training should be viewed in this context. While the policy makes provision for universities, as well as for private higher education institutions to be accredited to conduct teacher training (DHET, 2015), only Stellenbosch University and the University of Pretoria currently provide German SAL teacher training (Mbohwa-Pagels & Rode, 2014: 16). After completing their qualification (BEd or PGCE), aspiring teachers have to adhere to minimum requirements for teacher education as set by the Department of Higher Education and Training in its *Policy on Minimum Requirements for Teacher Education Qualifications (MRTEQ)* (DHET, 2011, p. 10). Minimum requirements set for entry-level teachers are reiterated in the *National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for Teacher Education Qualifications*. According to these policies, teachers must display sound subject knowledge, didactical and interpersonal competencies, highly developed communicative, literacy, numeracy and information technology (IT) skills and a sound knowledge of the curriculum and how to implement it. Furthermore, entry-level teachers are also expected to embrace diversity, have sound knowledge of assessment types and criteria, and have a positive work ethic (DHET, 2015, p. 64).

However, as was mentioned earlier, the *National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for Teacher Education Qualifications* (DHET, 2015, p. 8) makes it clear that remaining a competent teacher is an ongoing learning process. Point 11 of the *Set of Basic Competencies of a Beginner Teacher* (DHET, 2015, p. 64) clearly states the emphasis put on lifelong learning expected from teachers: 'Newly qualified teachers must be able to reflect critically on their own practice, in theoretically informed ways and in conjunction with

¹² While the Policy does make provision for alternative qualification routes like Recognition of Prior Learning (DHET, 2015, p. 14) and Work Integrated Learning (DHET, 2015, p. 15), the BEd and the PGCE remain the required formal qualifications.

their professional community of colleagues in order to constantly improve and adapt to evolving circumstances.'

While the abovementioned stipulation refers to newly qualified teachers, it needs to be kept in mind that experienced teachers are also required to work on furthering their education (Robinson, 2003). Should a teacher, in an attempt to adhere to this requirement, wish to further his/her formal qualifications, he/she can partake in formal, qualification-based Continuing Professional Development (CPD) learning programmes (DHET, 2015). However, even if the teacher does not elect to further his/her official qualifications, he/she is required to reach at least 150 professional development (PD) points every three years (SACE, 2013), as is determined by the teacher's personal Professional Development Portfolio (PDP) (SACE, 2013), and is set out in the South African Council for Educators' (SACE) Continuing Professional Teacher Development (CPTD) Management System (SACE, 2013). Points may be accrued by activities initiated by the teacher (Type 1), by the school (Type 2) (SACE, 2013, p. 9), or by an external provider endorsed by SACE (Type 3) (SACE, 2013, p. 10). Teachers are required to participate in all three types of PD activities in a three-year cycle. This ties in closely with the requirement set in the *National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for Teacher Education Qualifications* (DHET, 2015, p. 60) for teachers to remain lifelong learners. The document clearly requires that '[t]he educator will achieve ongoing personal, academic, occupational and professional growth, through pursuing reflective study and research in their chosen field, in broader professional and educational matters and in other related fields.' (DHET, 2015, p. 61)

Based on the previously mentioned requirement of the *National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for Teacher Education Qualifications* (DHET, 2015), one can, therefore, deduce that lifelong learning is not only limited to official PDP activities. In addition to working on their own PDP targets, teachers are also required to participate in the Integrated Quality Management System (IQMS), which appraises individual educators in regard to their strengths and weaknesses. Therefore, while continually improving their skills by means of PDP activities, teachers are also expected to be appraised and evaluated by the IQMS. This system was negotiated with teacher unions in the Education Labour Relations Council (ELRC) and signed as the ELRC Collective Agreement No. 8 of 2003 (DBE, 2011c). The implementation of the IQMS can possibly be lauded for introducing a transparent, educator-initiated appraisal system, for which school management and district officials are accountable (De Clerq, 2008: 13). However, while the IQMS was devised as a mechanism to appraise

development, measure performance and evaluate whole schools, it has been criticised as being bureaucratic, time-consuming and involving too much paperwork (DBE, 2011c). Possibly as a result of teachers' and schools' resistance against the IQMS, only 13% of 10 969 schools visited in February 2010 by the Teacher Development Summit had actually fully implemented the IQMS (DBE, 2011c). De Clerq (2008) further elaborates on the shortcomings of the IQMS, highlighting its unrealistic assumptions regarding teachers' work, status and competences, and the awkwardness of one system of internal and external professional monitoring that leads to tensions as well as poor leadership at both district and school level.

Notwithstanding the challenges faced by teachers and policymakers, both educators and academics currently have a growing interest in teacher professional development measures (Johnson et al., 2000). At the core of these teacher development measures and studies thereof, is the belief that professional teacher development is about teachers' further learning, teachers discovering how to learn and teachers translating this theoretical knowledge into practice for their students' benefit (Avalos, 2011). However, it is imperative that any teacher development measures are based on South African teachers' specific development needs (Johnson et al., 2000). This is furthermore illustrated by Mokhele and Jita (2010), who found in a study amongst teachers in Mpumalanga that much resistance to existing CPD programmes can be accredited to the fact that these programmes fail to take into account the individual reasons for teachers to participate in CPD activities as well as the processes that facilitate change in teachers. One could, therefore, deduce that it is crucial for CPD programmes and activities to be more individualised, considering teachers' individual backgrounds and education needs, as is discussed in the next section.

2.4 The need to enhance self-directed learning in teacher professional development

In the previous section, it was made clear that teacher professional development programmes are required by the *National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for Teacher Education Qualifications* (DHET, 2015). The fact remains that the South African teaching population remains heterogeneous in their qualifications (Blommaert et al., 2005) and development needs (DBE, 2011c), to which German SAL teachers form no exception, and that concerns about the shortcomings of existing teacher development programmes exist. This heterogeneity amongst teachers in combination with the speed at which new knowledge is generated (Guglielmino, 2008) gives rise to the belief that an effective teacher

development programme would have to be highly individualised if it is to motivate teachers to remain lifelong learners. However, unfortunately researchers like Smith (2017) too often still find that existing teacher development programmes seem to be designed with a one-size-fits-all approach, focusing on cost-efficiency rather than on teachers' real learning needs.

As was mentioned earlier, andragogy, as postulated by Knowles (1968; 1973), focuses strongly on lifelong learning in adults and takes adults' individual experiences into account. Knowles distinguishes andragogy from pedagogy with the four basic assumptions that as a person grows and matures, his/her self-concept changes (Knowles, 1973), his/her experiences play a greater role in his/her learning (Knowles, 1973) and his/her readiness to learn is increasingly determined by the developmental tasks necessary to fulfil his/her social role (Knowles, 1973). In addition, Knowles states that an adult has a more problem-centred approach to learning than a child (Knowles, 1973). Fostering the characteristics of SDL, with which andragogy is closely connected, would enable teacher educators to draw on teachers' existing knowledge, experiences and needs, while focusing on these teachers' often quite individual developmental tasks.

Self-directed learning (SDL) has been characterised as one of the fastest growing research areas of the past 40 years (Guglielmino, 2013). While much research focuses on SDL as a personal attribute (Guglielmino, 2008; Merriam, 2001). Dehnad et al. (2014) maintain that SDL is a complex concept for which various definitions exist, of which Malcolm Knowles' definition is the most widely accepted one. Malcolm Knowles (1975, p. 18) defines SDL as '[...] a process in which individuals take initiative, with or without the help of others, in diagnosing their learning needs, formulating learner goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes'. A self-directed learner would, therefore, be able to take a certain amount of pedagogical control (Bouchard, 2009). Fostering SDL in German SAL teachers would also imply that they direct their own learning. For example, this would permit them to plan their learning according to their own time schedules and learning requirements, allowing for existing time limitations. By taking responsibility for his/her own learning, the self-directed learner is able to take over certain tasks traditionally ascribed to the teacher (Garrison, 2000) by means of autonomous learning strategies (Bouchard, 2009). While focusing largely on individual character traits, SDL, therefore, encompasses a process by means of which individuals are trained to take responsibility for their own learning by setting learning aims, controlling resources, and self-evaluating the achievement of their own learning aims (Adeola & Ngoitima, 2006; Knowles, 1975), which would enable transformative learning and ultimately promote emancipation of the learner from the teacher (Merriam, 2001). This

furthermore implies that SDL learners have to be highly motivated (Garrison, 1997). As German SAL teachers are already willing to teach German SAL outside normal schooling hours in addition to a full teaching load, they may already be quite motivated and would, therefore, suit the profile quite well.

However, as important as the aforementioned individual character traits are to SDL, one has to keep in mind the importance of the learning environment and economic factors as well (Bouchard, 2009), which is illustrated by Brockett and Hiemstra (1991), who claim that a balanced and congruent socio-economic background should be able to encourage SDL in learners. This socio-economic factor is not only explained by sufficient access to resources (Smith, 2017), but also by access to and experience in electronic learning resources (Bouchard, 2009) and the ability to utilise and synthesise new media, on the part of both the student and the instructor (Garrison, 2000). Furthermore, Garrison (1997) stresses the importance of contextual factors, not only sufficient resources, but also the setting of realistic learning goals, constructive feedback and a positive learning atmosphere, which are necessary to truly enable SDL. While, in 2014, 92% of secondary schools were relatively well-resourced former Model C schools (Mbohwa-Pagels & Rode, 2014, p. 16), only 46% of German SAL teachers had departmental posts in 2013 and usually taught English and Afrikaans during normal school hours in addition to teaching German SAL ((Mbohwa-Pagels & Rode, 2014). The Goethe-Institut does have so-called *Lehrmittelzentren* (teaching material centres) available in most provinces, at which German SAL teachers can borrow materials at no charge, but only half of the German teachers are reported to have made use of these (Mbohwa-Pagels & Rode, 2014). In direct conversations about the reason for the under-utilisation of these resources, teachers reported that the centres are too far away for them to regularly visit as well as not knowing which materials are available. Even though these factors are not conducive to SDL, they do show the necessity for more self-directedness and a higher level of knowledge about available materials and opportunities.

SDL, which certain authors (Cooker & Benson, 2013; Guglielmino, 2008; Hiemstra, 2003;) view as the most natural form of learning, could offer teachers the benefit of learning based on their own professional identity and needs (Rodgers & Scott, 2008). Since SDL postulates individual freedom, responsibility and personal views (Savin-Baden & Major, 2004), it would benefit teachers in that learning would empower them 'to become a free, mature, and authentic self' (Savin-Baden & Major, 2004, p. 14). It would, therefore, seem plausible that, instead of offering training solely based on the acquisition of new knowledge, an effective training programme focuses on the enhancement of individual learning skills, as is propagated by Knowles (1975, p. 15):

We are entering into a strange new world in which rapid change will be the only stable characteristic [...] It is no longer realistic to define the purpose of education as transmitting what is known [...] The main purpose of education must now be to develop the skills of inquiry.

Developing aforementioned skills of inquiry would imply promoting SDL in terms of andragogy (Knowles, 1968) to ensure that individual teachers' developmental needs are truly met. The development of these skills is discussed in the next section.

2.5 Recommendations towards developing SDL in South African teachers

For the purposes of a self-directed skills development programme, teachers would have to be actively involved in planning their own learning (Beavers, 2009). Furthermore, the intricacies of the teaching practice, as well as the existing knowledge and experience that practising teachers can contribute to educational discourse, will have to be strongly considered when planning a professional development activity (Smith, 2017). These experiences should then be actively applied to current and relevant situations in order to produce good educational results (Trotter, 2006: 11).

By following the aforementioned bottom-up approach, teachers would be encouraged to take responsibility for their own learning (Guglielmino & Guglielmino, 2006; Knowles, 1975; Tough, 1971) by defining their own learning needs. Therefore, the participants' self-development is the focus point of learning, and facilitators of teacher development programmes are working with, not on, teachers (Smith, 2017). To reformulate, teachers would have to be enabled to define their own learning needs, while the facilitator's role would be to assist teachers to find ways to fulfil these needs. The facilitator's primary role would, therefore, consist of preparing participants to engage in critical learning activities that would enable them to achieve their own developmental goals (Loyens et al., 2008). A practical suggestion as to how these theoretical considerations can be included in the instructional design of a professional development programme for teachers of German SAL will be provided in Chapter 5, while the evaluation of said programme will be presented in Chapter 6.

In order to achieve the aims mentioned in the previous paragraph, professional development programmes would, therefore, have to focus on fostering SDL by ensuring that South African teachers possess the characteristics of a self-directed learner. The most generally operable

definition of such a learner is described by Guglielmino (1978, p. 73) in her Delphi survey of experts:

A highly self-directed learner, based on the survey results, is one who exhibits initiative, independence, and persistence in learning; one who accepts responsibility for his or her own learning and views problems as challenges, not obstacles; one who is capable of self-discipline and has a high degree of curiosity; one who has a strong desire to learn or change and is self-confident; one who is able to use basic study skills, organise his or her time and set an appropriate pace for learning, and to develop a plan for completing work; one who enjoys learning and has a tendency to be goal-oriented.

While considering this definition, it becomes clear that readiness for SDL exists on a continuum, which differs amongst individuals, but which can be trained (Guglielmino, 2013). Measuring and quantifying this readiness has been facilitated by Guglielmino's SDL Readiness Scale (SDLRS) (1978), which is still widely used today (Liddell, 2008) and focuses on 11 characteristics of self-directed learners, including initiative, independence, persistence, responsibility, self-discipline, curiosity, desire (to learn or change), basic skills (study and organisational), pacing/completion, joy of learning, and goal orientation (Guglielmino, 1978). This scale can be supplemented by the self-rating scale of self-directed learning (SRSSDL) developed by Williamson (2007: 68), which adds to the SDLRS by assessing self-directed learning behaviour in addition to perceptions and readiness for self-directed learning.

When considering the attributes of a self-directed learner, literature shows a combination of personality aspects and skills (Table 2-2).

Table 2-2: Personality aspects and skills required for self-directed learning

Author	Characteristics
Knowles (1975)	Relate collaboratively to peers; see peers as resources for diagnosing needs and planning learning; give help and receive help from peers; diagnose own learning needs realistically, with help from facilitators and peers; translate learning needs into learning objectives; relate to educators as facilitators, and take initiative in making use of their

	resources; identify human and material resources; select effective strategies for making use of learning resources; and collect and validate evidence of the achievement of various kinds of learning objectives.
Guglielmino (1978)	Initiative; independence; persistence; sense of responsibility for one's own learning; tendency to view problems as challenges; self-discipline; high degree of curiosity; strong desire to learn or change; ability to use basic study skills; ability to organise one's time and set an appropriate pace for learning; self-confidence; ability to develop a plan for completing work; joy in learning; tolerance of ambiguity; preference for active participation in shaping educational programme; ability to evaluate one's own progress; exploratory view of education; above-average risk-taking behaviour; knowledge of a variety of potential learning resources and ability to use them; ability to accept and use criticism; ability to discover new approaches for dealing with problems; ability to formulate learning objectives; ability to select and use many learning strategies; positive orientation to the future; emotional security; average or above average intelligence; creativity; preference for independent study or relatively unstructured sources.
Patterson et al. (2002)	Assessment of learning gaps; evaluation of self and others; reflection; information management; critical thinking; and critical appraisal
Thornton (2010)	Moves through phases of management: planning; implementing; monitoring; evaluating; and reflecting
Warburton and Volet (2013)	Asking appropriate questions to guide their inquiry; interrogating the assumptions behind the ideas presented to them; identifying appropriate resources and tools; and strategically modifying these tools to achieve their learning goals

When considering the abovementioned skills and characteristics of self-directed learners, it becomes apparent that much emphasis is placed on participants assessing their own learning needs and planning their own learning. As participants, teachers would, therefore, be given the opportunity to take responsibility for their own learning. Instead of following the traditional approach, whereby generic programmes are designed to achieve the most cost-effective means of delivering information while also achieving the greatest outreach, teachers themselves would need to be the key decision makers about what matters to their own professional development (Smith, 2017). Instead of imparting knowledge to participants, the facilitator would enable them to develop the skills necessary to become lifelong, independent learners (Guglielmino, 2013). Considering that about 50% of German SAL teachers are non-mother tongue speakers, who have learned the language at universities, where German is no longer taught (Mbohwa-Pagels & Rode, 2014) and that German SAL teachers are often quite isolated in their schools with limited possibilities to practice their own language skills (Mbohwa-Pagels & Rode, 2014), it would make sense to consciously work with teachers' own needs and be aware of their difficult working situations, instead of imparting a top-down model devised by people who do not share the German SAL teachers' experiences.

In accordance to Patterson et al.'s (2002, p. 26) four-level Assessment of Learning Gaps table, teachers would initially identify gaps with the assistance of the facilitator (level 1) until gradually becoming 'independent and confident in identifying gaps through the integration of data from a variety of sources within a broader context of learning'. This increased confidence, in turn, would foster the personality attributes mentioned by Guglielmino (1978), which again, would enable them to learn more independently.

Teachers, as participants, would, therefore, learn to recognise their own existing skills and knowledge and accept themselves as major role players in their own development (Grow, 1991), setting their own goals and standards (Grow, 1991: 134). As self-directed learners, they would also master critically evaluating their own learning (Patterson et al., 2002; Thornton, 2010) and modifying the tools and processes at their disposal to achieve their learning aims (Warburton & Volet, 2013). In practice, a professional development programme focusing on fostering the characteristics of SDL could be represented as follows:

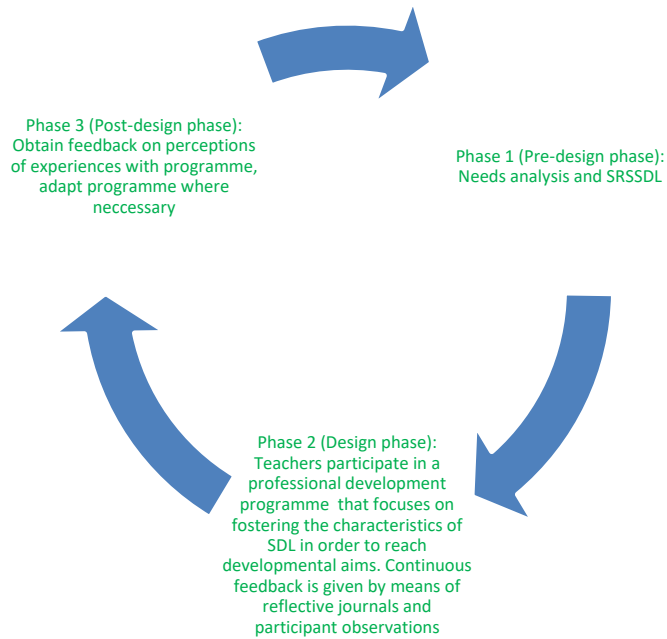


Figure 2-1: Design phases in a professional development programme focussing on SDL

In Phase 2 of the model, professional development opportunities should be based on concrete classroom problems (Trotter, 2006). This is in line with Knowles' assumption that adults have a problem-centred approach to learning (Knowles, 1973). This would tie in closely with problem-based learning, an instructional method aiming to provide participants with the necessary knowledge to solve real problems (Schmidt, 1983). While not much can be done about the fact that German SAL is not taught very widely in South Africa, it might be of assistance to German SAL teachers to form part of an online community of practice. Learning would be mediated (Avalos, 2011) and take the form of collaborative learning (Ermeling, 2010; Murray et al., 2009) by dialogues, conversations and interactions with peers. Since the group of German SAL teachers in South Africa is quite small and teachers tend to know each other, this would enable horizontal sharing of ideas and experiences, which play a big role in collaborative learning. While retaining a focus on the individual's autonomy (Murray, 2014) within a social setting (Cooker & Benson, 2013), participants would be enabled to work on solving their own problem-based learning aims (Loyens et al., 2008) cooperatively (Loyens & Gijbels, 2008). As the research progressed, a need to include collaborative learning, which will be discussed in Chapter 6, emerged. Collaborative learning was therefore included as a focus point.

Throughout the programme, changes should be made as necessary and the programme should be re-evaluated continuously (Lynch, 1990) to ensure that participants reach their learning aims

and continue to determine their own learning. Such a horizontal learning approach has the potential to greatly assist teachers in overcoming other obstacles to their own learning, such as a lack of classroom resources (Johnson et al., 2000) or isolation in their work environment (Jita & Ndhlalane, 2009: 63).

2.6 Conclusion

This article provided a brief overview of the policies relating to teacher professional development, the expectations placed on teachers, specific challenges placed on German SAL teachers by existing policies, and general developmental challenges faced by South African teachers. A brief definition of SDL was provided, and it was suggested that the values of SDL be fostered in teacher development programmes. In practice, implementing SDL in teacher development programmes would translate to teachers (as participants of the development programme) being enabled to define their own learning needs, after which they would collaborate with each other and the facilitator, finding ways to meet them. Thereafter, they would reflect on the processes they followed and make adaptations where necessary. Ideally, this approach would turn teachers into empowered learners who are inquisitive, enthusiastic, reflective and increasingly autonomous (Cannella & Reiff, 1994: 28) and would be able to translate the new-found skills in their classroom, thereby inspiring their learners to become self-directed themselves. Such a programme would be especially suitable to German SAL teachers. While many challenges exist for effective teacher development (Aldridge et al., 2004), SDL could possibly, or at least partly, be a way for teachers to overcome challenges (Mushayikwa & Lubben, 2009) by assisting them to recognise and develop their own problem-solving skills as well as by encouraging peer education and support.

For the purposes of this study, blended learning was considered as a suitable approach towards a professional development programme for teachers of German SAL in South Africa. In Chapter 3, the theory underlying blended learning, suitability of blended learning for said professional development programme, as well as a model of how the aims of the professional development programme could be accommodated through blended learning, will be presented.

2.7 References

Adeola, A., & Ngoitima, Z. (2006). Managing self-directed learning in African universities: The case of Nigeria and Botswana. *Journal of Adult Education, Tanzania* (14), 59-85.

- Aldridge, J. M., Fraser, B. J., & Sebela, M. P. (2004). Using teacher action research to promote constructivist learning environments in South Africa. *South African Journal of Education*, 24(4), 245-253.
- Arkoudis, F. (2003). Teaching English as a second language in Science classes: Incommensurate epistemologies? *Language and Education*, 17(3), 161-174.
<https://doi.org/10.1080/09500780308666846>
- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and Teacher Education*, 27(1), 10-20.
<https://doi.org/10.1016/j.tate.2010.08.007>
- Bagheri, M., Ali, W. Z. W., Abdullah, M. C. B., & Daud, S. D. (2013). Effects of project-based learning strategy on self-directed learning skills of educational technology students. *Contemporary Educational Technology*, 4(1), 15-29.
<http://files.eric.ed.gov/fulltext/EJ1105523.pdf>
- Banerjee, G. (2011). Blended environments: Learning effectiveness and student satisfaction at a small college in transition. *Journal of Asynchronous Learning Networks*, 15(1), 8-19.
<http://files.eric.ed.gov/fulltext/EJ918215.pdf>
- Beavers, A. (2009). Teachers as learners: Implications of adult education for professional development. *Journal of College Teaching & Learning*, 6(7), 25-30.
<https://doi.org/10.19030/tlc.v6i7.1122>
- Berry, A. (2009). Professional self-understanding as expertise in teaching about teaching. *Teachers and Teaching: Theory and practice*, 15(2), 305-318.
<https://doi.org/10.1080/13540600902875365>
- Blommaert, J., Muyliaert, N., Huysmans, M., & Dyers, C. (2005). Peripheral normativity: Literacy and the production of locality in a South African township school. *Linguistics and Education*, 16(4), 378-403. <https://doi.org/10.1016/j.linged.2006.03.001>
- Bolhuis, S. (2003). Towards process-oriented teaching for self-directed lifelong learning: A multidimensional perspective. *Learning and Instruction*, 13(3), 327-347.
[https://doi.org/10.1016/S0959-4752\(02\)00008-7](https://doi.org/10.1016/S0959-4752(02)00008-7)

- Bouchard, P. (2009). Pedagogy without a teacher: What are the limits. *International Journal of self-directed learning*, 6(2), 13-22. <https://oltraining.com/SDLwebsite/IJSDL/IJSDL6.2-2009.pdf#page=18>
- Bransford, J., Darling-Hammond, L., & Lepage, P. (2005). Introduction. In L. Darling-Hammond, & Bransford, J., (Eds.), *Preparing teachers for a changing world - what teachers should learn and be able to do*. Jossey-Bass.
- Brockett, R. G., & Hiemstra, R. (1991). A conceptual framework for understanding of self-direction in adult learning. In R. G. Brockett, & R. Hiemstra, (Eds.), *Self-direction in adult learning: Perspectives on theory, research, and practice* (pp. 18-33). Routledge.
- Cannella, G. S., & Reiff, J. C. (1994). Individual constructivist teacher education: Teachers as empowered learners. *Teacher Education Quarterly*, 21(3), 27-38. <https://www.jstor.org/stable/23475804>
- Christ, I. (2002). Die Ausbildung von Lehrkräften für Fremdsprachen und bilingualen Unterricht in der Sicht der Kultusverwaltungen. *Fremdsprachen Lehren und Lernen*, 31, 42-63. <http://pascal-francis.inist.fr/vibad/index.php?action=getRecordDetail&idt=14859958>
- Coldwell, M. (2017). Exploring the influence of professional development on teacher careers: A path model approach. *Teaching and Teacher Education*, 61, 189-198. <https://doi.org/10.1016/j.tate.2016.10.015>
- Cooker, L., & Benson, P. (2013). *The applied linguistic individual: Sociocultural approaches to identity, agency and autonomy*. Equinox.
- De Clerq, F. (2008). Teacher quality, appraisal and development: The flaws in the IQMS. *Perspectives in Education*, 26(1), 7-18.
- Dehnad, A., Afsharian, F., Hosseini, F., Arabshahi, S. K. S., & Bigdeli, S. (2014). Pursuing a definition of self-directed learning in literature from 2000–2012. *Procedia-Social and Behavioral Sciences*, 116, 5184-5187. <https://doi.org/10.1016/j.sbspro.2014.01.1097>
- Department of Basic Education (DBE) (South Africa). (1997). *Language in Education Policy in Terms of Section 3 (4) of the National Education Policy Act, 1996 (Act 27 of 1996)*. Government Printers. Retrieved March, 20, 2020, from

<https://www.education.gov.za/Portals/0/Documents/Policies/GET/LanguageEducationPolicy1997.pdf?ver=2007-08-22-083918-000>

Department of Basic Education (DBE) (South Africa). (2011a). *Action plan to 2014: Towards the realisation of schooling 2025*. Government Printers. Retrieved March, 20, 2020, from https://www.gov.za/sites/default/files/gcis_document/201409/dobeshortened-action-plan-2025031120100.pdf

Department of Basic Education. (2011b). *Curriculum and Assessment Policy Statement English as a Second Additional Language*. Retrieved September 30, 2020, from https://www.education.gov.za/Portals/0/CD/National%20Curriculum%20Statements%20and%20Vocational/CAPS%20FET%20%20SAL%20%20ENGLISH%20GR%2010-12%20%20Web_1BB7.pdf?ver=2015-01-27-155020-433

Department of Basic Education (DBE) (South Africa). (2011c). *Integrated Strategic Planning Framework for Teacher Education and Development in South Africa, 2011-2025: Technical Report*. Government Printers. Retrieved March, 20, 2020, from <https://www.dhet.gov.za/Teacher%20Education/Technical%20Report%20-%20Intergrated%20Strategic%20Planning%20Framework%20for%20Teacher%20Education%20and%20Development%20In%20SA,%2012%20Apr%202011.pdf>

Department of Basic Education (DBE) (South Africa). (2014). *Report on the Annual National Assessment of 2014 Grades 1 to 6 & 9*. Government Printers. Retrieved September 30, 2020, from https://www.saqa.org.za/docs/rep_annual/2014/REPORT%20ON%20THE%20ANA%20OF%202014.pdf

Department of Education (DoE) (South Africa). (2005). *A national framework for teacher education in South Africa: Report of the Ministerial Committee on teacher education*. Government Printers. Retrieved March, 20, 2020, from <https://www.education.gov.za/Portals/0/Documents/Reports/Ministerial%20Committee%20on%20Teacher%20Education.pdf?ver=2008-03-05-111025-000>

Department of Higher Education and Training (DHET) (South Africa). (2011). *Integrated strategic planning framework for teacher education and development in South Africa, 2011-2025*. Government Printers. Retrieved September 20, 2020, from <https://www.dhet.gov.za/Teacher%20Education/Technical%20Report%20->

[%20Intergrated%20Strategic%20Planning%20Framework%20for%20Teacher%20Education%20and%20Development%20In%20SA,%2012%20Apr%202011.pdf](#)

- Department of Higher Education and Training (DHET) (South Africa). (2015). *National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for teacher education qualifications* Government Printers. Retrieved September 20, 2020, from <https://www.dhet.gov.za/Teacher%20Education/National%20Qualifications%20Framework%20Act%2067%202008%20Revised%20Policy%20for%20Teacher%20Education%20Qualifications.pdf>
- Dreyer, C., & Nel, C. (2003). Teaching reading strategies and reading comprehension within a technology-enhanced learning environment. *System*, 31(3), 349-365. [https://doi.org/10.1016/S0346-251X\(03\)00047-2](https://doi.org/10.1016/S0346-251X(03)00047-2)
- Ermeling, B. A. (2010). Tracing the effects of teacher inquiry on classroom practice. *Teaching and Teacher Education*, 26(3), 377-388. <https://doi.org/10.1016/j.tate.2009.02.019>
- Gabela, R. V. (2004). What makes a good teacher? In R. Balfour, T. Buthelezi, & C. Mitchell, (Eds.), *Teacher development at the centre of change* (pp. 55-57). KZNDE Teacher Development Directorate.
- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48(1), 18-33. <https://doi.org/10.1177%2F074171369704800103>
- Garrison, R. (2000). Theoretical challenges for distance education in the 21st century: A shift from structural to transactional issues. *The International Review of Research in Open and Distributed Learning*, 1(1). <https://doi.org/10.19173/irrodl.v1i1.2>
- Girvan, C., Conneely, C., & Tangney, B. (2016). Extending experiential learning in teacher professional development. *Teaching and Teacher Education*, 58:129-139. <https://doi.org/10.1016/j.tate.2016.04.009>
- Grow, G. O. (1991). Teaching learners to be self-directed. *Adult Education Quarterly*, 41(3), 125-149. <https://doi.org/10.1177%2F0001848191041003001>

- Guglielmino, L. M. (1978). Development of the self-directed learning readiness scale. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 38(11-A), 6467.
- Guglielmino, L. M. (2008). Why self-directed learning. *International Journal of Self-Directed Learning*, 5(1), 1-14.
- Guglielmino, L. M. (2013). The case for promoting self-directed learning in formal educational institutions. *SA-eDUC*, 10(2), 1-18.
- Guglielmino, P. J., & Guglielmino, L. M. (2006). Culture, self-directed learning readiness, and per capita income in five countries. *SAM Advanced Management Journal*, 71(2), 21-28.
- Hawker, D. (2013). Thousands of unqualified teachers are teaching SA children. Retrieved August 21, 2017, from <http://www.enca.com/south-africa/thousands-unqualified-teachers-sa-schools>
- Hiemstra, R. (2003). More than three decades of self-directed learning: From whence have we come? *Adult Learning*, 14(4), 5-8. <https://doi.org/10.1177%2F104515950301400402>
- Hong, J. Y. (2012). Why do some beginning teachers leave the school, and others stay? Understanding teacher resilience through psychological lenses. *Teachers and Teaching*, 18(4), 417-440. <https://doi.org/10.1080/13540602.2012.696044>
- Howie, S., Combrinck, C., Roux, K., Tshele, M., Mokoena, G., & Palane, N. M. (2017). Progress in International Reading Literacy Study (PIRLS) 2016: South African children's reading literacy achievement. University of Pretoria: Centre for Evaluation and Assessment. https://www.up.ac.za/media/shared/164/ZP_Files/pirls_2016_final_16_03_2018_high_quality-1.zp146890.pdf
- Jita, L. C., & Ndjalane, T. C. (2009). Teacher clusters in South Africa: opportunities and constraints for teacher development and change. *Perspectives in Education*, 27(1), 58-68.
- Johnson, S., Hodges, M., & Monk, M. (2000). Teacher development and change in South Africa: A critique of the appropriateness of transfer of northern/western practice. *Compare: A Journal of Comparative and International Education*, 30(2), 179-192. <https://doi.org/10.1080/713657456>

- Knowles, M. S. (1968). Andragogy, not pedagogy. *Adult Leadership*, 16(10):350-352.
- Knowles, M. S. (1973). *The adult learner: a neglected species*. Gulf Publishing Company.
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Association Press.
- Lam, D., Ardington, C., & Leibbrandt, M. (2011). Schooling as a lottery: Racial differences in school advancement in urban South Africa. *Journal of Development Economics*, 95(2), 121-136. <https://doi.org/10.1016/j.jdeveco.2010.05.005>
- Lee, K., Tsai, P.-S., Chai, C. S., & Koh, J. H. L. (2014). Students' perceptions of self-directed learning and collaborative learning with and without technology. *Journal of Computer Assisted Learning*, 30(5), 425-437. <https://doi.org/10.1111/jcal.12055>
- Liddell, T. N. (2008). Executive women's self-directed learning and leading in charitable foundations. *International Journal of Self-Directed Learning*, 5(1), 15-29.
- Long, H. B. (2000). Understanding self-direction in learning. In H. B. Long, (Ed.), *Practice & theory in self-directed learning* (pp. 11-24). Motorola University Press.
- Loyens, S. M., & Gijbels, D. (2008). Understanding the effects of constructivist learning environments: Introducing a multi-directional approach. *Instructional Science*, 36(5), 351-357. Doi: [10.1007/s11251-008-9059-4](https://doi.org/10.1007/s11251-008-9059-4)
- Loyens, S. M., Magda, J., & Rikers, R. M. (2008). Self-directed learning in problem-based learning and its relationships with self-regulated learning. *Educational Psychology Review*, 20(4), 411-427. Doi: [10.1007/s10648-008-9082-7](https://doi.org/10.1007/s10648-008-9082-7)
- Lynch, B. K. (1990). A context-adaptive model for program evaluation. *TESOL quarterly*, 24(1), 23-42. <https://doi.org/10.2307/3586850>
- Mbohwa-Pagels, K., & Rode, R. (2014). DaF im SA Schulsystem. *eDusa*, 9(1), 13-19.
- Mentz, E. (2014). Preparing pre-service teachers to support self-directed learning [Blog]. (Vol. 2018.): Washington: Partnership for 21st Century Skills. Retrieved January 21, 2019, from <http://www.p21.org/news-events/p21blog/1477-mentz-preparing-pre-service-teachers-to-support-self-directedlearning>

- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, (89), 3-14. <https://doi-org.nwulib.nwu.ac.za/10.1002/ace.3>
- Merriam, S. B., & Brockett, R. G. (2011). *The profession and practice of adult education: An introduction*. John Wiley & Sons.
- Minott, M. A. (2010). Reflective teaching as self-directed professional development: Building practical or work-related knowledge. *Professional Development in Education*, 36(1-2), 325-338. <https://doi.org/10.1080/19415250903457547>
- Modisaotsile, B. M. (2012). The failing standard of basic education in South Africa. *Policy Brief*, 72, 1-7.
- Mokhele, M. L., & Jita, L. C. (2010). South African teachers' perspectives on continuing professional development: a case study of the Mpumalanga Secondary Science Initiative. *Procedia-Social and Behavioral Sciences*, 9, 1762-1766. <https://doi.org/10.1016/j.sbspro.2010.12.396>
- Murray, G. (2014) Exploring the social dimensions of autonomy in language learning. In G. Murray, (Ed.), *Social dimensions of autonomy in language learning* (pp. 3-11). Palgrave Macmillan. https://doi.org/10.1057/9781137290243_1
- Murray, J. (2008). Towards the re-articulation of the work of teacher educators in Higher Education institutions in England. *European Journal of Teacher Education*, 31(1), 17-34. <https://doi.org/10.1080/02619760701845073>
- Murray, S., Ma, X., & Mazur, J. (2009). Effects of peer coaching on teachers' collaborative interactions and students' mathematics achievement. *Journal of Educational Research*, 102(3), 203-212. <https://doi.org/10.3200/JOER.102.3.203-212>
- Mushayikwa, E., & Lubben, F. (2009). Self-directed professional development–Hope for teachers working in deprived environments? *Teaching and Teacher Education*, 25(3), 375-382. <https://doi.org/10.1016/j.tate.2008.12.003>
- Nepal, K. P., & Stewart, R. A. (2010). Relationship between self-directed learning- readiness factors and learning outcomes in third year project-based engineering design course. In *Proceedings of the 21st Annual Conference for the Australasian Association for*

Engineering Education (pp. 496-503). Sydney.

<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1034.4214&rep=rep1&type=pdf>

Ono, Y., & Ferreira, J. (2010). A case study of continuing teacher professional development through lesson study in South Africa. *South African Journal of Education*, 30(1), 59-74.
Doi: <https://doi.org/10.15700/saje.v30n1a320>

Patterson, C., Crooks, D., & Lunyk-Child, O. (2002). A new perspective on competencies for self-directed learning. *Journal of Nursing Education*, 41(1), 25-31.
<https://doi.org/10.3928/0148-4834-20020101-06>

Pretorius, E. J., & Klapwijk, N. M. (2016). Reading comprehension in South African schools: Are teachers getting it, and getting it right? *Per Linguam: Journal of Language Learning /Per Linguam: Tydskrif vir Taalaanleer*, 32(1), 1-20.

Robinson, M. (2003). Teacher education policy in South Africa: The voice of teacher educators. *Journal of Education for Teaching*, 29(1), 19-34.
<https://doi.org/10.1080/0260747022000057954>

Rodgers, C. R., & Scott, K. H. (2008). The development of the personal self and professional identity in learning to teach. In M. Cochran-Smith, S. D. Feiman-Nemser, D. J. McIntyre, & K. E. Demers, (Eds.), *Handbook of Research on Teacher Education*. (pp.732-754). Routledge.

SACE (South African Council for Educators). (2013). *The CPTD management system handbook*. SACE. Retrieved January 08, 2019, from https://sace.org.za/assets/documents/uploads/sace_30373-2016-08-31-CPTD%20Handbook.pdf

Savides, M. (2017). South African schools have 5,139 teachers who are unqualified or under-qualified. Retrieved August 21, 2018, from <https://www.timeslive.co.za/news/south-africa/2017-06-06-south-african-schools-have-5139-teachers-who-are-unqualified-or-under-qualified/>

Savin-Baden, M., & Major, C. H. (2004). *Foundations of problem-based learning*. SRHE & Open University Press.

- Schmidt, H. G. (1983). Problem-based learning: Rationale and description. *Medical Education*, 17(1), 11-16. <https://doi.org/10.1111/j.1365-2923.1983.tb01086.x>
- Short, D. (2002). Language learning in sheltered social classes. *TESOL Journal*, 11(1), 18 - 24. <https://eric.ed.gov/?id=EJ648995>
- Silva, B. (2017). Over 1700 unqualified teachers in South Africa. *West Cape News*, Retrieved August 21, 2018, from <http://westcapenews.com/?p=1431>
- Smith, K. (2017). *Teachers as self-directed learners: Active positioning through professional learning*. Springer.
- Spaull, N. (2013a). Poverty & privilege: Primary school inequality in South Africa. *International Journal of Educational Development*, 33(5), 436-447. <https://doi.org/10.1016/j.ijedudev.2012.09.009>
- Spaull, N. (2013b). South Africa's education crisis: The quality of education in South Africa 1994-2011. *Centre for Development and Enterprise (SDE)*. Retrieved September 18, 2019, from <http://www.section27.org.za/wp-content/uploads/2013/10/Spaull-2013-CDE-report-South-Africas-Education-Crisis.pdf>
- Taylor, N. (2011). *The National School Effectiveness Study (NSES): Summary for the synthesis report*. JET Education Services.
- Taylor, N., Fleisch, B., & Schindler, J. (2008). Changes in education since 1994: Background paper for the fifteen year review of government business, commissioned by the Policy Unity, Office of the Presidency. Retrieved on August 16, 2019 from <https://www.jet.org.za/resources/Taylor%20Fleisch%20Shindler%20Changes%20in%20Education%2015%20year%20review.pdf/@download/file/Taylor%20Fleisch%20Shindler%20Changes%20in%20Education%2015%20year%20review.pdf>
- Teo, T., & Lee, C. (2010). Fostering self-directed learning with ICT. In C. S. Chai & Q. Wang, (Eds.), *ICT for Self-Directed and Collaborative Learning* (pp. 39-51). Prentice-Hall. <http://handle.uws.edu.au:8081/1959.7/563251>
- Thornton, K. (2010). Supporting self-directed learning: A framework for teachers. *Research and Practice in English Language Teaching in Asia*, 59-71. <http://dx.doi.org/10.5746/LEiA/10/V1/A14/Thornton>

- Tough, A. M. (1971). *The adult's learning projects: A fresh approach to theory and practice in adult learning*. Ontario Institute for Studies in Education.
- Trotter, Y. D. (2006). Adult learning theories: Impacting professional development programs. *Delta Kappa Gamma Bulletin*, 72(2), 8-13.
- Van der Walt, H. (2016). The feasibility of grafting self-directed learning theory onto capability theory. In E. Mentz, & I. Oosthuizen, (Eds.), *Self-directed learning research. An imperative for transforming the educational landscape*. AOSIS.
- Van Dyk, T., & Van de Poel, K. (2013). Towards a responsible agenda for academic literacy development: Considerations that will benefit students and society. *Journal for Language Teaching. Ijenali Yekufundzisa Lulwimi. Tydskrif vir Taalonderrig*, 47(2), 43-69.
<https://doi.org/10.4314/jlt.v47i2.3>
- Warburton, N., & Volet, S. (2013). Enhancing self-directed learning through a content quiz group learning assignment. *Active Learning in Higher Education*, 14(1), 9-22.
<https://doi.org/10.1177%2F1469787412467126>
- Webb, N. M. (2009). The teacher's role in promoting collaborative dialogue in the classroom. *British Journal of Educational Psychology*, 79(1), 1-28.
<https://doi.org/10.1348/000709908X380772>
- Williamson, S. N. (2007). Development of a self-rating scale of self-directed learning. *Nurse Researcher*, 14(2), 66-83. Doi: [10.7748/nr2007.01.14.2.66.c6022](https://doi.org/10.7748/nr2007.01.14.2.66.c6022)
- Yamauchi, F. (2011). School quality, clustering and government subsidy in post-apartheid South Africa. *Economics of Education Review*, 30(1), 146-156.
<https://doi.org/10.1016/j.econedurev.2010.08.002>

CHAPTER 3 BLENDED LEARNING AS AN APPROACH TO FOSTER SELF-DIRECTED LEARNING IN TEACHER PROFESSIONAL DEVELOPMENT PROGRAMMES

3.1 Abstract

Trends in research on teacher development in recent years have shown a shift away from merely studying what teachers learn to how they learn, how they improve their learning and how they transform their skills and knowledge into practice so as to offer their own learners an improved educational experience. Although blended learning has been proposed as a means to enhance student learning and engagement, little research has been done on blended learning teacher development programmes, especially in the context of teachers of German Second Additional Language (SAL) in South Africa. This article aims to shift the focus from general higher institutional settings to teacher professional development programmes for teachers of German SAL by proposing blended learning as a mediator to foster self-directed learning in teacher professional development programmes. After examining existing definitions and models on blended learning, a synthesis between models, which could be adjusted to the South African teaching context, is proposed. The new model offers certain opportunities to foster the characteristics of self-directed learners, which are highlighted in this article. Suggestions are made on how this model could be utilised and adapted to the context of teacher professional development for teachers of German SAL in order to foster the characteristics of self-directed learning rather than merely imparting subject knowledge to teachers.

3.2 Keywords

blended learning, blending with a purpose, self-directed learning, teacher development

3.3 Introduction

New technological developments offer increasing immediate access to people and information, while smartphones, laptops and tablets allow their users to purposefully 'blend' digital and physical experiences, as explicated by Stein and Graham (2014). Similarly, *blended learning* is gaining popularity in the education sector (Graham et al., 2013; Porter et al., 2013). However, despite the increasing prominence of blended learning as approach in education, it is essential to note that this should not be regarded as the only possible and effective solution in all contexts. This aspect is especially true in contexts where resources are limited.

Although a number of international publications on teacher training and professional development exist (Ganz & Reinmann, 2007; Matzat, 2013; Osburg & Todorova, 2009) and extensive research has been conducted on *blended learning* in the South African higher education sector (Bosch et al., 2019; Petersen & Mentz, 2016), little research has been done on the possibilities it offers for South African teacher development programmes (Boitshwarelo, 2009). The lack of research on blended learning in teacher professional development is especially apparent in the field of German SAL. Mbohwa-Pagels and Rode (2014) conducted and published on a nation-wide survey amongst teachers of German in South Africa in 2013, which mentioned certain challenges teachers of German SAL in South Africa face (Mbohwa-Pagels & Rode, 2014, p. 15). Annas (2016a) and Laurien (2006) examined the role of German at South African universities, while Von Maltzan (2009) examined South African language politics and the role German plays as a foreign language in South Africa. However, the above-mentioned studies remained descriptive and had a strong focus on the higher education sector. More recently, Wittmann and Olivier (2019) published a theoretical study on further professional development opportunities to foster the self-directed learning of practising German SAL teachers in South Africa. This article utilises the proposition made by Wittmann and Olivier (2019), but also proposes exploring the possibilities blended learning offers teacher professional development while focusing on self-directed learning for practising teachers of German SAL. The main research question that drives this research is: How would can blended learning be utilised to foster self-directed learning in teachers of German SAL for professional development?

In order to answer this research question, this conceptual article involved an in-depth literature review regarding the relevant aspects of blended learning and self-directed learning within the context of teacher professional development.

The then Department of Education (DoE) in South Africa, currently named Department of Basic Education (DBE), outlined its expectations of teachers regarding e-learning in its *Draft White Paper on e-Education Transforming Learning and Teaching through ICT* (DoE, 2004) and in its *Guidelines for Teacher Training and Professional Development in ICT* (2007). While a main principle of the *White Paper on e-Education Transforming Learning and Teaching through ICT* is the achievement of national education goals by “providing modern technologies to schools in order to enhance the quality of learning and teaching” (DoE, 2004, p. 6), the *Guidelines for Teacher Training and Professional Development in ICT and Training* (DoE, 2007, p. 3) calls for teacher development programmes that provide teachers with “the necessary knowledge, skills

and understanding to successfully integrate ICT into everyday educational practices in a meaningful way”. Teachers, in turn, are required to enhance the problem-solving and critical-thinking skills of their learners by advancing their learners’ ability to:

- apply ICT skills to access, analyse, evaluate, integrate, present and communicate information;
- create knowledge and new information by adapting, applying, designing, inventing and authoring; and
- function effectively in a knowledge society by using appropriate ICT and mastering communication and collaboration skills. (DoE, 2007, p. 3)

Policies clearly outline the requirements for teacher professional development programmes to develop ICT skills in teachers and for teachers so that they can transfer such skills to their students; however, an additional need for a form of education that provides the skills and predispositions for continual learning was identified (Harber & Mncube, 2011). Universities and teacher development programme providers have therefore started experimenting with courses that utilise a combination of online and face-to-face instruction, better known as *blended learning*. These courses are an attempt to not only satisfy learners’ learning needs regarding what the current syllabus requires learners to know, (Dziuban et al., 2005) but also equip teachers to utilise content knowledge, which is the actual content area of the subjects that are being taught (Doering et al., 2009), as well as pedagogical knowledge, which is the knowledge of how to teach content (Doering et al., 2009), to effectively reach their learners.

As knowledge in today’s world changes and accumulates rapidly (Guglielmino, 2013), it is important to cultivate self-directedness in teachers, which they can, in turn, foster in their students to enable them to remain lifelong learners. When fostering the characteristics of self-directed learning in teachers, it is still important to not only focus on the external learning management process but also consider internal monitoring and motivational issues. As such, we subscribe to Garrison’s (1997, p. 18) definition of self-directed learning as being “an approach where learners are motivated to assume personal responsibility and collaborative control of the cognitive (self-monitoring) and contextual (self-management) processes in constructing and confirming meaningful and worthwhile learning outcomes”. Garrison (1992) rightly wonders how the learner (in this case, the teacher as participant of the professional development activity) can assume responsibility for his / her own learning while simultaneously accepting external support and direction (i.e., control). Garrison (1992, p. 144) concludes that if self-directed learning was

assumed to be freedom from influence, it would be a meaningless concept. Instead, self-directed learning should be centred around continuous dialogue between the learner (in this case, the teacher) and the teacher (in this case, the facilitator):

The balance of control will properly shift depending upon the context and the proficiency of the learner. However, through sharing control there is an increased probability of students reaching desired and worthwhile learning goals which, in turn, would result in improved intrinsic motivation, ability to learn, and self-directedness (Garrison, 1992, p. 144).

To propose a model for a teacher development programme that does not only assist teachers in fostering the above-mentioned characteristics of self-directed learners in their pupils but also equips teachers to adhere to the e-learning requirements outlined in government policy (DoE, 2004), both the existing theories on *blended learning* and self-directed learning must be carefully considered. In this article, we propose a suitable model for such a teacher development programme by means of an in-depth literature analysis. We strive to not only provide a theoretical overview of definitions and theories around *blended learning* but also to consider various models of *blended learning* in order to propose the synthesis of existing selected models into one model, adapted and suitable to foster the characteristics of self-directed learning in teachers. Furthermore, we highlight the need for a stronger focus on *blended learning* in South African teacher development and the opportunities *blended learning* can offer while fostering self-directed learning.

3.4 Understanding blended learning

Little research has been conducted on *blended learning* in teacher professional development (Boitshwarelo, 2009). Nonetheless, in the last decades, universities and other educational institutions in general have regarded *blended learning* as promising (Garrison & Vaughan, 2013; George-Walker & Keffe, 2010; Osguthorpe & Graham, 2003) and are increasingly moving towards instructional models of *blended learning* (Dziuban et al., 2005). This shift can largely be ascribed to the fact that universities and teacher-training institutions have witnessed rapid technological and socio-economic changes, leading them to rethink their educational practices (Garrison & Kanuka, 2004). *Blended learning* does not only offer increased flexibility to students but can also potentially offer students a wider variety of quality learning experiences compared to pure face-to-face instruction (George-Walker & Keffe, 2010) and engages them in active collaborative learning (Garrison & Vaughan, 2013). Furthermore, *blended learning* also offers

significant advantages over pure online learning, as *blended learning* still allows for face-to-face engagement with the instructor and therefore does not lead to as much estrangement as pure online teaching (Hew & Cheung, 2014). Similarly, Garrison and Kanuka (2004) pose that *blended learning* is an effective and low-risk strategy in overcoming challenges caused by transformational changes that technological developments bring to higher education institutions. Furthermore, they highlight how *blended learning* offers students the opportunity to form communities without having to be at the same place simultaneously.

However, while being widely lauded for the possibilities it offers, there is little consensus on a precise definition of *blended learning* (Driscoll, 2002; Graham, 2006; Launer, 2011; Picciano, 2009). According to Clark (2003, p. 4), “[l]ike many learning terms, ‘*blended learning*’ has the illusion of being a concrete concept. In practice it is a flexible term that means different things to different people”. Generally, it seems that definitions of, or rather approaches towards, *blended learning* can be classified into three categories (Graham et al., 2003; Kim, 2013) (of which the third category is the most widely followed), namely: blending instructional modalities (Driscoll, 2002; Singh & Reed, 2001); blending instructional methods (Clark & Mayer, 2016); and blending face-to-face instruction with computer-mediated instruction (Garrison & Kanuka, 2004; Graham, 2006; Sahare & Thampi, 2010; Staker & Horn, 2012). The latter approach applies to this article.

For the purposes of this article, however, it is imperative that *blended learning* is seen as more than a mere combination of face-to-face and digital instruction and that the above-mentioned approach is not deemed to be a definition in itself. Various, more concrete definitions of *blended learning* exist, of which the most important pedagogical principles will be highlighted. Vaughan (2007, p. 82) stresses that *blended learning* is about more than “bolting” technology to a traditional course. Instead, he emphasises the concept of *hybridization*, as part of which online and face-to-face classroom segments are merged in order to encourage active learning, reduce classroom time and create an environment that is highly conducive to student learning (Garrison & Vaughan, 2008). Being conducive to student learning would entail that the environment is highly transformative in order for students to develop critical thinking and complex learning skills (Garrison & Kanuka, 2004). Singh and Reed (2001, p. 2) place similar value on pedagogical principles in their definition: “*Blended learning* focuses on optimizing achievement of learning objectives by applying the ‘right’ learning technologies to match the ‘right’ personal learning style to transfer the ‘right’ skills to the ‘right’ person at the ‘right’ time.” Poon (2013) adds to existing definitions that the aim of the delivery methods should always be to complement each other. She is of the opinion that blended learning should significantly “influence students’ perceptions of the

learning environment and, subsequently, their study approach and learning outcomes.” (Poon, 2013, p. 271). She, therefore, sees a strong correlation between blended learning, student learning experience and, ultimately, achievement (Poon, 2013). Staker and Horn (2012, p. 3), on the other hand, define blended learning as follows: “a formal education program in which a student learns at least in part through online delivery of content and instruction with some elements of student control over time, place, path, and/or pace *and* at least in part at a supervised brick-and-mortar location away from home”.

The above definitions are undoubtedly valid and complement each other to a large extent, and they are very focused on the teacher (Oliver & Trigwell, 2005). Oliver and Trigwell recognise that many definitions of blended learning rather refer to blended teaching and suggest a shift in focus from the teacher to the student, content to the experience, and technologies to pedagogy. As part of the student-centeredness, advocated by Oliver and Trigwell (2005), this article focuses on how fostering the characteristics of self-directed learning could not only achieve a truly student-centred blended learning model, but, in line with South African government regulations requiring teachers to be lifelong learners (DHET, 2014, p. 58), could assist teachers to develop characteristics of self-directed learners, which they, in turn, can foster in their own students. Before considering how blended learning could support student-centeredness and lifelong self-directed learning, certain classifications of blended learning are considered.

3.5 Classification of blended learning models

As much as definitions of blended learning differ, so do their presentation models and forms. There are various forms of blended learning, which Staker and Horn (2012) categorise into four models, namely the “rotation model, the flex model, the self-blend model, and the enriched virtual model” (Staker & Horn, 2012, p. 2). Rotation models are characterised by the fact that participants rotate between learning modalities, either at the teacher’s discretion or by following a fixed schedule (Staker & Horn, 2012). At least one of these modalities should be online learning, while other examples of modalities include individual paper-based assignments, conventional instruction, either in small groups or as a full class, and individual tutoring. Examples of rotation models include the “station-rotation model, the lab-rotation model, the flipped-classroom model, and the individual-rotation model” (Staker & Horn, 2012, p. 2).

In comparison to rotation models, flex models offer the participant more individual freedom. The content and instruction are delivered online, while students follow an individually-customised,

flexible schedule between learning modalities. The instructor stays on site (Staker & Horn, 2012). Similarly, self-blend models offer students a large amount of personal choice and freedom in that students follow one or more online courses to supplement their traditional courses (Staker & Horn, 2012). This category of models was renamed by Christensen et al. (2013) as the *a la carte model*. This name change is ascribed to the fact that the term *self-blend* might be misleading, as it could be interpreted to mean that students have the authority to blend the methods of instruction themselves. Consequently, the definition has been amended. The *a la carte model*, therefore, is “a program in which students take one or more courses entirely online with an online teacher of record and at the same time continue to have brick-and-mortar educational experiences. Students may take the online courses either on the brick-and-mortar campus or off-site” (Christensen et al., 2013, p. 3).

Finally, the *enriched virtual model* offers students the highest amount of autonomy by allowing them to divide their own time between face-to-face and online learning (Staker & Horn, 2012). Time division between online and face-to-face instruction is dependent on the course and vary greatly. When conceptualising a *blended learning* teacher development programme focusing on fostering the characteristics of self-directed learning, it would thus make sense to employ a model falling into the enriched virtual model category. However, the pedagogical approach used in conceptualising the model must be considered separately.

3.6 Pedagogical approaches towards and models of blended learning

In Staker and Horn's (2012), classification of *blended learning* models, the authors attach a certain value to students' self-directedness by expressly mentioning that each student has a certain amount of control over his or her learning (time, place, path, pace), their definition remains rather teacher-centred. While accepting their classification, models and pedagogical approaches that do fall into Staker and Horn's (2012) classification are investigated and proposed in this article and more depth is added to the mere classification. From an extensive literature review of published and unpublished research on *blended learning*, it was found that, in this context, both Staker and Horn's (2012) enriched virtual model and Picciano's (2009) multimodal model are regarded as highly relevant and appropriate within the context relevant to this article. If the enriched virtual model is chosen, teachers would have the benefit of mostly working online and at their own pace, having supplementary face-to-face encounters with the instructor.

Several blended learning environment models exist, which all fall at a certain point of the continuum between pure online and pure face-to-face instruction. Mishra and Koehler (2006), for

example, have developed the so-called “technological pedagogical content knowledge model” (TPCK model). This model assumes that TPCK is an emerging form of knowledge that goes beyond its components, content, pedagogy and technology. Therefore, to develop good and meaningful content, one should carefully interweave these three key sources of knowledge (Mishra & Koehler, 2006). In comparison, Puentedura (2012) has developed the SAMR model, which consists of four levels of technology integration: “substitution, augmentation, modification and redefinition”. This model provides a framework for educators to create learning experiences using mobile devices. The model has been suggested as a framework especially suitable for evaluating m-learning, which Romrell et al. (2014, p. 2) understand as “learning that is personalized, situated, and connected through the use of a mobile device”.

While scholars deem both of the above models as useful, Picciano’s (2009) multimodal model seems to offer an added dimension, which might be particularly useful in fostering the characteristics of self-directed learning, as in his model, he introduces pedagogical objectives and activities that should drive the approaches used in instruction. In comparison to the above-mentioned models, Picciano (2009) places less emphasis on the content of teaching and more on the emotional and social support participants should receive, be it through dialectics or questioning, through which students can refine their own knowledge, or through collaborative learning. By blending objectives, activities and approaches within multiple modalities, instructors should be able to satisfy most students’ learning needs.

By focusing on the multimodal model, while drawing from the TPCK and SAMR models, a blended learning model for teacher professional development to foster the characteristics of self-directed learning is subsequently suggested.

3.7 Blended learning in support of self-directed learning

Even though the relevance of blended learning for SDL has been shown in literature (Olivier, 2019), merely establishing blended learning environments for teacher professional development opportunities will not in itself promote self-directedness in participants, or, as put by Wang (2010, p. 189), “the meaning of ICTs depends entirely on how they are used within any cultural setting”. The blended learning model should not only be designed around the preparation of the content but should essentially be based on insights relating to students’ character and nature (Bosch & Pool, 2019). The success or failure of a professional development activity in fostering characteristics of SDL would therefore be largely dependent on the approach and content used in the activity.

Following a learner-centred approach to blended learning, as suggested by Picciano (2009), corresponds with Bonk et al.'s (2005, p. 13) prediction that blended learning will be increasingly determined by participants themselves as blended learning options proliferate. Reinmann et al. (2009) view the great potential of blended learning to encourage self-directed learning as one of its main benefits. Oliver and Trigwell's (2005, p. 22) demands towards blended learning to focus on students' experiences, in comparison, tie in closely with andragogy as postulated by Knowles (1973). The underlying basic assumptions of andragogy are: as persons grow and mature, their self-concept changes; their experiences play a greater role in their learning; and their readiness to learn is increasingly determined by the developmental tasks necessary to fulfil their social role (Knowles, 1973, p. 45-46). Similarly, Ranieri et al. (2019) published a study, in which they investigated educators' professional learning ecologies in a blended learning environment. They concluded that formal education seems to play a less significant role in shaping their participants' professional identity compared to factors such as personal experiences, colleagues, or work experiences (Ranieri et al., 2019). In addition, according to Knowles (1973), an adult has a more problem-centred approach to learning than a child. Therefore, when thinking about a blended learning teacher-development model, it would make sense to choose a blended learning model that takes the experiences and the individual differences and learning needs of teachers into account. Following this approach, one would have participants who learn because they genuinely want to develop an understanding and mastery of the material (Ross et al., 2002). Although motivation has been found to be a central aspect of learner autonomy in distance learning, it remains imperative to enhance those components of motivation that actually contribute to autonomy – most notably the participants' belief in their own personal ability and their personal goals (Lynch & Dembo, 2004).

In adaptive learning theory, which holds as an underlying principle that personalising instruction improves learning (Murray & Pérez, 2015), participants with a strong belief in their own abilities and goals would be classified as being motivated by task or achievement goal orientation (Ross et al., 2002). It seems significant that these participants have been found to display high levels of self-efficacy (Anderman & Young, 1994), attach a high intrinsic value to their learning and are more likely to make attributions to effort (Ames, 1992). Masie (2006, p. 25) furthermore describes how learners naturally add learning elements: "They add what is missing, they mix it with what they need, and they subtract what is not valuable. They socialise it. They find context. And they transform training and instruction into learning." Therefore, it would make sense to develop a blended learning teacher professional development programme that focuses on learning and

dialogue rather than on teaching content. In this case, there would be a continual shift of dependence and control. The participant would have to be neither dependent nor independent. The interdependence of the participant will dynamically shift in balance between the facilitator and fellow learners (Garrison, 1992). To achieve fostering achievement goal orientation as part of a *blended learning* professional development programme, one should carefully consider the most appropriate model and strategy.

Bath and Bourke (2010) have focused on the blended learning design process and suggest that designing a blended learning environment should be done systematically by planning for integrated learning, then designing and developing the blended learning elements, followed by the implementation of the blended learning design, reviewing (evaluating) the effectiveness of the blended learning design, and improving the said design for the next course (Bath & Bourke, 2010). While designing the model, close cooperation with the participants is required to ensure that it is set in a community of inquiry (CoI) framework as postulated by Garrison and Vaughan (2008). A community of inquiry is a collaborative-constructivist process model, that integrates three elements, or so-called presences, which are required for successful online learning: cognitive presence (CP), social presence (SP), and teaching presence (TP) (Castellanos-Reyes, 2020, p. 557; Garrison & Vaughan, 2008). The model proposed in this article will, however, go beyond the social, cognitive and teaching presence traditionally associated with the CoI framework and focus on participants' self-directed learning skills as demanded by Bosch and Pool (2019). Expanding on the CoI framework in this manner should not only assist participants to influence their own learning outcomes but will also encourage them to "reflect on the effectiveness of their current learning strategy, as well as to interpret and reflect on their achievement (Lubbe & Mentz, 2019, p. 351). Ensuring that emphasis is placed on the participants and their experiences will situate the activity well within adaptive learning, as described by Howard et al. (2006, p. 1): "the use of what is known about learners, a priori or through interactions, to alter how a learning experience unfolds, with the aim of improving each learner's success and satisfaction". By not only having self-determination in influencing their own learning aims but also a space where they can shape their practice and reflect on their learning, participants should be highly motivated to master their goals (Ross et al., 2002). However, as demonstrated by Hofmann (2006), *blended learning* designs have to be carefully crafted so that true curricula are weaved to facilitate effective learning.

Keeping in mind the above-mentioned importance of pedagogically-sound, carefully-interwoven *blended learning* designs, suggestions are made in the next subsection regarding the

opportunities to foster characteristics of self-directed learners in teacher professional development programmes.

3.8 Blended learning to enhance self-directedness in teacher professional development programmes

When designing and developing a blended learning professional development activity¹³ focusing on self-directed learning for South African Second Additional Language teachers, it is imperative to place emphasis on participant experience and individual differences between participants' learning needs, preferences and styles. Situated within Staker and Horn's (2012, p. 15) *enriched virtual model*, participants divide their own time between face-to-face and online instruction. While all material is made available online, participants have an initial and a closing face-to-face meeting with the instructor in order to plan and structure the online phase initially, and to reflect upon it afterwards. Participants are also encouraged to activate and assess their pre-existing knowledge, not only on content but also on learning processes (Bolhuis, 2003) in order to develop their metacognitive thinking. Throughout the online phase, participants can schedule further face-to-face meetings. The professional development activity itself should be based on Picciano's (2009, p. 11) multimodal model and can be represented by Figure 3-1 below:

¹³ As this article related to South African teachers, the phrase *professional development activity* as used in the Department of Basic Education policies like the "White Paper on e-Education Transforming Learning and Teaching through ICT" as well as the "Guidelines for Teacher Training and Professional Development in ICT" will be used when referring to any programme or course designed to further South African teachers' education.

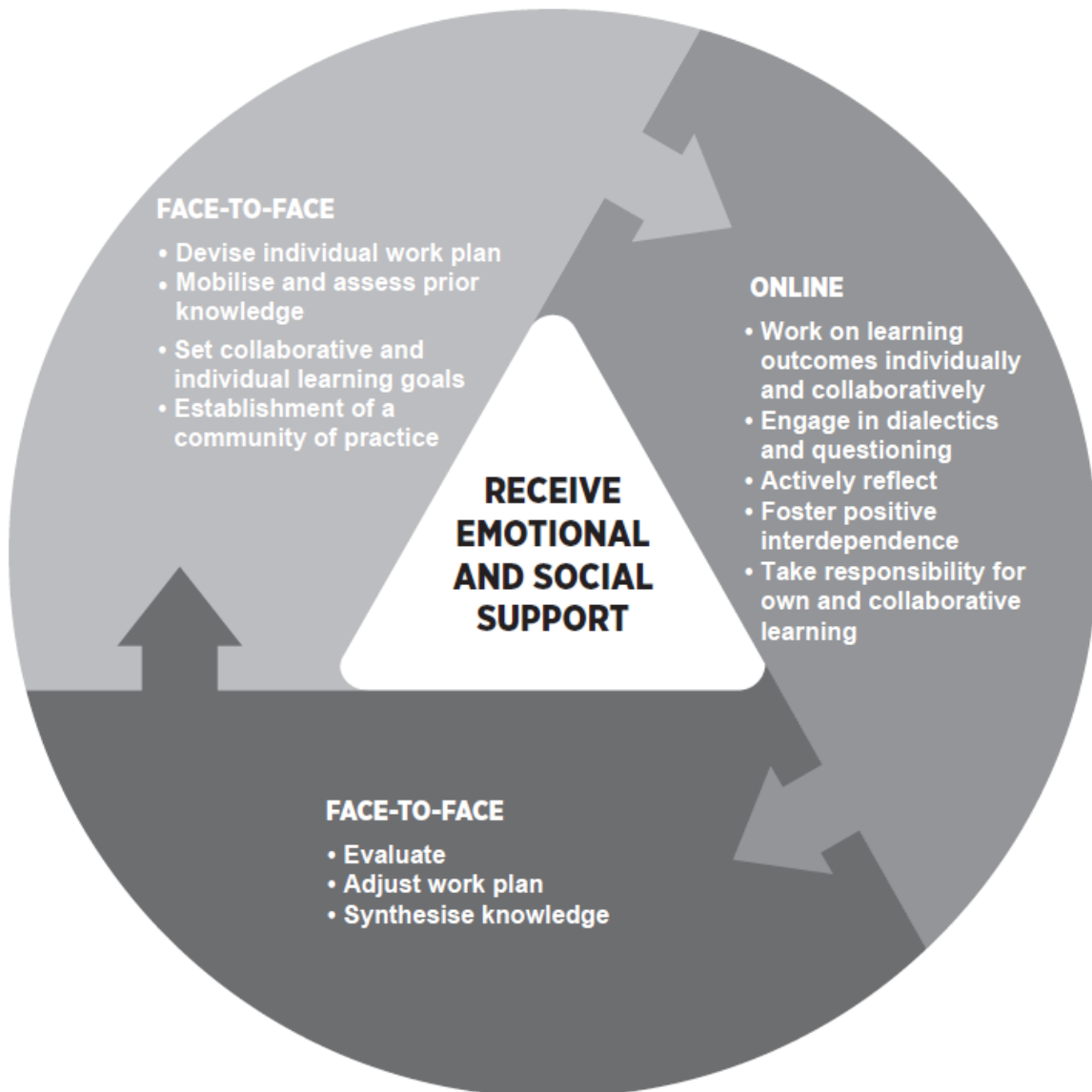


Figure 3-1: Teacher professional-development opportunity in the ‘virtually enriched’ spectrum of Staker and Horn (2012)

During the initial face-to-face meeting, the participants collaboratively determine their overarching group learning goals while setting smaller individual goals within this setting. The facilitator assumes responsibility to design a learning environment that enables participants to take active responsibility (Bosch et al., 2019). In this context, it is important to note that participants will not be left to their own devices when making their choices but will be assisted to make appropriate choices, as MacDonald (2008) warns that certain participants arrive equipped to make their own choices, while others may be overwhelmed by the possibilities. Group decisions and goals are also set, as collaborative learning is not only one of the pillars of Picciano’s (2009) multimodal

model but also one of the key elements of self-directed learning (Garrison, 1997). Learning is treated as a social phenomenon, thereby creating positive interdependence (Bolhuis, 2003). After the learning goals have been set, the instructor and participant cooperate in assessing the participant's learning aims and the content to be covered. In line with Picciano's multimodal model, multiple technologies and media are utilised (Picciano, 2009). The instructor therefore supports the participant in establishing his or her learning goals and the choices he or she has when learning. Setting such a collaborative learning environment in which the participants have an input in shaping their own and collaborative learning goals will be conducive to constructing meaningful knowledge (Garrison, 1997). Furthermore, throughout the learning process, the participant is supported in developing "the necessary skills of reflection, self-direction and self-management" (George-Walker & Keeffe, 2010, p. 5) by journaling and constant course and learning evaluation. Developing these skills would ensure that not only the external contextual elements but also internal cognitive processes that precipitate and shape the participant's thinking are taken into account, thereby assisting each participant to develop a cognitive presence, which Garrison (2003, p. 4) defines as "the process of both reflection and discourse in the initiation, construction and confirmation of meaningful learning outcomes".

After the initial meetings, the instructor designs a learning environment focusing on collaboration (Picciano, 2009) online, in which participants work on achieving their individual learning outcomes, but simultaneously form part of a community that is united by its academic purpose and interest. In said community, group members work collaboratively. All actions are directed towards achieving communal learning outcomes (Garrison & Vaughan, 2008). A CoI is established in which participants are cognitively engaged and ideas are supported and critically analysed and meanings negotiated (Garrison, 2003). Furthermore, positive interdependence is established between participants by means of group goals in order to encourage them to display appropriate behaviour and to engage and achieve group outcomes (Bosch & Pool, 2019). Discussions and questioning form a large part of the group activities, as they allow the instructor to follow the participants' progress and assist them in refining their knowledge (Picciano, 2009). Participants are encouraged to complete regular reflections, both individually in journals and as a group in discussion forums, and they are requested to share their reflections with the instructor and the group to further enrich their reflections (Picciano, 2009). By modelling reflective enquiry, students develop the ability to manage and monitor their own learning. Hereby they develop the ability, as well as the confidence to be self-directed learners (Garrison, 2003). Conceptualising these interactions is imperative, as Garrison and Kanuka (2004, p. 97) regard one of *blended learning's* most promising opportunities to be the "quality and quantity of the interaction and the

sense of engagement in a community of inquiry and learning, achieved through the effective integration of Internet communication technology". Moreover, participant reflections and feedback enable the instructor to respond to the individual learner's situation as the learner progresses through a learning activity and to adapt either the activity itself or the technology to be used in order to support the participant's learning if necessary (Howard et al., 2006).

Towards the end of the programme, students submit an assignment that synthesises and assesses (Picciano, 2009) their learning. Learners evaluating their learning outcomes is another cornerstone of self-directed learning (Merriam, 2001). In the second face-to-face meeting, participants can evaluate both the programme and their own learning. They then formulate new goals, based on the achievement of the goals set in the first face-to-face meeting as well as their own continuous and summative reflections and, in cooperation with the instructor, develop new strategies to attain these new learning goals.

3.9 Conclusion

When developing a blended learning teacher development programme, it is important to not only focus on the content to be taught, but much rather on the skills to be learned in order for participants to develop into lifelong self-directed learners. By fostering the skills of the self-directed learner in participants, one would hope that participants would gradually learn to identify their own learning needs and make appropriate choices to satisfy their needs by being encouraged to set and assess their learning aims, initially mostly collaboratively but increasingly individually.

It is important to note in terms of limitations, that this article has not and does not intend to cover all the possible scholarship around blended learning, self-directed learning and teacher professional development. From the extensive literature review the authors then had to be selective in terms of specific literature in order to answer the posed research question.

The aim of this article was to fill a gap in the scholarly discourse by focusing on teacher professional development – an area currently under-researched in South Africa. A professional development model strongly aligned with Picciano's (2009) multimodal model was proposed and firmly placed within the *enriched virtual model* of Staker and Horn (2012), focusing primarily on fostering the skills of self-directed learners and on participants improving their pedagogical knowledge, in contrast to the more traditional teacher professional development models focusing on content knowledge. Should this model be implemented in practice, it is hoped that participants

would improve their pedagogical and technical knowledge of digital media while simultaneously improving their self-directed learning skills and being able to assist their own learners in doing the same.

Chapters 2 and 3 provided a discussion of the SDL and BL, which were proposed to serve as a theoretical basis for a professional development programme for teachers of German SAL in South Africa. The subsequent Chapters will be marked by a distinct shift in focus towards the practical implementation of the theory. In Chapter 4, the exact professional needs of the teachers of German SAL will be established, where after the instructional design of the professional development programme will be discussed in Chapter 5. In Chapter 6, the implementation and evaluation of said programme will be presented.

3.10 References

- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84(3), 261-271. <https://psycnet.apa.org/doi/10.1037/0022-0663.84.3.261>
- Anderman, E. M., & Young, A. J. (1994). Motivation and strategy use in science: Individual differences and classroom effects. *Journal of Research in Science Teaching*, 31(8), 811-831. <https://doi.org/10.1002/tea.3660310805>
- Annas, R. (2016). Deutsch an Universitäten im südlichen Afrika Zur Entwicklung des Fachs seit 2003: Afrika schreiben/writing Africa. *Acta Germanica: German Studies in Africa*, 44(1), 105-118. <https://hdl.handle.net/10520/EJC194887>
- Bath, D., & Bourke, J. (2010). *Blended learning*. Griffith University.
- Boitshwarelo, B. (2009). Exploring blended learning for science teacher professional development in an African context. *International Review of Research in Open and Distributed Learning*, 10(4), 1-19. <https://doi.org/10.19173/irrodl.v10i4.687>
- Bolhuis, S. (2003). Towards process-oriented teaching for self-directed lifelong learning: A multidimensional perspective. *Learning and Instruction*, 13(3), 327-347. [https://doi.org/10.1016/S0959-4752\(02\)00008-7](https://doi.org/10.1016/S0959-4752(02)00008-7)
- Bonk, C. J., Kim, K.-J., & Zeng, T. (2005). Future directions of blended learning in higher education and workplace learning settings. In P. Kommers, & G. Richards, (Eds.),

- EdMedia+ Innovate Learning* (pp. 3644-3649). Association for the Advancement of Computing in Education (AACE).
- Bosch, C., Mentz, E., & Reitsma, G. M. (2019). Integrating cooperative learning into the combined blended learning design model: Implications for students' intrinsic motivation. *International Journal of Mobile and Blended Learning*, 11(1), 58-73. Doi:[10.4018/IJMBL.2019010105](https://doi.org/10.4018/IJMBL.2019010105)
- Bosch, C., & Pool, J. (2019). Establishing a learning presence: Cooperative learning, blended learning, and self-directed learning. In L.N. Makewa, B.M. Ngussa, & J.M. Kuboja, (Eds.), *Technology-supported teaching and research methods for educators* (pp. 51-74). IGI Global.
- Castellanos-Reyes, D. (2020). 20 Years of the Community of Inquiry Framework. *TechTrends*, 64, 557–560. <https://doi.org/10.1007/s11528-020-00491-7>
- Christensen, C. M., Horn, M. B., & Staker, H. (2013). *Is K-12 blended learning disruptive? An introduction to the theory of hybrids*. Clayton Christensen Institute for Disruptive Innovation.
- Clark, D. (2003). *Blended learning*. Epic Group.
- Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley.
- Department of Education (DoE) (South Africa). (2004). *White Paper on e-Education: Transforming learning and teaching through information and communication technologies*. Government Printers. Retrieved March, 20, 2020, from https://www.gov.za/sites/default/files/gcis_document/201409/267341.pdf
- Department of Education (DoE) (South Africa). (2007). *Guidelines for teacher training and professional development in ICT*. Government Printers. Retrieved March, 20, 2020, from https://www.schoolnet.org.za/sharing/guidelines_teacher_training.pdf
- Department of Higher Education and Training (DHET) (South Africa). (2014). *Revised policy on the minimum requirements for teacher education qualifications*. Government Printers.
- Doering, A., Veletsianos, G., Scharber, C., & Miller, C. (2009). Using the technological, pedagogical, and content knowledge framework to design online learning environments

- and professional development. *Journal of Educational Computing Research*, 41(3), 319-346. <https://doi.org/10.2190%2FEC.41.3.d>
- Driscoll, M. (2002). Blended learning: Let's get beyond the hype. *Journal of E-learning*, 1(4), 1-4.
- Dziuban, C., Moskal, P., & Hartman, J. (2005). Higher education, blended learning, and the generations: Knowledge is power: No more. In J. Bourne, & J. C. Moore, (Eds.), *Elements of quality online education: Engaging communities* (pp. 88-105). Sloan Center for Online Education.
- Ganz, A., & Reinmann, G. (2007). Blended Learning in der Lehrerfortbildung-Evaluation einer Fortbildungsinitiative zum Einsatz digitaler Medien im Fachunterricht. *Unterrichtswissenschaft*, 35(2), 169-191.
- Garrison, D. R. (1992). Critical thinking and self-directed learning in adult education: An analysis of responsibility and control issues. *Adult Education Quarterly*, 42(3), 136-148. <https://doi.org/10.1177%2F074171369204200302>
- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48(1), 18-33. <https://doi.org/10.1177%2F074171369704800103>
- Garrison, D. R. (2003). Cognitive presence for effective asynchronous online learning: The role of reflective inquiry, self-direction and metacognition. *Elements of Quality Online Education: Practice and Direction*, 4(1), 47-58.
- Garrison, D.R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105. <https://doi.org/10.1016/j.iheduc.2004.02.001>
- Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. John Wiley.
- Garrison, D. R., & Vaughan, N. D. (2013). Institutional change and leadership associated with blended learning innovation: Two case studies. *The Internet and Higher Education*, 18, 24-28. <https://doi.org/10.1016/j.iheduc.2012.09.001>
- George-Walker, L. D., & Keeffe, M. (2010). Self-determined blended learning: A case study of blended learning design. *Higher Education Research & Development*, 29(1), 1-13. <https://doi.org/10.1080/07294360903277380>

- Graham, C. R. (2006). Blended learning systems. In C. J. Bonk, & C. R. Graham, (Eds.), *The Handbook of Blended Learning* (pp. 3-21). Pfeiffer.
- Graham, C. R., Allen, S., & Ure, D. (2003). *Blended learning environments: A review of the research literature*. Provo, UT. Retrieved January 14, 2020, from https://www.researchgate.net/publication/267774009_Blended_Learning_Environments
- Graham, C. R., Woodfield, W., & Harrison, J. B. (2013). A framework for institutional adoption and implementation of blended learning in higher education. *The Internet and Higher Education*, 18, 4-14. <https://doi.org/10.1016/j.iheduc.2012.09.003>
- Guglielmino, L. M. (2013). The case for promoting self-directed learning in formal educational institutions. *SA-eDUC*, 10(2), 1-18.
- Harber, C., & Mncube, V. (2011). Is schooling good for the development of society? The case of South Africa. *South African Journal of Education*, 31(2), 233-245. <https://doi.org/10.15700/saje.v31n2a483>
- Hew, K. F., & Cheung, W. S. (2014). *Using blended learning: Evidence-based practices*. Springer.
- Hofmann, J. (2006). Why blended learning hasn't (yet) fulfilled its promises. In C. J. Bonk, & C. R. Graham, (Eds.), *Handbook of blended learning: Global perspectives, local designs* (pp. 27-40). Pfeiffer.
- Howard, L., Remenyi, Z., & Pap, G. (2006) Adaptive blended learning environments. *International Conference on Engineering Education Session T3K-11* (pp.23-28). Retrieved December 14, 2019, from http://w3.isis.vanderbilt.edu/Projects/VaNTH/papers/icee_2006_p1.pdf#?
- Kim, J. (2013). Types of blended instructions: Different approaches to different mixes. In *36th Annual Proceedings of Association for Educational Communications and Technology* (pp. 474-484). Nova South-Eastern University. Association for Educational Communications and Technology. Retrieved December 16, 2019, from https://members.aect.org/pdf/Proceedings/proceedings13/2013i/13_21.pdf
- Knowles, M. S. (1973). *The adult learner: a neglected species*. Gulf Publishing.
- Launer, R. (2011). Blended Learning für den Fremdsprachenunterricht aus Perspektive der Wirksamkeitsforschung. *Grenzen überwinden mit Deutsch*, 37, 179-191. <https://d-nb.info/115382888X/34#page=189>

- Laurien, I. (2006). 'Das Fach Deutsch an Universitäten im» Neuen Südafrika «–Eine» Laborsituation «für Europa? *Informationen Deutsch als Fremdsprache*, 33(5), 438-445. http://www.daf.de/downloads/InfoDaF_2006_Heft_5.pdf#page=46
- Lubbe, A. & Mentz, E. (2019). Participative assessment practices and its contribution to the development of self-directed learning skills. In E. Mentz, J. De Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century: Implications for Higher Education* (pp. 341-368). AOSIS. (NWU Self-Directed Learning Series Volume 1).
- Lynch, R., & Dembo, M. (2004). The relationship between self-regulation and online learning in a blended learning context. *International Review of Research in Open and Distributed Learning*, 5(2), 1-16. <https://doi.org/10.19173/irrodl.v5i2.189>
- MacDonald, J. (2008). *Blended learning and online tutoring: Planning learner support and activity design* (2nd ed.). Gower Publishing.
- Masie, E. (2006). The blended learning imperative. In C. Bonk & C. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 22-27). Pfeiffer.
- Matzat, U. (2013). Do blended virtual learning communities enhance teachers' professional development more than purely virtual ones? A large scale empirical comparison. *Computers & Education*, 60(1), 40-51. <https://doi.org/10.1016/j.compedu.2012.08.006>
- Mbohwa-Pagels, K., & Rode, R. (2014). DaF im SA Schulsystem. *eDusa*, 9(1), 13-19.
- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, (89), 3-14. <https://doi-org.nwulib.nwu.ac.za/10.1002/ace.3>
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054. <https://www.learntechlib.org/p/99246/>
- Murray, M. C., & Pérez, J. (2015). Informing and performing: A study comparing adaptive learning to traditional learning. *Informing Science: The International Journal of an Emerging Transdiscipline*, 18, 111-125. <http://www.inform.nu/Articles/Vol18/ISJv18p111-125Murray1572.pdf>

- Oliver, M., & Trigwell, K. (2005). Can 'blended learning' be redeemed? *E-learning and Digital Media*, 2(1), 17-26. <https://doi.org/10.2304%2Felea.2005.2.1.17>
- Olivier, J. (2019). Towards a multiliteracies framework in support of self-directed learning through open educational resources' skills. In E. Mentz, J. De Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century. implications for Higher Education* (pp. 167-201). AOSIS. (NWU Self-Directed Learning Series Volume 1).
- Osburg, T., & Todorova, A. (2009). Online platform support for sustained, collaborative and self-directed engagement of teachers in a blended professional development program. In M. Spaniol, Q. Li, R. Klamma, & R. W. H. Lau, (Eds.), *Advances in Web Based Learning – ICWL 2009. ICWL 2009. Lecture Notes in Computer Science*, vol 5686, pp. 312-321. Springer https://doi.org/10.1007/978-3-642-03426-8_38
- Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning environments: Definitions and directions. *Quarterly Review of Distance Education*, 4(3), 227-233. <https://www.learntechlib.org/p/97576/>
- Petersen, N., & Mentz, E. (2016). The influence of cooperative learning methods on second-year tertiary student-teachers' levels of self-directedness in learning. In M.A. Mokoena, & I. Oosthuizen, (Eds.), *A Kaleidoscope of advances in modern day education* (pp. 41-63). Ivyline Academic Publishers.
- Picciano, A. G. (2009). Blending with purpose: The multimodal model. *Journal of Asynchronous Learning Networks*, 13(1), 7-18. <https://eric.ed.gov/?id=EJ837540>
- Poon, J. (2013). Blended learning: An institutional approach for enhancing students' learning experiences. *Journal of Online Learning and Teaching*, 9(2), 271-288. <http://hdl.handle.net/10536/DRO/DU:30057995>
- Porter, W. W., Graham, C. R., Spring, K. A., & Welch, K. R. (2014). Blended learning in higher education: Institutional adoption and implementation. *Computers & Education*, 75, 185-195. <https://doi.org/10.1016/j.compedu.2014.02.011>
- PuenteDura, R. (2012). The SAMR model: Six exemplars. Retrieved August 14, 2019, from http://www.hippasus.com/rrpweblog/archives/2012/08/14/SAMR_SixExemplars.pdf

- Ranieri, M., Giampaolo, M., & Bruni, I. (2019). Exploring educators' professional learning ecologies in a blended learning environment. *British Journal of Educational Technology*, 50(4), 1673-1686. <https://doi.org/10.1111/bjet.12793>
- Reinmann, G., Florian, A., Häuptle, E., & Metscher, J. (2009). *Wissenschaftliche Begleitung von Blended Learning in der Lehrerfortbildung: Konzept, Methodik, Ergebnisse, Erfahrungen und Empfehlungen am Beispiel" Intel® Lehren–Aufbaukurs Online*. MV - Wissenschaft.
- Romrell, D., Kidder, L., & Wood, E. (2014). The SAMR model as a framework for evaluating mLearning. *Online Learning Journal* 18(2). <https://www.learntechlib.org/p/183753/>
- Ross, M. E., Shannon, D. M., Salisbury-Glennon, J. D., & Guarino, A. (2002). The patterns of adaptive learning survey: A comparison across grade levels. *Educational and Psychological Measurement*, 62(3), 483-497. <https://doi.org/10.1177%2F00164402062003006>
- Sahare, S., & Thampi, G. (2010). Blended learning: Current trends and issues. In Z. Abas, I. Jung, & J. Luca, (Eds.), In Z. Abas i. Jung, & J. Luca, (Eds.), *Proceedings of Global Learn Asia Pacific 2010--Global Conference on Learning and Technology* (pp.3970-3977). Penang, Malaysia: Association for the Advancement of Computing in Education (AACE). Retrieved August 28, 2019, from <https://www.learntechlib.org/primary/p/34484/>
- Singh, H., & Reed, C. (2001). A white paper: Achieving success with blended learning. Centra software. Retrieved December 1, 2019, from <http://www.leerbeleving.nl/wbts/wbt2014/blend-ce.pdf>
- Staker, H., & Horn, M. B. (2012). *Classifying K-12 blended learning*. Innosight Institute.
- Stein, J., & Graham, C. R. (2014). *Essentials for blended learning a standards-based guide*. Routledge.
- Vaughan, N. (2007). Perspectives on blended learning in higher education. *International Journal on E-learning*, 6(1), 81-94. <https://www.learntechlib.org/primary/p/6310/>
- Von Maltzan, C. (2009). Sprachenpolitik und die Rolle der Fremdsprachen (Deutsch) in Südafrika. *Stellenbosch Papers in Linguistics PLUS*, 38, 205-214. <https://hdl.handle.net/10520/EJC143430>

- Wang, M. (2010). Online collaboration and offline interaction between students using asynchronous tools in blended learning. *Australasian Journal of Educational Technology*, 26(6), 830-846. <https://doi.org/10.14742/ajet.1045>
- Wittmann, G.-E., & Olivier, J. (2019). Professional development in fostering self-directed learning in German Second Additional Language teachers. *Per Linguam*, 35(3), 125-142. <https://dx.doi.org/10.5785/35-3-870>

CHAPTER 4 PROFESSIONAL DEVELOPMENT NEEDS OF TEACHERS OF GERMAN SECOND ADDITIONAL LANGUAGE IN SOUTH AFRICA

4.1 Abstract

While various studies have been undertaken on the teaching and learning of German in South Africa, this article aims to fill a research gap by conducting a thorough analysis of the professional development needs of teachers of German Second Additional Language (SAL) in South Africa. The mixed-method investigation that was used involved interviews with experts in the field as well as a questionnaire administered to teachers of German. Results of the research indicated that while these teachers do receive support from German institutions, there is a lack of support focused specifically on the situation of these teachers in South Africa. Various sources were consulted and triangulated to formulate recommendations as to what a professional development programme, based on the needs of German SAL teachers in South Africa, should entail.

4.2 Keywords

Expectations of teachers, German SAL, teacher professional development, needs analysis, teaching and learning, teaching situations.

Keywords

Erwartungen, German SAL, Lehrerfort- und -weiterbildung, Bedarfsanalyse, Erwartungen, Lehren und Lernen, Lehrvoraussetzungen.

4.3 Introduction

This article explores the needs of teachers of German Second Additional Language (SAL) in the context of teacher development, and as such, should be regarded within the context of a number of studies on the teaching and learning of German in South Africa that have been conducted in the past. (Annas, 2016:9; Augart, 2012; Mbohwa-Pagels & Rode, 2014; Von Maltzan, 2009; Weber, 2018) In an attempt to gain an overview of the teaching and learning of German, as well as the challenges that teachers of German face in South Africa, the Goethe- Institut Johannesburg conducted a nation-wide survey amongst teachers of German in South Africa in 2013. (Mbohwa-Pagels & Rode, 2014) Similarly, Annas (2016) investigated the development of German as a subject at South African universities since 2003, while Laurien (2006) described the subject German at South African universities in post-Apartheid South Africa, and von Maltzan (2009) examined South African language politics and the role German plays as a foreign language in South Africa. However, the above-mentioned studies were of a descriptive nature, focusing mainly

on German as a foreign language at universities, and German in South African society in general, or merely describing German SAL in the schooling sector. More recently, Wittmann and Olivier (2019) proposed professional development opportunities to foster the self-directed learning of German SAL teachers in South Africa, but this study was of a theoretical nature. Therefore, there has thus far been no recent comprehensive research conducted on teachers of German SAL in South Africa and their professional development needs.¹⁴ This article¹⁵ seeks to remedy the situation by presenting a comprehensive analysis of the professional development needs of German SAL teachers in South Africa, not only by taking into account both relevant policies published by the Department of Basic Education and recent developments in teacher professional development activities worldwide, but also by giving teachers a voice in expressing their own perceived professional development needs.

4.4 Research design

When seeking to determine the professional development needs of German SAL teachers in South Africa, it is important to conduct a thorough needs analysis. West (1994) traces the concept of *needs analysis* in language teaching back to the 1920s in India, where it referred not only to what learners would be required to do with the foreign language in a target situation, but also to how the target language might best be mastered. Since then, needs analyses have developed significantly to become empirical processes whereby necessary information is accumulated and analysed (Hong 2019) in order to draw conclusions for the curriculum development of foreign language teaching. (Brown, 2009; Funk, 2010; Long, 2015) Research on needs analyses and definitions, and approaches to needs analyses in German as a Foreign Language (Deutsch als Fremdsprache / DaF) are still largely based on ESP (English for Specific Purposes) and English literature. (Hong, 2019) However, even though research involving needs analyses in ESP and English literature has been published, little attention has been paid to needs analysis theories and approaches. (Long, 2005b; Serafini et al., 2015) Similarly, with regard to German as a Foreign Language, research involving needs analyses tends to be an account of the results yielded by the analysis, with little regard paid to theory development and the approach itself. (Hong, 2019) This article, therefore, seeks to present a detailed analysis of the needs of German SAL teachers

¹⁴ The nature of university training falls outside of the focus of this article and the wider project. Some of the recommendations made from the study will have implications for university training, but the focus here has been deliberately on teacher professional development as a specific need exists in this regard.

¹⁵ This article is part of PhD research focussing on the professional teacher development of German SAL teachers in South Africa. (cf. Wittmann & Olivier 2019)

in South Africa underlined by a solid theoretical foundation, thereby addressing a shortcoming in existing research.

Apart from the fact that in research in this field, little attention has been paid to the theory of needs analyses, Long (2005a) also criticises the fact that in many foreign and second language settings, needs analyses are conducted in the form of semi-structured interviews or questionnaires, to be completed by learners. While he concedes that learners wish to be consulted and are often well-informed (Long, 2005a), he questions the sufficiency of learners as the sole source of information for a needs analysis and suggests that information rather be collected from five different sources: “Published and unpublished literature, learners, teachers and applied linguists, domain experts and triangulated sources” (Long, 2005a: p. 25). An effective needs analysis should, therefore, draw on multiple sources within and outside of the field of German SAL teaching, and a variety of quantitative and qualitative methods, to determine course content. (Serafini et al., 2015)

This article will follow the recommendations mentioned above by Serafini et al. (2015) in an attempt to identify the professional development needs of German SAL teachers in South Africa, a variety of knowledge sources were consulted, using a combination of methods. However, as this article is framed around professional development programmes for teachers, the latter will take on the role of *learners* as the participants in Long’s model, while *teachers and applied linguists* will be assumed to include information-rich participants and teacher professional development experts. Relevant scientific research in this field will also be included.

4.4.1 Published and unpublished literature: scholarly research

Similar to needs analyses, empirical research on second and foreign language teacher education and professional development has been conducted predominantly by researchers in the field of TEFL (Teaching English as a Foreign Language). (Singh & Richards, 2006) However, as is the case with research on needs analyses, Legutke and Schart (2016) bemoan the fact that the discourse is still dominated by research on TEFL and that little work exists concerning the professionalisation of German as a Foreign Language. However, training for teachers of German as a Foreign Language seems to follow a trend set by Freeman and Johnson (1998), who argued that in second and foreign language teacher education, there should be a shift from the transmission view (where the teacher is seen to be a bridge between the learner and the subject matter) towards a comprehensive model based on three domains. These are represented by the “teacher-learner”, the “Social Context: Schools and Schooling”, and “The Pedagogical Process: Language Teaching and Learning”. (Freeman & Johnson, 1998, pp. 407-409) Legutke and Schart (2016, p. 18) expand on Freeman and Johnson’s model by proposing closely interwoven

dimensions: “Sprache und Kultur” (language and culture), “Lehren und Lernen” (teaching and learning), “Identität und Rolle” (identity and role), and “Kooperation und Entwicklung” (cooperation and development), all of which are strongly influenced by the local context and institutional conditions. Freeman and Johnson (1998) and Legutke and Schart (2016) call for a teacher training concept that does not focus on the mere transmission of knowledge, but rather on teachers and the contexts in which they operate.

In the training and professional development of teachers of German, an international trend towards this more reflective, practice-based approach can be detected (Abendroth-Timmer, 2011; Benitt, 2019; Puljić, 2010). A number of studies on professional development for teachers of German as a Foreign Language¹⁶ have been conducted, of which only a few cursory examples will be mentioned. Enns (1996) reports on a new teacher professional development programme in Canada that has been modelled around Canadian German teachers’ need for a development model that offers more support to teachers than previous models, while simultaneously requiring fewer resources. The programme also takes into account the relative isolation of Canadian German teachers due to long distances between schools, under the heading “Hilfe zur Selbsthilfe.”¹⁷ This model focuses strongly on a paradigm shift in Canadian German teachers’ conferences from a transmission model with isolated events towards an interaction model with continual learning processes (Enns, 1996). Similarly, Esteve (2011, p. 100) gives an account of developments in the teacher training methodology in Spain, known as “Learning from practice”, which is based on exploratory practice and reflective teaching. Furthermore, Dos Santos et al. (2019) give insights into a teacher training programme in Brazil, in which participants use the principles of action-research to reflect on their own teaching. A recent study in Japan by Schart and Ohta (2018) follows the same trend by emphasising the participation of teachers, their views of their profession and themselves, as well as their working conditions, and using these aspects as a basis for in-service training.

¹⁶ In this study, the term “German as a Foreign Language” applies to the general teaching of this discipline worldwide. “German Second Additional Language” (SAL) refers to the school subject as it exists in South Africa.

¹⁷ Authors’ own translation: “Assistance for self-assistance”.

4.4.2 Published and unpublished literature: Expectations of German SAL teachers regarding professional development

In the public and private sector, most employers maintain detailed job descriptions for their employees. These job descriptions usually take the form of lists of tasks that a job entails, sometimes accompanied by minimum performance standards (Long, 2005a). A similar practice applies to teachers of German SAL in South Africa, whose minimum performance standards are regulated by South African legislation and policies.

The Constitution of the Republic of South Africa (1996), in Section 6(5)(b)(i), calls for the establishment of a Pan South African Language Board to promote and ensure respect for “all languages commonly used by communities in South Africa, including German, Greek, Gujarati, Hindi, Portuguese, Tamil, Telegu and Urdu”. Therefore, even though German is not one of South Africa’s official languages, it is protected by the Constitution. In the South African schooling system, the subject *German Second Additional Language* is currently regulated by the *Language in Education Policy* (Department of Basic Education (DBE), 1997, p. 1) as a Second Additional Language (SAL). The Second Additional Language level is defined in the *Curriculum and Assessment Policy Statement (CAPS)* of 2011. While theoretically allowing for SALs to be taught from Grade 4,

[s]chools offering an optional language or at least Second Additional Language level may do so [only] if they can make an arrangement for the allocation of additional time to the allocated 27.5 hours (DBE, 2011b, p.8),

The CAPS (DBE, 2011b, p. 7) further instructs that

[t]he allocated time per week may be utilised only for the minimum required NCS¹⁸ subjects as specified above, and may not be used for any additional subjects added to the list of minimum subjects. Should a learner wish to offer [*sic*] additional subjects, additional time must be allocated for the offering of these subjects.”¹⁹

In practice, this translates to teachers having to offer SAL outside of regular school hours. Therefore, teaching SAL presents a considerable challenge for teachers, due not only to the time

¹⁸ National Curriculum Statement.

¹⁹ In the reading of this excerpt, the interpretation of Mbohwa-Pagels and Rode (2014) will be followed. It will be assumed that schools are allowed to offer additional subjects outside regular school hours only.

constraints, but also to the fact that the content and assessment requirements provided in the CAPS (DBE, 2011b) for all SALs have been conceptualised for English, allowing this language to shape curricula for all other languages (Murray, 2013). As South African pupils are often exposed to English in their natural environment, it seems like a daunting task for teachers of other SALs to have to cover the same content as is covered in English, but then in languages that learners are not exposed to outside of the classroom.

In its *National Curriculum Statement Grades 10 – 12 (General) Languages German Second Additional Language*, the Department of Education describes the kind of teacher that is envisaged (DoE, 2003, p. 5):

All teachers and other educators are key contributors to the transformation of education in South Africa. The National Curriculum Statement Grades 10–12 (General) visualises teachers who are qualified, competent, dedicated and caring. They will be able to fulfil the various roles outlined in the Norms and Standards for Educators. These include being mediators of learning, interpreters and designers of Learning Programmes and materials, leaders, administrators and managers, scholars, researchers and lifelong learners, community members, citizens and pastors, assessors, and subject specialists.

When reading the above description of the ‘ideal’ German SAL teacher, it becomes clear how much emphasis the Department of Education puts on life-long learning. This emphasis is repeated in the same statement’s description of the ideal learner (DoE, 2003, p.5):

In addition to the above, learners emerging from the Further Education and Training band must:

- have access to, and succeed in, lifelong education and training of good quality;
- demonstrate an ability to think logically and analytically, as well as holistically and laterally; and
- be able to transfer skills from familiar to unfamiliar situations.

As is the case with other school subjects, professional development for teachers of German Second Additional Language is managed by the South African Council for Educators (SACE), which received this mandate in the *National Policy Framework for Teacher Education and Development in South Africa (NPFTED)* (DoE, 2006, p. 16):

[...] the South African Council for Educators (SACE), as a statutory body for professional educators will have overall responsibility for the implementation, management and quality

assurance of the CPTD system. SACE will be provided with the necessary resources and support to undertake that role.

The SACE, in turn, reiterates on its webpage the requirement for teachers to remain lifelong learners:

An educator:

[...]

3. keeps abreast of educational trends and developments;
 4. promotes the ongoing development of teaching as a profession;
 5. accepts that he or she has a professional obligation towards the education and induction into the profession of new members of the teaching profession. [...]
- (SACE, 2019)

In its *Continuing Professional Teacher Development (CPTD) Management Handbook* for teachers, principals and school management teams, district coordinating committees, provincial coordinating committees, professional development providers, and others who support continuing professional teacher development (SACE, 2013, p.4), the SACE once again reiterates the need for teachers to remain life-long learners. Furthermore, it states that teachers are required to gain 150 points in their Personal Professional Development Points Account (PPDPA) in a three-year cycle by means of a combination of activities: Type 1 Activities (initiated by the teacher), Type 2 Activities (initiated by the school) and Type 3 Activities (initiated externally) (SACE, 2013, p.9). However, little information is provided on the specific skills teachers are expected to gain and the activities they are expected to participate in.

4.4.3 Research methodology

In order to collect information scientifically and ethically, this research followed a survey design (Kothari 2004) with two groups of participants. Initially, three e-mail interviews with information-rich participants were conducted. Based on these interviews, a questionnaire including both closed and open-ended questions was set up in consultation with the Statistical Consultation Service at North-West University (NWU) and approved by the NWU Faculty of Education Research Ethics Committee. This questionnaire was distributed to German SAL teachers in South Africa. The two participant groups and the research results will be discussed separately, with the research findings to be compared and triangulated towards the end of this article.

4.4.3.1 Sampling

Three participants were selected by means of purposeful sampling on the grounds that they were “especially knowledgeable about or experienced with a phenomenon of interest” (Palinkas et al., 2015, p. 534). Due to the researcher’s prolonged engagement with and familiarity in the field, it was possible to identify three particularly knowledgeable and influential interviewees, as was deemed acceptable in terms of the requirements set by Shenton (2004, p. 65).

While this study is based on Long’s (2005b) work on needs analysis, it has to be considered that his work is focused on language acquisition, while this study focuses on teacher development. Therefore, teachers in Long’s context are here conceived as participants, rather than teachers.

4.4.3.2 Data Collection

Responses from the e-mail interviews were coded inductively by the researcher herself. Three senior academics confirmed the accuracy of the codes.

The first interviewee was a former Curriculum Advisor from a South African Provincial Department, who also had been involved in teacher training, while the second was a former university lecturer, who shared insights into the development of teacher training at universities in the country. In addition, an experienced teacher at a highly-ranked school, who is well known in the field of German SAL, holds various high-ranking board positions and has vast teaching and teacher training expertise, provided a perspective on German SAL teaching in South Africa, and the challenges it poses to teachers.

4.4.3.3 Data Analysis

The analysis focused on the experiences of the information-rich participants in relation to German SAL teacher development, as well as German SAL teaching in South Africa. All qualitative data was analysed by inductive coding (Corbin & Strauss, 2014). As the amount of data gathered was fairly limited, coding was done manually. Initial coding, which refers to the separation of data into smaller parts and the close examination and comparison thereof (Corbin & Strauss, 2014), was undertaken. To ensure trustworthiness of the data analysis, the researcher was assisted by additional coders (Turner & Daniel, 2010, p. 759), and “thick descriptions” (Merriam, 1985, p. 206) were employed.

In the coding, seven themes emerged, and these were subsequently labelled as “Support”, “Threats”, “Teachers”, “Trends and development”, “Respondents’ personal opinions”, “Professional experience” and “Opportunities for the learners.” The first four themes were identified as being the most relevant to the need analysis itself and will be described in more detail below.

All interviewees stated clearly that the main support received by German SAL teachers in South Africa is from the Goethe-Institut, in the form of teaching and learning material or professional development opportunities. Interviewee 1 saw the Goethe-Institut as the only opportunity for teacher professional development:

Other than the opportunities provided by the Goethe-Institute, there is no other in-service training for German teachers. We do not even have subject advisors to support us – all other subjects have. [1: 64-65]

While Interviewees 2 and 3 agreed that the Goethe-Institut plays a major role in teachers’ professional development, they also mentioned other institutions such as the *Central Agency for German Schools Abroad* (Zentralstelle fürs Auslandsschulwesen / ZfA)²⁰[2: 27], the *German Academic Exchange Service* (Deutscher Akademischer Austauschdienst / DAAD) [3: 21] and German departments at universities. [2: 29–31] Whilst not designating it in those terms, Interviewee 2 agreed with Wittmann and Olivier (2019, p. 133) on the importance of self-directed learning for German SAL teachers and stressed the importance of teachers taking responsibility for their own learning:

But they [the teachers] must also be made aware that they simply have to switch to German on their smart phones to begin with and secondly that they have German podcasts to pick and choose at their disposal in order to keep up with the language and the “Landeskunde.” They must realise that they can simply download an app such as “Simple Radio” onto their smart phones in order to listen to German radio broadcasts 24 hours a day and that telephone conversations via Skype and WhatsApp cost next to

²⁰ Note by researcher: While the ZFA does offer training opportunities and bursaries, these are strictly limited to schools within its network.

nothing. (For those who can afford it – DEUKOM brings German television into your living room. And then there is such a thing as Netflix and streaming!) [2: 60– 69]²¹

The main threats that were identified as facing German SAL teachers and teaching could be classified according to several themes. One of these, namely “time constraints / teaching load,” was already identified as a threat to German SAL in South Africa by Mbohwa-Pagels and Rode (2014, p. 16). Other themes were “lack of subject advisors,” “lack of in-service training opportunities,” “cost of professional development opportunities” and “isolation / distance between schools.” The attitude of the headmaster and/or school governing body was seen as both a potential threat and a source of support, as Interviewee 1 states:

Unfortunately the schools that still offer German as a subject are mostly those schools where headmasters and government bodies are well-informed about the global and academic opportunities that a foreign language offers. If a headmaster does not believe in this cause, the subject is doomed. [1:53-55]

Interviewee 2 agreed, saying that:

In those cases where a highly skilled and motivated teacher is teaching German SAL this subject is on a sound footing, provided that she / he has the full support of the headmaster. [2:21-23]

Interviewee 3 concurred, but elaborated by mentioning the importance of parents:

In my opinion these are schools, where both management and parents are interested in the promotion of foreign languages, as these contribute to a broader general knowledge and they are convinced that these offer their children better chances of future employment”. [3:3-7]

Regarding the role of teachers themselves, interviewees stressed the importance of teachers showing initiative regarding their teaching and learning. While this might put an additional strain on teachers, who are already overwhelmed by their workloads, it would be achievable for self-

²¹²¹ Quotes from participants do not appear in the bibliography, as all data was coded anonymously. However, quotes are referenced in the text as [Number assigned to participant: Lines in participant's answer].

directed life-long learners (Merriam, 2001), which the Department of Basic Education (DoE, 2003) expects teachers to be (Wittmann & Olivier 2019).

The interviewees were furthermore concerned about teachers' lack of knowledge regarding digital media, their language skills, and the fact that many are of an older age, which Mbohwa-Pagels and Rode (2014) already remarked upon in 2014. However, the information-rich participants also commented on teachers' attributes and personality traits, and mentioned their high motivation levels. Interviewee 2 said,

However, the teachers of German SAL still remaining in South Africa are generally highly motivated and display far better linguistic skills in German than the teachers of yesteryear. I get the impression that they enjoy teaching German in spite of all the bureaucracy imposed upon them. They are special!" [2:58-53]

These motivation levels are corroborated by Mbohwa-Pagels and Rode (2014).

While the positive feeling towards German SAL teachers seems to be a trend in the interviews, interviewees were concerned about trends like dwindling learner numbers, the closing of German departments at secondary and tertiary levels, and the financial situations of schools, as well as the apparently doubtful future of the teaching of German in South Africa. The support of the headmaster/headmistress was seen as crucial in regard to the future of the subject at a school.

4.4.4 German SAL Teachers

Once the data collected from the information-rich participants was analysed, the data gathered during these interviews was used to develop a basic non-standardised profiling questionnaire, which will be elaborated on in the following section. Whereas Long (2005b) refers to "learners," in this case, German SAL teachers take on the role of participants in the professional development programme.

4.4.4.1 Sampling

Based on the qualitative data gathered in the interviews with information-rich participants, a basic non-standardised profiling questionnaire was set up and approved by the NWU Faculty of Education Research Ethics Committee. After permission to conduct the research at schools within the different provinces had been obtained from the relevant provincial departments, the questionnaire was sent to headmasters with a request for permission to send these

questionnaires to their teachers. The questionnaire was sent to all German SAL teachers in South Africa whose headmasters had granted such permission, although only those German SAL teachers (N=14) who had given full informed consent completed the questionnaires. As not all German SAL teachers were assumed to have the appropriate technology for submission via *Google Forms*, special provision was made to distribute the questionnaire through postal services as well. However, teachers did not express a need for this avenue of communication. German SAL teachers working at private German schools funded by the German Government (Deutsche Auslandsschulen) were excluded, as these schools operate under different circumstances to schools not funded by the German Government.

4.4.4.2 Data collection

The content and nature of the open and closed questions in the questionnaire ranged from questions that were asked merely to provide an overview of the German SAL teacher population (age, qualification) to more open-ended questions which were determined by the interviews with the information-rich participants. Questions in the questionnaire were formulated so as to gather comprehensive data on:

- Where and how German is taught in South African schools, and under what conditions;
- The language profiles of South African German teachers, as well as the level of education of these teachers and the technology available to them;
- Developmental needs as perceived by the German SAL teachers.

Based on the collected data, German SAL teachers were profiled according to their educational background, their home language, their teaching environment and their access to and knowledge about technology.

4.4.4.3 Data analysis

Participants ranged in age from 25 to 65 years, with nine teachers reporting to be older than 40 years, while five teachers reported that they were younger than 40. Only 15.4% of the teachers spoke German as a first language, while the biggest group comprised first language speakers of Afrikaans (76.9%). Similarly, Afrikaans was reported to be spoken by 84.6% of the learners taught by these teachers. All teachers stated that they were teaching at a high school. While all teachers had at least a bachelor's degree, the highest qualification was a master's degree. Two teachers reported that they had no teaching qualification. While overall teaching experience ranged from 0 to 42 years, German SAL teaching experience ranged from 0 to 37 years. Teachers reported

either that they received no additional funding and resources from any institution, or that they received support from the Goethe-Institut Johannesburg if they were PASCH-schools,²² or from the ZfA²³ if they were DSD-schools²⁴. Twelve of the fourteen teachers reported that they had been able to attend training opportunities in German-speaking countries (Germany, Austria, Switzerland or Liechtenstein) in the last five years.

Only one teacher reported that additional teaching materials were not readily available, while nine teachers stated that these were readily available. However, participants commented on the suitability of the material, or on their insecurities with regard to selecting appropriate material and content:²⁵

Finding resources + not knowing what to teach Scaffolding in grade 8. The book that I am using expects learners to construct sentences / responses without giving them the tools to do so. [3:9]

Eleven teachers reported that it was possible to use digital media in their classrooms. However, only three teachers reported that they confidently used digital media in their classrooms.

The greatest needs for functioning optimally as teachers were identified to be teaching materials, time, own classrooms, digital know-how, guidelines on what and how to teach, and contact with other teachers. One respondent, for example, reported:

I would like each learner to have a textbook but it is to (sic) expensive for them. Because the subject has so few learners, the school does not supply German textbooks. The

²² PASCH refers to “Schools: Partners for the Future” and is an initiative coordinated by the Federal Foreign Office and implemented in cooperation with the Central Agency for Schools Abroad (ZfA), the Goethe-Institut, the German Academic Exchange Service and the Educational Exchange Service of the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany. This initiative creates a network of schools with particular ties to Germany. PASCH schools receive additional funding, bursaries for teachers and exchange opportunities for learners.

²³ The *Zentralstelle für Auslandschulwesen* is an agency in the Federal Republic of Germany tasked with overseeing German teachers at German schools worldwide

²⁴ DSD –schools receive special support from the ZfA, but it is expected of them to conduct a certain number of DSD (Deutsches Sprachdiplom) examinations yearly.

²⁵ All responses given by participants in Google forms were directly quoted in this article without any language editing

fact that we do not have a specific curriculum for German is sometimes frustrating when you don't have specific outcomes and dates like other subjects. [6:8]

Another respondent mentioned:

Clearer guidelines on what I expected to teach / what can be expected of the learners in each grade. Good + clear grammar resources with explanations that make sense to SAL learners / relate it to their home language. [3:8]

In describing their challenges, teachers again reported a lack of time and funds.

Although the schools recognise (sic) German as a SAL, I have to do everything after school and need to "find" learners to learn the subject. The interested learners are often the all-rounders and it is very difficult to have a timetable that suits everyone. Money is often a problem. School fees [sic] are high and to pay for additional for an extra subject (German language), for many impossible. [2:9]

A lack of support from their schools or respective education departments was furthermore mentioned.

Obtaining prescribed material, the fact that the [...] education department doesn't always understand how assessment is done by the IEB. [4: 9]

The uncertainty of what we have to do exactly in grade 10 and 11. Each school do as they wish. In the end it is only grade 12 that matters. In grade 12 there is still a lot of discrepancies between what the IEB and the [Department of Education] wants in connection with mark sheets. [6:9]

When participants were asked to describe their biggest developmental need, the most pressing concern seemed to be knowing how to keep up to date with recent developments in teaching and learning, and incorporating history, music and new trends into teaching. Methodology and the selection of learning material were also mentioned: "The textbooks are good, but move to fast [sic]. There are not enough reading and listening exercises and grammar exercises...and grammar notes and vocabulary lists." [10:8]

On the other hand, one participant did mention the opportunities available, but made it clear that it was up to teachers themselves to make use of them:

I don't have a specific need regarding development because we get such a lot of opportunities from the Goethe Institut to develop ourselves. If you go to these workshops you develop yourself each time. [6:10]

In this case, the amount of emphasis the participant placed on the responsibility of “self” to develop himself or herself seems remarkable. Life-long self-directed learning did seem to be a matter of interest, as one teacher described his/her biggest need as being: “to know what is happening in the field of second language teaching—new text books, interesting websites, etc.” [4:10]. Another participant expanded on this need in the sense of wanting to be able to pass it on to his or her learners “[s]kills in getting the kids to work more on their own.” [11:10]

4.4.5 Existing teacher development programmes

As has been mentioned, the main contributor to the professional development of German SAL teachers is the Goethe-Institut Johannesburg. The Institute organises and funds one three-day National German Teacher's Conference (Nationale Deutschlehrertagung [NDLT]) every two years, which alternates with one one-day teachers' professional development training in the Free State, Gauteng, Western Cape and KwaZulu-Natal provinces in those years that the NDLT does not take place. These professional development opportunities are not aimed specifically at German SAL teachers in high schools, however, but have a general approach in an endeavour to include German educators from primary school level up to university level.

Should a teacher wish to follow a more comprehensive professional development model, he or she has the opportunity to take up an offer from the Goethe-Institut. The most influential recent teacher development programme, which is employed by Goethe-Institutes worldwide, is known as *Deutsch Lehren Lernen* (Learning the Teaching of German), or DLL (Legutke & Rotberg 2018, p. 606). The programme comprises six basic modules, each of which is an independent unit that could be presented either in a blended learning environment or fully online (Legutke & Rotberg, 2018, p. 606). The first of these modules is *Lehrkompetenz und Unterrichtsgestaltung*.²⁶ (Schart & Legutke, 2012) The second module is *Wie lernt man die Fremdsprache Deutsch?* (Ballweg et

²⁶ Teaching Skills and Planning Lessons.

al., 2013),²⁷ which is followed by *Deutsch als fremde Sprache*²⁸ (Barkowski et al., 2014), *Aufgaben, Übungen, Interaktion*²⁹ (Funk et al., 2014), *Lernmaterialien und Medien*³⁰ (Rösler & Würffel, 2014), and finally *Curriculare Vorgaben und Unterrichtsplanung*.³¹ (Ende et al., 2013) While these six modules form the foundation of DLL, further modules are continually being developed.

The DLL units are based on the quality criteria for professional development programmes for foreign language teachers as laid down by Legutke (2010):

- Teacher professional development activities should not be planned around scientific and didactical theories, but rather concrete teaching requirements.
- Teacher development activities should create conditions which encourage teachers to bring their views and experiences into the developmental activity discourse, as these are to be developed and strengthened.
- Teacher development activities must provide new learning experiences for the participants.
- Participants must be able to study the learning processes of other colleagues and be able to analyse them with the necessary documentation.
- Reflective experiential learning must be developed.
- Participants must have the opportunity to view the known from a new perspective, without discrediting their current practice.
- Participants must be able to use their own experiences to gain access to didactical or scientific knowledge.
- Teacher development activities should always be in the target language, as they can also act as language training opportunities.

The units were developed, moreover, to be directly related to participants' own teaching, to encourage cooperative dialogical learning, to be based on reflective experiential learning, to have solid theoretical and didactical foundations, to be certifiable, and to generate a database for

²⁷ How is German Learned as a Foreign Language?

²⁸ German as a Foreign Language.

²⁹ Assignments, Exercises and Interactions.

³⁰ Learning Materials and Media.

³¹ Curriculum Standards and Lesson Planning.

teachers to which they have access after completion of the module (Legutke & Rotberg, 2018, p. 610-611).

In spite of what DLL offers to German SAL teachers, the programme remains unattainable to most teachers. This is partly due to the fact that the Goethe-Institut Johannesburg runs only two of the six modules per year in their blended learning programme. Sixteen teachers representing the whole of Sub-Saharan Africa receive bursaries to participate in the programme, significantly limiting South African teachers' chances for participation. Furthermore, should a teacher receive a bursary, the six modules take three years to complete, and the Goethe-Institute requires that teachers should allow for about eight hours per week for a period of ten weeks, to complete a module. As both information-rich participants and teachers reported in their questionnaire responses that they had a severe lack of time, the completion of this programme seems unattainable for the broader German SAL teacher population. This is aggravated by the fact that German SAL teachers in South Africa receive no recognition for the completion of this programme, which is recognised by the Jena University in Germany as the basis of a master's programme.

4.5 Results

From the literature and the policies reviewed, it seems as if teachers are expected to be life-long learners, and that a trend towards reflective, experience-based learning exists. This is further mirrored in the content of DLL, the current global market leader in the professional development of German teachers (Legutke & Rotberg, 2018, p. 611). This was reflected in the responses of teachers in the questionnaires, with all but one of the 14 participants stating a desire to extend their knowledge and to keep up with trends in German teaching. The one teacher who expressed no such interest motivated this answer by stating that he or she was semi-retired and only wanted to finish the current year of teaching. From the responses of the teachers, it became clear that they perceived it as necessary to learn how to distinguish more clearly between suitable and unsuitable material, and that they wanted to learn how to assist their learners to work more independently.

Information-rich participants and teachers alike seemed to agree that German SAL teachers are greatly supported by the Goethe-Institut Johannesburg and the *ZfA*, but that little support exists from South African partners. Teachers have access to additional teaching material as well as digital media, but are unsure of how to use the material at their disposal efficiently. As enough additional teaching material seems to be available, and as most teachers report having completed

development opportunities in German-speaking countries during the previous five years, the biggest need of teachers seems to relate to the ability to adapt the material to their own needs, to strategize and plan their own teaching and learning, and to use digital media with more confidence.

While a programme *is* available that would address these needs, due to a variety of reasons this programme remains inaccessible to the majority of the teaching population. Therefore, teachers have no choice but to take responsibility for their own learning, as was suggested by an information-rich participant. Fostering the self-directed learning of German SAL teachers might assist them in reaching their learning goals (cf. Wittmann & Olivier, 2019).

4.6 Conclusion

In this study, the policy outlining German SAL teacher development expectations, relevant scholarly research, and information collected from both information-rich participants and practising German SAL teachers were collated in an endeavour to construct a thorough needs analysis.

Based on the needs analysis, it became clear that the most pressing professional development needs were the following:

- knowing what to teach at which grade level (clear learning outcomes are given only for matric);
- knowing how to identify suitable teaching material;
- being able to adapt partly suitable material;
- being able to generate own teaching material;
- keeping up to date regarding teaching approaches and material used in class; and
- more cooperation between teachers, to reduce the feeling of isolation experienced by them.

Given the fact that teachers reported a lack of time to prepare for classes (but also to further their own learning) as one of their main constraints, a teacher development programme such as *DLL (Deutsch Lehren Lernen)*, which currently is regarded internationally as the market leader in professional development programmes for German Foreign Language (the term SAL is used only in South Africa), is not fully suited to the needs of German SAL teachers. This can be ascribed to

participants in the programme being advised to set aside eight hours per week for a total of 10 weeks, in addition to the necessary reading time, in order to complete one module.

For these reasons, a teacher development programme for South African German SAL would have to be brief, cooperative in nature and leave sufficient room for a heterogeneous group of teachers to work on fulfilling their own learning outcomes. An efficient professional development programme for German SAL teachers would not only have to encourage reflection and life-long learning, but would also have to be strongly adapted to both the real needs and the working and learning environments of these teachers. This could be achieved through a strong focus on fostering the characteristics of self-directed learners in German SAL teachers by developing a programme that accommodates the heterogeneity of the population, that is strongly individualised, but that still assists teachers to overcome their isolation through the encouragement of cooperative learning.

Abovementioned needs, as well as the theoretical considerations regarding SDL served as the basis towards the design of a professional development programme, which would be suited to the specific context and needs of teachers of German SAL in South Africa. Chapter 5 will present the practical and theoretical considerations in the instructional design of said professional development programme.

4.7 Acknowledgements

This article is based on research funded and supported in part by the National Research Foundation of South Africa (Grant Number: 112143).

4.8 Bibliography

Abendroth-Timmer, D. (2011). Reflexive Lehrerbildung: Konzepte und Perspektiven für den Einsatz von Unterrichtssimulation und Videographie in der fremdsprachendidaktischen Ausbildung. *Zeitschrift für Fremdsprachenforschung*, 22, 3-41.

Annas, R. (2016). Deutsch an Universitäten im südlichen Afrika Zur Entwicklung des Fachs seit 2003: Afrika schreiben/writing Africa. *Acta Germanica: German Studies in Africa*, 44(1), 105-118. <https://hdl.handle.net/10520/EJC194887>

Augart, J. (2012). (Süd-)Afrikanische Germanistik – Zur Positionierung und Professionalisierung der Germanistik im südlichen Afrika. *eDusa*, 7(1), 7-22. <http://repository.unam.edu.na/handle/11070/972>

- Ballweg, S., Drumm, S., Hufeisen, B., Klippel, J., & Pilypaityt, L. (2013). *Wie lernt man die Fremdsprache Deutsch?* (Vol. 2). Klett-Langenscheidt.
- Barkowski, H., Grommes, P., Lex, B., Vicente, S., Wallner, F., & / Britta Winzer-Kiontke, B. (2014). *Deutsch als fremde Sprache* (Vol. 3). Ernst Klett Sprachen.
- Benitt, N. (2019). Campus meets classroom: Video conferencing and reflective practice in language teacher education. *European Journal of Applied Linguistics and TEFL*, 8(2), 121-140.
- Brown, J. D. (2009). Foreign and second language needs analysis. In M. Long, & C. Doughty, (Eds.), *The handbook of language teaching* (pp. 269-293). Wiley-Blackwell.
- Constitution of the Republic of South Africa* 1996. Retrieved March 30, 2020, from <https://www.justice.gov.za/legislation/constitution/SACConstitution-web-eng.pdf>
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage.
- Department of Basic Education (DBE) (South Africa). (1997). *Language in Education Policy in Terms of Section 3 (4) of the National Education Policy Act, 1996 (Act 27 of 1996)*. Government Printers. Retrieved March, 20, 2020, from <https://www.education.gov.za/Portals/0/Documents/Policies/GET/LanguageEducationPolicy1997.pdf?ver=2007-08-22-083918-000>
- Department of Basic Education. (2011b). *Curriculum and Assessment Policy Statement English as a Second Additional Language*. Retrieved September 30, 2020, from https://www.education.gov.za/Portals/0/CD/National%20Curriculum%20Statements%20and%20Vocational/CAPS%20FET%20_%20SAL%20_%20ENGLISH%20GR%2010-12%20_%20Web_1BB7.pdf?ver=2015-01-27-155020-433
- Department of Education (DoE) (South Africa). (2003). *National curriculum statement grades 10 – 12 (general) languages. German second additional language*. Retrieved March 20, 2020, from <https://dlvsa.co.za/files/2015/04/German-2nd-Add-Language.pdf>
- Department of Education (DoE) (South Africa). (2006). National policy framework for teacher education and development in South Africa (NPFTED). *Government Gazette*, 29832,

Section 53. Retrieved March, 20, 2020, from

https://www.gov.za/sites/default/files/gcis_document/201409/teachereducdev0.pdf

Dos Santos, Y., Kleinbing, H., Scribelk, L., & Voerkele, P. (2019). Platz zum Denken!? Praxis und Reflexion als entscheidende Impulse in der brasilianischen Deutschlehrerausbildung.

Pandaemonium Germanicum, 22(36), 178-206. <https://doi.org/10.11606/1982-88372236178>

Ende, K., Grotjahn, K., Kleppin, K., & Mohr, I. (2013). *Curriculare Vorgaben und Unterrichtsplanung* (Vol. 6). Klett-Langenscheidt.

Enns, E. E. (1996) Hilfe zur Selbsthilfe: Das Leitmotiv eines neuen Fortbildungsmodells für DaF in Kanada. *Die Unterrichtspraxis / Teaching German*, 29(1), 37-41.

<https://doi.org/10.2307/3531639>

Esteve, O. (2011). Fremdsprachenforschung, Unterrichtspraxis und Lehrerweiterbildung in Spanien. *Fremdsprachen Lehren und Lernen*, 40(1), 100-114.

Freeman, D., & Johnson, K. E. (1998). Reconceptualizing the knowledge-base of language teacher education. *TESOL Quarterly*, 32(3), 397-417. <https://doi.org/10.2307/3588114>

Funk, H. (2010). Berufsorientierter Deutschunterricht. In H.-J. Krumm, C. Fandrych, B. Hufeisen, & C. Riemer, (Eds.), *Handbuch zur Sprach- und Kommunikationswissenschaft. Deutsch als Fremd- und Zweitsprache: ein internationales Handbuch* (pp. 1145-1151). De Gruyter Mouton.

Funk, H., Kuhn, C., & Skiba, D. (2014). *Aufgaben, Übungen, Interaktion* (Vol. 4). Klett-Langenscheidt.

Hong, Z. C. (2019). Einsatzmöglichkeiten einer Bedarfsanalyse zur Curriculum-Entwicklung für berufsorientierten DaF-Unterricht in China. *Informationen Deutsch als Fremdsprache*, 46(1), 159-177. <https://doi.org/10.1515/infodaf-2019-0012>

Kothari, C. R. (2004). *Research methodology methods and techniques* (2nd rev. ed.). New Age International Publishers.

Laurien, I. (2006). Das Fach Deutsch an Universitäten im »Neuen Südafrika« – Eine Laborsituation »für Europa? *Informationen Deutsch als Fremdsprache*, 33(5), 438-445. http://www.daf.de/downloads/InfoDaF_2006_Heft_5.pdf#page=46

- Legutke, M. (2010). Fort-und Weiterbildung von Lehrkräften für Deutsch als Fremdsprache. *Deutsch als Fremd-und Zweitsprache*, 2, 1351-1357.
- Legutke, M., & Rotberg, S. (2018). Deutsch Lehren Lernen (DLL) – das weltweite Fort-und Weiterbildungsangebot des Goethe-Instituts. *Informationen Deutsch als Fremdsprache*, 45(5), 605-634.
- Legutke, M. K., & Schart, M. (2016). Fremdsprachliche Lehrerbildungsforschung: Bilanz und Perspektiven. In M. Legutke, & M. Schart, (Eds.), *Fremdsprachendidaktische Professionsforschung: Brennpunkt Lehrerbildung* (pp. 9-46). Narr.
- Long, M. H. (2005a). Methodological issues in learner needs analysis. In M. Long, (Ed.), *Second language needs analysis* pp. 19-76). Cambridge University Press.
- Long, M. H. (2005b). *Second language needs analysis*. Cambridge University Press.
- Long, M. H. (2015). *Second language acquisition and task-based language teaching*. John Wiley & Sons.
- Mbohwa-Pagels, K., & Rode, R. (2014). DaF im SA Schulsystem. *eDusa*, 9(1), 13-19.
- Merriam, S. B. (1985). The case study in educational research: A review of selected literature. *The Journal of Educational Thought (JET) / Revue de la Pensée Educative Journal*, 19(3), 204-217. <https://www.jstor.org/stable/23768608>
- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, (89), 3-14. <https://doi-org.nwulib.nwu.ac.za/10.1002/ace.3>
- Murray, S. (2013). The challenges of designing a common, standards-based curriculum for all South Africa's languages. *Per Linguam*, 28(2), 84-94. <https://hdl.handle.net/10520/EJC133552>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. <https://doi.org/10.1007/s10488-013-0528-y>

- Puljić, B. K. (2010). Lehrerausbildung und das Reflexive Denken Zwischen Wissen und Handeln. *Educational Sciences / Odgojne Znanosti*, 12(1), 119-129.
<https://hrcak.srce.hr/59606>
- Rösler, D., & Würffel, N. (2014). *Lernmaterialien und Medien*. Klett-Langenscheidt.
- SACE (South African Council for Educators). (2013). *The CPTD management system handbook*. SACE. Retrieved January 08, 2019, from https://sace.org.za/assets/documents/uploads/sace_30373-2016-08-31-CPTD%20Handbook.pdf
- SACE (South African Council for Educators). (2019). *Teacher professionalisation*. Retrieved March 28, 2020, from <https://www.sace.org.za/pages/teacher-professionalisation-fags>
- Schart, M., & Legutke, M. (2012). *Lehrkompetenz und Unterrichtsgestaltung*. Langenscheidt.
- Schart, M., & Ohta, T. (2018). Von den Lehrenden her denken–zur Konzeption von Fortbildungen am Beispiel eines Qualifizierungsangebots für Deutschlehrkräfte in Japan. *Informationen Deutsch als Fremdsprache*, 45(5), 672-694.
<https://doi.org/10.1515/infodaf-2018-0085>
- Serafini, E. J., Lake, J. B., & Long, M. H. (2015). Needs analysis for specialized learner populations: Essential methodological improvements. *English for Specific Purposes*, 40, 11-26. <https://doi.org/10.1016/j.esp.2015.05.002>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63-75. Doi: [10.3233/EFI-2004-22201](https://doi.org/10.3233/EFI-2004-22201)
- Singh, G., & Richards, J. C. (2006). Teaching and learning in the language teacher education course room: A critical sociocultural perspective. *RELC journal*, 37(2), 149-175.
<https://doi.org/10.1177%2F0033688206067426>
- Turner, I., & Daniel, W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15(3), 754 -760.
<http://nsuworks.nova.edu/tqr/vol15/iss3/19?>
- Von Maltzan, C. (2009). Sprachenpolitik und die Rolle der Fremdsprachen (Deutsch) in Südafrika. *Stellenbosch Papers in Linguistics PLUS*, 38, 205-214.
<https://hdl.handle.net/10520/EJC143430>

- Weber, A. (2018). Interkulturelles Lernen im südafrikanischen DaF-Unterricht: Eine Studie. *Acta Germanica*, 46, 94-108. <https://hdl.handle.net/10520/EJC-10e84ad7ff>
- West, R. (1994). Needs analysis in language teaching. *Language Teaching*, 27(1), 1-19. <https://doi.org/10.1017/S0261444800007527>
- Wittmann, G.-E., & Olivier, J. (2019). Professional development in fostering self-directed learning in German Second Additional Language teachers. *Per Linguam*, 35(3), 125-142. <https://dx.doi.org/10.5785/35-3-870>

4.9 Addendum A: Questionnaire

1. Please complete the table.

Email address		
Cell phone number		
Age		
Province		
First Language		
Other languages spoken by you and language Level (Beginner/Intermediate/Advanced)		
Highest qualifications		
Do you teach at a primary school or high school?		
Teaching experience (years)		
German Second Additional Language (SAL) teaching experience (years)		
Number of learners learning German	Grade 8	
	Grade 9	

	Grade 10	
	Grade 11	
	Grade 12	
First language(s) of learners		
Other subjects taught by you		
Extramural activities offered by you		
Number of other German SAL teachers within a 100km radius		

2. Do you receive any additional funding for your German SAL classes, either by the Goethe-Institut Johannesburg or by another organisation? Please elaborate.

--

3. Have you been able to attend any training opportunities in the German-speaking countries (Germany, Austria, Switzerland or Liechtenstein) within the last 5 years? If so, please elaborate.

Yes	No

4. Which textbook do you use in your class?

--

5. Which other media and teaching material do you use in class?

--

6. On a scale of 1 – 5 (one being the least likely and 5 being the most likely), please indicate the extent to which you would agree with the following statements.

6.1 Additional teaching material for German SAL is readily available to me.

1	2	3	4	5
---	---	---	---	---

6.2 It is possible to use digital media in my classroom.

1	2	3	4	5
---	---	---	---	---

6.3 My learners have access to digital media outside the classroom.

1	2	3	4	5
---	---	---	---	---

6.4 I confidently use digital media in my classroom.

1	2	3	4	5
---	---	---	---	---

6.5 I have experience with digital media in the classroom.

1	2	3	4	5
---	---	---	---	---

7. Do you have a degree or qualification in teaching? If yes, please provide details.

Yes	No

8. To function optimally as a German SAL teacher, what would you view to be your biggest needs?

--

9. In terms of teaching German SAL, what are the biggest of the other challenges that you face?

--

10. What would you describe as your own biggest developmental need? Please explain your answer.

--

11. Please explain how it came about that you started teaching German SAL at your school.



CHAPTER 5 COLLABORATIVE SELF-DIRECTED LEARNING FOR TEACHERS OF GERMAN SECOND ADDITIONAL LANGUAGE TEACHER PROFESSIONAL DEVELOPMENT IN SOUTH AFRICA: PUTTING THEORY INTO PRACTICE

5.1 Abstract

As part of a wider study on professional development for teachers of German Second Additional Language (SAL), this article integrates theories on self-directed and collaborative learning with principles of instructional design and gives an empirical overview of an evaluation of a created learning platform. The Four-Component Instructional Design (4C/ID) model is suggested as a suitable model for a professional development opportunity for teachers of German SAL. By combining the 4C/ID model with principles of self-directed learning and collaborative learning, a three-cycle model is proposed for a professional development opportunity for teachers of German SAL in South Africa. An initial cycle was developed on the Moodle learning management system. Independent experts positively evaluated the initial cycle and judged it as highly relevant to teachers of German SAL due to its support for individual learning needs, the high level of collaboration between participants, and its reliance on participants' own experiences.

5.2 Keywords

Collaborative learning, 4C/ID, German SAL, instructional design, self-directed learning, teacher professional development;

5.3 Introduction

In the South African context, teachers – in this case, specifically teachers of German Second Additional Language (SAL) – require continued professional development in order to meet the needs of an ever-changing educational landscape. Consequently, this article is part of the scholarship around the instructional design (Colpaert, 2014; Morrison et al., 2011; Seel et al., 2017; Susilo et al., 2013; Van Merriënboer, 2020) for teacher professional development, with specific emphasis on self-directed learning (SDL) (Bolhuis, 2003; Knowles, 1975; Mentz & Bailey, 2019; Merriam & Brockett, 2011; Van Zyl & Mentz, 2019) and cooperative learning (CL) (Davidson & Major, 2014; Johnson & Johnson, 2015; 2019; Mentz & Bailey, 2019; Van Zyl & Mentz, 2019).

In this article, principles of SDL and CL as well as the results of a needs analysis are applied to principles of instructional design in order to provide a professional development concept as well as guidelines towards the actual instructional design of the suggested programme. The

preliminary content and guidelines will focus on fulfilling the needs of teachers of German SAL as mentioned above and discussed by Wittmann and Olivier (2020).

This article forms part of a wider study that seeks to identify remedies for the lack of professional development support for teachers of German. It integrates theoretical research on SDL and CL – which are proposed as possible foundations for German SAL teachers' development programmes (Wittmann & Olivier 2019) – with the results of a needs analysis conducted among German SAL teachers and other stakeholders (Wittmann & Olivier, 2020). As part of the aforementioned ongoing study on the professional development needs of teachers of German SAL in South Africa, Wittmann and Olivier (2019) proposed the fostering of the characteristics of self-directed learners as a possible approach to designing a professional development programme.

The article builds upon existing findings to suggest a model for a professional development programme for teachers of German SAL that focusses on fostering the characteristics of self-directed learners. Recommendations are made for certain principles to be applied in an intervention, and expert opinions (in the form of qualitative data) are presented on the first cycle of the intervention which was developed in cooperation with teachers of German SAL. Due to the nature of SDL, as is explicated in this article, participants will have a strong influence on the content of the programme. At a later stage, a section of the proposed programme will be developed and tested by German SAL teachers in order to make extrapolations to be used as a basis for recommendations for a more comprehensive professional development programme.

In the design and development of the programme, a strong methodological focus will be placed on online learning, which has enjoyed increasing popularity in recent years, giving rise to an increased need for well-trained, proficient online teachers (Moore-Adams et al., 2016). In 2020, this need has been exacerbated worldwide by the COVID-19 pandemic (Donitsa-Schmidt & Ramot, 2020; Kerres, 2020).

Although there are several challenges inherent in online learning (Kim et al., 2014), it is argued that several intrinsic factors play a role in determining participant success. These include discipline (Allen & Seaman, 2005), emotional engagement and motivation (Özhan & Kocadere, 2020), initiative and cognitive strategies (Schrum & Hong, 2002), and time-management and organisational skills (Song et al., 2004). These skills and factors overlap with attributes of self-directed learners, as identified by Guglielmino (1978) in her Delphi survey of experts.

5.4 Theoretical/pedagogical principles

5.4.1 Collaborative learning

Learning in small groups is by no means a new idea, having already been mentioned in 1980 by Slavin (1991). Indeed, the concept can be traced as far back as the origins of social constructivism as proposed by Lev Vygotsky (Powell & Kalina, 2009). Vygotsky believed that knowledge is created in interaction with others (Vygotsky, 1978) and that meaning is constructed through social interaction. However, as Churcher et al. (2014) point out, a distinction needs to be made between knowledge creation and learning: while knowledge is created through the interaction with others and learning may take place in the process, learning remains an internal mechanism in the individual and is thereby experienced individually. Learning is therefore seen as a product of knowledge creation. As meaning is negotiated in groups, not only do individual learning processes take place but these also have an impact on group processes (John-Steiner & Mahn, 1996).

Vygotsky (1978) (as quoted in Marsh & Ketterer, 2005, p. 2) proposed that learning takes place in the area in which intellectual development is in progress, or what he termed the Zone of Proximal Development (ZPD), while already learnt knowledge, or what he termed the Zone of Actual Development (ZAD), represents merely the “fruits” of earlier development. Learning is therefore a move from the ZAD to the ZPD.

Due to strong evidence that learners who learn in small groups outperform their counterparts who work individually in areas like “knowledge development,” “thinking skills,” “social skills” and “course satisfaction” (Davidson & Major, 2014, p. 7), group learning has remained relevant and has grown in popularity, both in theory and practice. The three main areas of small group learning that emerged over the past decades are “collaborative learning,” “cooperative learning” and “problem-based learning (PBL)” (Davidson & Major, 2014, p. 8).

Cooperation is clearly a major factor in group learning and, according to Johnson and Johnson, five conditions must exist for cooperation to take place, namely: “positive interdependence, individual accountability, promotive interaction, social skills and group processing” (Johnson & Johnson, 2019, p. 47).

In this context, *positive interdependence* is defined as “the perception that one is linked with others in a way so that one cannot succeed unless they do (and vice versa) and, therefore, groupmates’ work benefits one and one’s work benefits them” (Johnson & Johnson, 2019, p. 47).

Positive interdependence can be subdivided into outcome interdependence, means interdependence and boundary interdependence. Phrased differently, positive interdependence can only occur if it exists when individuals perceive that reaching their personal goal is directly linked to and dependent on other individuals, with whom they are cooperatively linked, also reaching their goals (Johnson & Johnson, 2019).

The second condition, *individual accountability* (Johnson & Johnson, 2019, p. 47–48), exists when feedback on individual performance is given to both the individual group members and the group as a whole. Individuals remain aware of the fact that they are responsible for individual as well as group performance. *Promotive interaction* refers to the requirement that participants assist, support and encourage each other, with the result that participants set higher group goals as they feel confident that the group can achieve these aims through mutual support (Johnson & Johnson, 2019, p. 48). The fourth condition, *social skills*, refers to skills such as “leadership, decision-making, trust-building, communication and conflict management” (Johnson & Johnson, 2019, p. 48). Lastly, *group processing* refers to the requirement for group members to “focus periodically on the continuous improvement of the quality of the processes they are using to achieve their goals” (Johnson & Johnson, 2019, p. 49).

While the authors of this article focus on collaborative learning (CL), cooperative learning and problem-based learning (PBL) are briefly explained here for the sake of completeness. Cooperative learning is deemed to be an approach to learning in which a small number of students work together as a team. Teamwork is therefore essential to solve a problem, complete a task, or accomplish a common goal (Wessner & Pfister, 2000). In comparison, PBL – which is also an approach centred around small group work – focusses on the problem, which drives the learning (Davidson & Major, 2014).

In contrast to cooperative learning and PBL – which focus on students working together in small groups – CL focusses on knowledge as “something people construct by talking together and reaching agreement” (Bruffee, 1993, p. 3) and occurs when a group of participants cooperate to reach a shared learning goal (Labonté & Smith, 2019). CL can therefore be seen as a “social negotiation process in which students engage for the purpose of gaining deeper understanding” (Lee et al., 2014, p. 426).

As Mentz and Bailey (2019) point out, a major difference between cooperative and CL learning lies in the role of the instructor. In cooperative learning the instructor has to carefully plan the

learning environment to include the five conditions for cooperation (Johnson & Johnson, 2019), whereas these conditions are not necessarily included in collaborative learning environments (Mentz & Bailey, 2019). CL focusses not only on student knowledge but also instructor knowledge:

Collaborative learning occurs when students and faculty work together to create knowledge. [...] It is a pedagogy that has at its center the assumption that people make meaning together and that the process enriches and enlarges them. (Matthews, 1996, p. 101)

Furthermore, CL yields the additional benefit that the workload on the individual participant is reduced, as the intrinsic load on working memory is shared between all group members (Van Zyl & Mentz, 2019). As collaborative teaching entails students and instructors being put on a more equal footing and knowledge for both groups is created together, the authors chose to follow the aforementioned approach to devising guidelines for the development of a German SAL teacher professional development programme that focusses on fostering SDL.

5.5 Collaborative learning and its interplay with SDL

In attempting to devise guidelines for a teacher professional development programme, one is faced with the paradox that, in existing teacher professional development programmes, there is a strong focus on knowledge about teaching and learning, while teachers' existing knowledge is often individualised based on their personal experiences and activities. Therefore, this lived knowledge cannot be transferred to experiences of their participants in such programmes (Berry, 2009; Wittmann & Olivier, 2019). The notion of andragogy, or adult learning, as postulated by Knowles (1968) and on which SDL is based, might provide a bridge to overcome this paradox in that Knowles emphasises that adult learners have preconceived ideas about what and how they need to learn based on existing knowledge and previous experiences (Merriam & Brockett, 2011).

Although the authors agree with Dehnad et al. (2014) that SDL is a complex concept with a multitude of definitions, Knowles' definition seems to remain the most widely accepted and is also relevant to this study. He defines SDL as follows:

[...] a process in which individuals take initiative, with or without the help of others, in diagnosing their learning needs, formulating learner goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes. (Knowles, 1975, p. 18)

Furthermore, as posited by Bosch et al. (2019, p. 30), SDL requires a collaborative relationship between the facilitator and the participants, while participants are considered as central figures of their own learning.

Lee et al. (2014) postulate that fostering SDL should be the major educational goal if one wishes to cultivate lifelong learning in learners in the 21st century. Bolhuis (2003) agrees that developing SDL increases participants' capacity for educational growth throughout their lives. Wittmann and Olivier (2019) suggest that, due to the unique nature of the challenges German SAL teachers face in meeting the professional development demands placed on them by government policy (Wittmann & Olivier, 2019), developing SDL through teacher development programmes would be particularly helpful to these teachers. By improving their SDL skills, teachers of German SAL would not only recognise that they are role players in their own development, but they would also acknowledge the value of their pre-existing skills (Grow, 1991). Furthermore, they would be able to critically evaluate their own learning (Patterson et al., 2002; Thornton, 2010) and manage the tools and processes at their disposal to achieve their learning outcomes (Warburton & Volet, 2013). However, to achieve these goals, pertinent principles of instructional design would first have to be carefully established and an appropriate instructional design model would have to be considered.

5.6 Instructional design

5.6.1 Underlying principles of instructional design for this study

Instructional design can be defined as “a systematic procedure in which educational and training programs are developed and composed aiming at a substantial improvement of learning” (Seel et al., 2017, p. 9). This procedure includes the study of “how to optimize the acquisition, organization, and retrieval of new knowledge” (Reigeluth, 1983, p. 197). The ultimate purpose of instructional design should therefore be to make learning “more efficient and effective and less difficult” (Morrison et al., 2011, p. 2). The authors of this article also apply Smith and Ragan's (2005, p. 4) definition of instructional design: “the systematic and reflective process of translating principles of learning and instruction into plans for instructional materials, activities, information resources, and evaluation.”

Colpaert (2014, p. 6) suggests a typology for instructional design models, which is considered by the authors of this article. He divides these models into three categories: *design process-oriented*

models relate to the “making of educational artefacts, from course materials to entire learning environments”; *product feature-oriented models* “focus on the requirements educational artefacts should meet in order to comply with psychological (motivational), technological and pragmatological findings”; and *teaching-learning process-oriented models* “focus more on the specific process of learning and instruction designers should choose in function of a specific context” (Colpaert, 2014, p. 7). The third category draws on the Nine Events of Instruction (Gagné, 1985), Experiential Learning (Kolb, 1984), Elaboration Theory (Reigeluth, 1992), Component Display Theory (Merrill, 1983) and Four-Component Instructional Design (Van Merriënboer, 1997; Van Merriënboer et al., 2002).

Four-Component Instructional Design (4C/ID) is a model used to plan educational interventions for teaching complex tasks (Susilo et al., 2013) and is based on tasks that are designed to imitate real-life situations that participants may face in their professional lives (Susilo et al., 2013). While all five models mentioned in the third category above focus on the teaching and learning processes of both the instructor and the participants, the 4C/ID design offers the advantage that it does not focus on the knowledge types themselves but rather on the integration and performance of task-specific constituent skills. This design consists of the following four components: learning tasks, supportive information, procedural information, and part-task practice (Van Merriënboer et al., 2002). It offers a distinction between supportive and required just-in-time information, and it recommends a mixture between “part/task” and complex “whole-task” learning (Van Merriënboer et al., 2002, p. 39-40). For further explication, the following description of the function of the 4C/ID model by Van Merriënboer et al. is relevant:

The 4C/ID-model should be used to develop training programs for complex skills and when transfer is the overarching learning outcome. [...] The model is not developed for teaching conceptual knowledge or procedural skills per se.” (Van Merriënboer et al., 2002, p. 55)

Taking the above description into consideration, 4C/ID seems especially suitable for a teacher professional development programme focusing on self-directed collaborative learning, as it places so much emphasis on complex skills and their transfer. There is a strong focus on tasks that participants should solve both individually and collaboratively with the help of supportive information that is constantly at their disposal. Instead of the instructor conveying knowledge, participants work on discovering new knowledge and building skills, not only individually but also as a group. Therefore, the model is especially suited to a programme focusing on self-directedness and CL, as is demonstrated later in the article.

5.6.2 Applying 4C/ID to SDL and CL

Before the design process was implemented, a multi-tiered needs analysis was conducted (Wittmann & Olivier, 2020). The qualitative data gathered in interviews with information-rich participants were used to develop a basic, non-standardised profiling questionnaire to gather descriptive data. This questionnaire was completed by practicing German SAL teachers using *Google Forms*. Questions in the questionnaire were formulated to gather comprehensive data on:

- where and how German is taught in South African schools and under what conditions;
- the language profiles of South African German teachers as well as their level of education and the technology available to them; and
- developmental needs as perceived by German SAL teachers.

Based on the collected data, German SAL teachers were profiled in terms of their educational backgrounds, their home languages, teaching environments, and their access to and knowledge about technology.

Due to the heterogeneity of the German SAL teacher population (cf. Mbohwa-Pagels & Rode, 2014) and the need to foster SDL in teachers of German SAL (Wittmann & Olivier, 2019), it was first necessary to determine the individual learning needs of the participants.

5.6.3 Applying the three-cycle model in practice

An initial virtual meeting would be held to determine the most pressing individual developmental needs, which might be more specific than the needs established in the group, the desired overall training outcomes for the group, as well as the specific learning aims of individual participants. Working collaboratively on individual learning goals but also on group goals would give participants “the chance to analyze and exchange information, and engage in the learning material in a way not offered during individual learning, fostering students’ critical thinking skills, and greater conceptual understanding of course material” (Labonté & Smith 2019, p. 2).

In addition to the overarching group goals (whole tasks), participants also set their own individual learning goals (Bosch et al., 2019), which, in this study, formed the part-tasks, as explicated by Van Merriënboer et al. (2002).

While the details of the professional development opportunity will be determined by the teachers' individual learning needs, the broad content will be based on the needs established by Wittmann and Olivier (2020), these being most notably:

- knowing what to teach and on which grade level (clear learning outcomes are only given for matric);
- knowing how to identify suitable teaching material;
- being able to adapt partly suitable material;
- being able to generate own teaching material;
- keeping up to date regarding teaching approaches and material used in class;
- more cooperation between teachers to reduce their feeling of isolation.

The focus will therefore be on achieving improved applied teaching competence, defined by Richter et al. (2011, p. 116) as the “uptake of formal and informal learning opportunities that deepen and extend teachers' professional competence, including knowledge, beliefs, motivation and self-regulatory skills.” Further focus will fall on developing metaliteracy, which, according to Mackey and Jacobson (2011, p. 64), “expands the scope of information literacy as more than a set of discrete skills, challenging us to rethink information literacy as active knowledge production and distribution in collaborative online communities.” Moreover, metaliteracy prepares participants “to engage as critical and adaptive participants in an expanding landscape of socially constructed and technology-mediated information environments” (O'Brien et al., 2017, p. 268). In the context of a teacher professional development programme, metaliteracy would address the need of teachers of German SAL to be able to identify, adapt and generate suitable teaching material and to critically evaluate material at their disposal. Aforementioned focus on metaliteracy enabled the researchers to include the selection and adaptation of existing teaching, as well as the generating of new materials. Within this broad focus area, participants determined the topic, language level and type of material they wished to work with themselves.

The instructor's role would thus be in agreement with the role Bosch et al. (2019) propose, namely guiding participants to achieve higher levels of self-directedness. The development programme would be designed from a socio-constructivist approach. Constructivism places focus on the individual by asserting that “an individual generates his own *mental models*, which he uses to make sense of his experiences” (Brown & Green, 2015, p. 29). Brooks and Brooks explain the learning process as essentially self-directed:

Each of us makes sense of our world by synthesizing new experiences into what we have previously come to understand. Often, we encounter an object, an idea, a relationship, or a phenomenon that doesn't quite make sense to us. When confronted with such initially discrepant data or perceptions, we either interpret what we see to conform to our present set of rules for explaining and ordering our work, or we generate a new set of rules that better accounts for what we perceive to be occurring. Either way, our perceptions and rules are constantly engaged in a grand dance that shapes our understandings. (Brooks & Brooks, 1999, p. 4)

The instructor would therefore be responsible for setting up a physical or virtual environment in which participants can work on acquiring the ability to meet their own developmental goals (Garrett, 1991).

Throughout the programme, as suggested by Breed and Bailey (2018), the instructor would put emphasis on intentionally fostering and developing participants' SDL skills. The developmental goals will be established in an initial contact phase, after which the researcher will develop the tools necessary to reach the set aims. While the instructor can initiate the learning process, create a conducive learning environment and negotiate a learning aim, the participants need to be self-motivated to acquire new knowledge (Ballweg et al., 2013). All teachers participating in the study will therefore be seen as individuals who influence their own learning by drawing on their interests, needs and prior learning experiences.

As the most urgent needs mentioned by teachers of German SAL (Wittmann & Olivier, 2020) were related to the identification and adaption of suitable teaching material, a first module could be developed focusing on metaliteracy and working with texts. After completion of the three cycles (i.e. one module), participants would have:

- formulated their specific needs regarding text work;
- critiqued and selected suitable texts;
- adapted and generated suitable teaching and learning materials;
- assisted their peers in achieving their own outcomes;
- received and integrated feedback in order to enhance the achievement of their own learning outcomes; and
- reflected on their learning process and evaluated the achievement of their own learning goals as well as those of the programme itself.

While further details as to the exact nature of the tasks are supplied in Chapter 6, the following paragraph provides a short overview of a possible approach to be used in the setting of the exact tasks. An initial learning task, the first component of the 4C/ID model (Van Merriënboer et al., 2002), modelled on the participants' learning goals, would be set. In this instance, the whole task would be to identify, adapt and develop three suitable texts the participants would be able to use immediately in the classroom. Allowing participants to select texts, which are relevant to their individual contexts, would allow for a certain degree of individualisation from the onset. This whole task would be subdivided into several part tasks.

The learning platform itself would be populated with a combination of learning strategies and methods, allowing for sufficient individualisation to meet each participant's unique learning needs (Schart & Legutke, 2012). This information would form the second component of 4C/ID, *supportive information* (Van Merriënboer et al., 2002, p. 43). During the learning process, however, participants would work on group outcomes by synthesising their different learning styles and preferences. These group outcomes would only be achievable by mastering scaffolded "part-tasks" (Van Merriënboer et al., 2002, p. 53). In the context of the programme in question, part-tasks consisted of individual and collaborative assignments. In a first cycle of three steps, participants were asked to individually present an existing text, which participants had found to be useful to their own teaching context, and to explain the relevance of said text to their context. This presentation was followed by the formulation of needs in regard to a further text, participants deemed to be missing their own pool of resources. All participants then worked collaboratively in advising their fellow participants on possibly suitable or partly suitable texts. The collaborative working stage was followed by a reflection of participants' experiences on their role of experts (Step 1), formulating needs (Step 2) and assisting each other to meet said needs (Step 3).

The first cycle was followed by a second cycle, which focused on establishing a shared understanding as to criteria used in text selection, followed by a third cycle on the selection of and categorisation into suitable and partly suitable texts. These three cycles constituted the first learning task, which was followed by a second learning task, which was constituted of several part-tasks, which were, once again, grouped into cycles. The second learning task focused on the adaptation of partly suitable texts.

In order to achieve abovementioned "part-tasks," which together build up to the mastering of the "learning tasks," participants would collaboratively need to discover sufficient *just-in-time* (JIT)

information, the third component of 4C/ID. The underlying assumption is that participants work together to learn but they remain responsible for their own learning (Slavin, 1991).

Schematically, the envisaged process can be depicted as is shown in Figure 5-1.

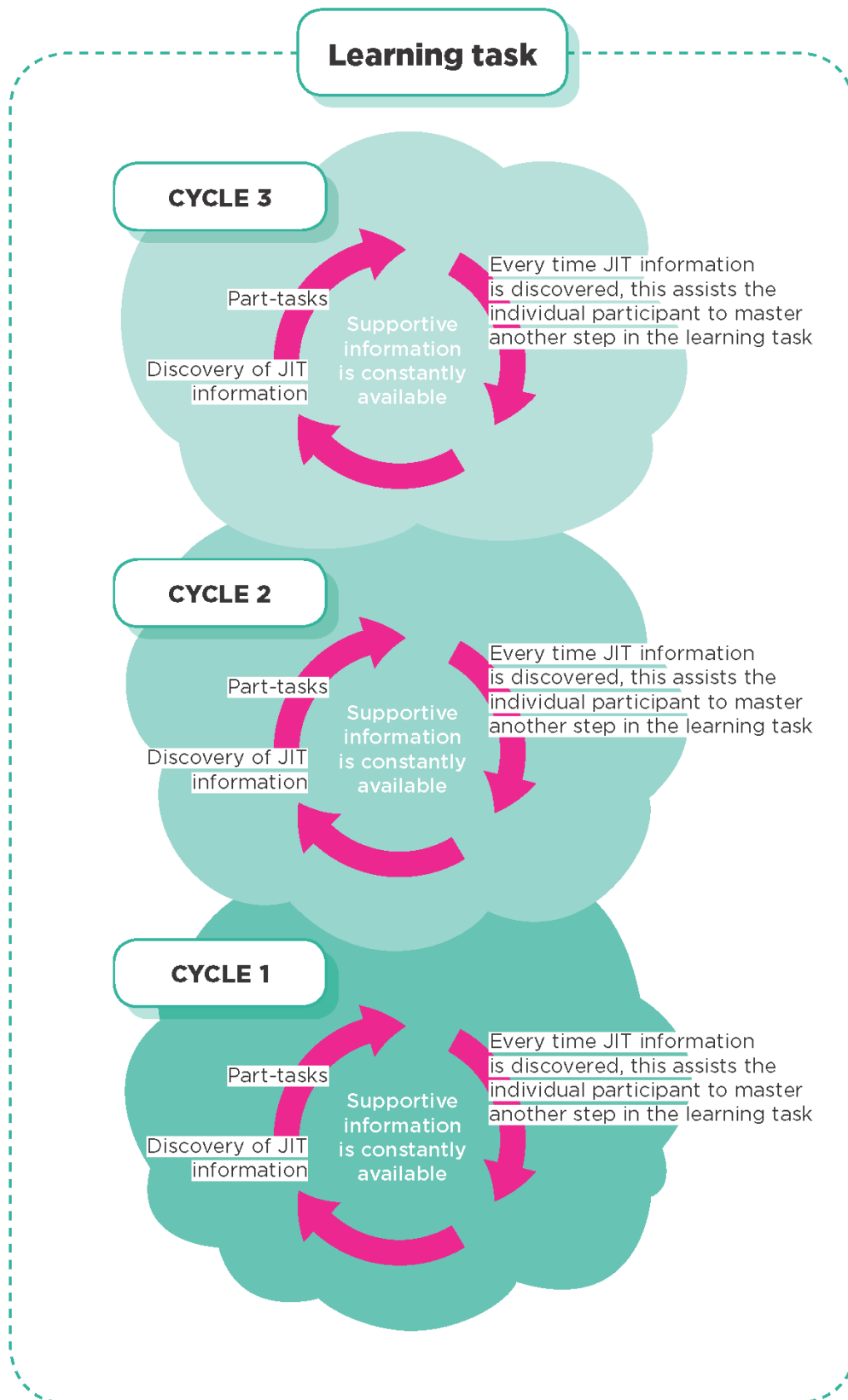


Figure 5-1: Learning task model

Only the content for the first cycle will have been developed beforehand (see Figure 5-1). The second- and third cycle's content will be determined by the participants' reflections and needs at the end of the preceding cycle. The instructor will therefore gradually move into the background, giving less input and prescribing less structure. This approach will facilitate collaborative learning, as part of which interactions should be structured by the participants (Mentz & Bailey, 2019). The approach described above will be informed by Vygotsky's (1978) socio-constructivism, which emphasises the relevance of interaction in learning. Learning will be assumed to take place as a result of the social interactions and students' experiences both within and outside of the classroom, as well as their personal critical thinking process, as advocated by Powell and Kalina (2009). Through collaborative activities, which will be given as part-tasks, interaction between course participants will play a central role in the learning phase. This aspect "[emphasises] the interdependence of social and individual processes in learning, and attributes the quality of the conversations in which participants engage a central role in education" (Escobar Urmeneta, 2013, p. 336).

The first cycle was developed on the *Moodle* learning platform and was evaluated by seven independent experts. These experts were selected by means of purposeful sampling, as they were "especially knowledgeable about or experienced with a phenomenon of interest" (Palinkas et al., 2015, p. 534). Ethical clearance was obtained to conduct this research from a research ethics committee at a South African higher education institution. The experts indicated that they would be willing to participate and provided informed consent to participate in this research. They were requested to rate, on a scale of one to five, the technical difficulty, language use, relevance and the extent to which the cycle encouraged self-directed and collaborative learning. Their responses were analysed inductively and the trustworthiness was ensured through thick descriptions. A summary of the findings is presented below.

While the experts agreed that the *Moodle* platform was easy to navigate, Expert 1 – who had in-depth knowledge of the population of teachers of German SAL in South Africa – stressed that teachers would have to master a rather high level of German to be able to understand the programme instructions. However, the expert maintained that the instructions would lose clarity should their language level be made easier.

All the experts agreed that the content was highly relevant to the teachers of German SAL in South Africa. The high relevance was ascribed to the fact that the questions were kept open and consistently referred to participants' own needs and experiences. Furthermore, the experts

commented positively on the fact that teachers were made aware of online resources but were asked to select and critique relevant texts themselves. They found the strongest points of the programme to be the collaboration and exchange of ideas between participants and the fact that participants had been asked to make own choices based on their personal needs and experiences. The programme was therefore endorsed by these experts. Although teachers of German SAL will in future have to evaluate the programme on its relevance, the guidelines laid out in the next section can already be applied.

5.7 Guidelines for the instructional design of a teacher professional development programme focusing on self-direction and CL

In addition to their professional development needs, teachers reported that a lack of time to prepare for classes (as well as for furthering their own learning) was one of the main constraints on achieving their developmental goals (Wittmann & Olivier, 2020). Therefore, a teacher development programme like *DLL (Deutsch Lehren Lernen)* – which is currently regarded internationally as the market leader in professional development programmes for German Foreign Language (the term SAL is used only in South Africa) – is not entirely suitable for German SAL teachers. Most notably, this sentiment can be ascribed to the fact that participants in the programme are advised to calculate eight hours per week for a total of 10 weeks, in addition to reading time, in order to complete one module (of the six basic modules to be completed in total). As such, German SAL teachers report that, while they do receive material and development (including online) support from European institutions, there is a grave lack of support that focusses on their specific needs and circumstances within the South African context (Wittmann & Olivier, 2020). In light of the time constraints, a South African German SAL teacher development programme should offer teachers of German SAL the possibility to achieve their individual learning goals in a manner that is not too time consuming. It will also have to allow sufficient opportunity for a heterogonous group of teachers to work on fulfilling their own learning outcomes collaboratively.

5.8 Conclusion

Based on the above discussion and findings, the authors recommend that developers of a teacher professional development model for teachers of German SAL keep in mind that the participants' development is dependent on the possibilities and experiences afforded by interactions with others. Ballweg et al. (2013) illustrate how interactionism can aid language learning by increasing the motivation of participants who want to speak, write and read increasingly complex texts. Through immediate feedback given in interactions with others, participants realise that they are

understood, which gives them the self-confidence to attempt increasingly complex interactions (Ballweg et al., 2013).

In this article, theories on self-directed and collaborative learning were applied to principles of instructional design in order to devise a teacher professional development model based on 4C/ID. Due to the fact that the content should essentially be adaptable to participants' needs, only the first cycle was fully developed. However, this first cycle was deemed by national and international experts to be highly relevant to teachers of German SAL in South Africa because of its focus on self-directed and collaborative learning.

After being evaluated, changes as suggested by expert evaluators were effected to the first cycle. All participants of the needs analysis as presented in Chapter 4, were invited to participate in the trial implementation and evaluation of the professional development programme itself. The results of the evaluation, as well as participant experiences with the programme will be presented in Chapter 6.

5.9 Acknowledgements

This article is based on research funded and supported in part by the National Research Foundation of South Africa (Grant Number: 112143).

5.10 References

- Allen, I. E., & Seaman, J. (2005). Growing by degrees: Online education in the United States. Sloan – Consortium.
- Ballweg, S., Drumm, S., Hufeisen, B., Klippel, J., & Pilypaityt, L. (2013). *Wie lernt man die Fremdsprache Deutsch?* (Vol. 2). Klett-Langenscheidt
- Berry, A. (2009). Professional self-understanding as expertise in teaching about teaching. *Teachers and Teaching: theory and practice*, 15(2), 305-318.
<https://doi.org/10.1080/13540600902875365>
- Bolhuis, S. (2003). Towards process-oriented teaching for self-directed lifelong learning: A multidimensional perspective. *Learning and Instruction*, 13(3), 327-347.
[https://doi.org/10.1016/S0959-4752\(02\)00008-7](https://doi.org/10.1016/S0959-4752(02)00008-7)
- Bosch, C., Mentz, E., & Goede, R. (2019). Self-directed learning: A conceptual overview. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century*:

- Implications for higher education* (pp.1-36). AOSIS. (NWU Self-Directed Learning Series, Vol. 1).
- Breed, B., & Bailey, R. (2018). The influence of a metacognitive approach to cooperative pair problem-solving on self-direction in learning. *The Journal for Transdisciplinary Research in Southern Africa*, 14 (1), a516. <https://doi.org/10.4102/td.v14i1.516>
- Brooks, J. G., & Brooks, M. G. (1999). *In search of understanding: The case for constructivist classrooms*. ASCD.
- Brown, A. H., & Green, T. D. (2015). *The essentials of instructional design: Connecting fundamental principles with process and practice*. Routledge.
- Bruffee, K. A. (1993). *Collaborative learning: Higher education, interdependence, and the authority of knowledge*. Johns Hopkins University Press.
- Churcher, K. M. A., Downs, E., & Tewksbury, D. (2014). "Friending" Vygotsky: A social constructivist pedagogy of knowledge building through classroom social media use. *Journal of Effective Teaching*, 14(1), 33–50. <https://eric.ed.gov/?id=EJ1060440>
- Colpaert, J. (2014). *Educational engineering and distributed design: A research report*. University Antwerpen. Institute for Education and Information Sciences. Retrieved November 15, 2020, from <http://www.iozefcolpaert.net/EE.pdf>
- Davidson, N., & Major, C. H. (2014). Boundary crossings: Cooperative learning, collaborative learning, and problem-based learning. *Journal on Excellence in College Teaching*, 25(3 & 4), 7–55.
- Dehnad, A., Afsharian, F., Hosseini, F., Arabshahi, S. K. S., & Bigdeli, S. (2014). Pursuing a definition of self-directed learning in literature from 2000–2012. *Procedia-Social and Behavioral Sciences*, 116, 5184-5187. <https://doi.org/10.1016/j.sbspro.2014.01.1097>
- Donitsa-Schmidt, S., & Ramot, R. (2020). Opportunities and challenges: teacher education in Israel in the Covid-19 pandemic. *Journal of Education for Teaching*, 1-10. <https://doi.org/10.1080/02607476.2020.1799708>
- Escobar U. C. (2013). Learning to become a CLIL teacher: Teaching, reflection and professional development. *International Journal of Bilingual Education and Bilingualism*, 16(3):334-353. <https://doi.org/10.1080/13670050.2013.777389>

- Gagné, R. M. (1985). *The conditions of learning and theory of instruction* (4th ed.). Holt, Rinehart and Winston.
- Garrett, N. (1991). Technology in the service of language learning: Trends and issues. *Modern Language Journal*, 75(1), 74-101. <https://doi.org/10.2307/329836>
- Grow, G. O. (1991). Teaching learners to be self-directed. *Adult Education Quarterly*, 41(3), 125-149. <https://doi.org/10.1177%2F0001848191041003001>
- Guglielmino, L. M. (1978). Development of the self-directed learning readiness scale. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 38(11-A), 6467.
- John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, 31(3/4), 191–206. <https://doi.org/10.1080/00461520.1996.9653266>
- Johnson, D. W., & Johnson, R. T. (2015). Theoretical approaches to cooperative learning. In R. Gillies, (Ed.), *Collaborative learning: Developments in research and practice* (pp. 17-46). Nova.
- Johnson, D. W., & Johnson, R. T. (2019). The impact of cooperative learning on self-directed learning. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century: Implications for higher education* (pp.37-66). AOSIS. (NWU Self-Directed Learning Series, Vol. 1).
- Kerres, M. (2020). Against all odds: Education in Germany coping with Covid-19. *Postdigital Science and Education*, 2, 690-694. <https://doi.org/10.1007/s42438-020-00130-7>
- Kim, R., Olfman, L., Ryan, T., & Eryilmaz, E. (2014). Leveraging a personalized system to improve self-directed learning in online educational environments. *Computers and Education*, 70, 150–60. <https://doi.org/10.1016/j.compedu.2013.08.006>
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Association Press.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

- Labonté, C., & Smith, V. R. (2019). Validation of a questionnaire assessing students' self-directed and collaborative learning with and without technology in Canadian middle school classrooms. *Canadian Journal of Learning and Technology*, 45(2), 1–19. <https://eric.ed.gov/?id=EJ1232515>
- Lee, K., Tsai, P.-S., Chai, C. S., & Koh, J. H. L. (2014). Students' perceptions of self-directed learning and collaborative learning with and without technology. *Journal of Computer Assisted Learning*, 30(5), 425-437. <https://doi.org/10.1111/jcal.12055>
- Mackey, T. P., & Jacobson, T. E. (2011). Reframing information literacy as a metaliteracy. *College and Research Libraries*, 72(1), 62–78. <https://doi.org/10.5860/crl-76r1>
- Marsh, G. E., & Ketterer, J. J. (2005). Situating the zone of proximal development. *Online Journal of Distance Learning Administration*, 8(2). <http://www.westga.edu/~distance/ojdla/summer82/marsh82.htm>
- Matthews, R. S. (1996). Collaborative learning: Creating knowledge with students. In R. J. Menges, M. Weimer, & Associates, (Eds.), *Teaching on solid ground: Using scholarship to improve practice* (pp. 101-124). Jossey-Bass.
- Mbohwa-Pagels, K., & Rode, R. (2014). DaF im SA Schulsystem. *eDusa*, 9(1), 13-19.
- Mentz, E., & Bailey, R. (2019). A systematic review of research on the use of technology-supported cooperative learning to enhance self-directed learning. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century: Implications for higher education* (pp. 203-38). AOSIS. (NWU Self-Directed Learning Series, Vol. 1).
- Merriam, S. B., & Brockett, R. G. (2011). *The profession and practice of adult education: An introduction*. John Wiley & Sons.
- Merrill, M. D. (1983). Component display theory. In C. Reigeluth, (ed.), *Instructional design theories and models*. Erlbaum Associates.
- Moore-Adams, B. L., Jones, W. M., & Cohen, J. (2016). Learning to teach online: A systematic review of the literature on K-12 teacher preparation for teaching online. *Distance Education*, 37(3), 333–48. <https://doi.org/10.1080/01587919.2016.1232158>
- Morrison, G. R., Ross, S. M., Kalman, H. K., & Kemp, J. E. (2011). *Designing effective instruction* (6th ed.). John Wiley and Sons.

- O'Brien, K. Y, Forte, M., Mackey, T. P., & Jacobson, T. E. (2017). Metaliteracy as pedagogical framework for learner-centered design in three MOOC platforms: Connectivist, Coursera and Canvas. *Open Praxis*, 9(3), 267–86. <https://openpraxis.org/index.php/OpenPraxis/article/view/553>
- Özhan, Ş. Ç., & Kocadere, S. A. (2020). The effects of flow, emotional engagement, and motivation on success in a gamified online learning environment. *Journal of Educational Computing Research*, 57(8), 2006-2031. <https://doi.org/10.1177/0735633118823159>.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. <https://doi.org/10.1007/s10488-013-0528-y>
- Patterson, C., Crooks, D., & Lunyk-Child, O. (2002). A new perspective on competencies for self-directed learning. *Journal of Nursing Education*, 41(1), 25-31. <https://doi.org/10.3928/0148-4834-20020101-06>
- Powell, K. C., & Kalina, C. J. (2009). Cognitive and social constructivism developing tools for an effective classroom. *Education*, 130(2), 241–50. <https://eric.ed.gov/?id=EJ871658>
- Reigeluth, C. M. (1983). Meaningfulness and instruction: Relating what is being learned to what a student knows. *Instructional Science*, 12(3) 197–218. <https://doi.org/10.1007/BF00051745>
- Reigeluth, C. M. (1992). Elaborating the elaboration theory. *Educational Technology Research and Development*, 40(3), 80–6. <https://doi.org/10.1007/BF02296844>
- Richter, D., Kunter, M., Klusmann, U., Lüdtke, O., & Baumert, J. (2011). Professional development across the teaching career: Teachers' uptake of formal and informal learning opportunities. *Teaching and Teacher Education*, 27(1), 116-126.
- Schart, M., & Legutke, M. (2012). *Lehrkompetenz und Unterrichtsgestaltung*. Langenscheidt.
- Schrum, L., & Hong, S. (2002). Dimensions and strategies for online success: Voices from experienced educators. *Journal of Asynchronous Learning*, 6(1), 57–67. <http://actxelearning.pbworks.com/f/10.1.1.109.3649.pdf>

- Seel, N. M., Lehmann, T., Blumschein, P., & Podolskiy, O. A. (2017). *Instructional design for learning: Theoretical foundations*. Sense Publishers.
- Slavin, R. E. (1991). Synthesis of research of cooperative learning. *Educational Leadership*, 48(5), 71-82.
- Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3rd ed.). Wiley.
- Song, L., Singleton, E. S., Hill, J. R., & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The Internet and Higher Education*, 7(1), 59–70. <https://doi.org/10.1016/j.iheduc.2003.11.003>
- Susilo, A. P., Van Merriënboer, J., Van Dalen, J., Claramita, M., & Scherpbier, A. (2013). From lecture to learning tasks: Use of the 4C/ID Model in a communication skills course in a continuing professional education context. *Journal of Continuing Education in Nursing*, 44(6), 278–84. <https://doi.org/10.3928/00220124-20130501-78>
- Thornton, K. (2010). Supporting self-directed learning: A framework for teachers. *Research and Practice in English Language Teaching in Asia*, 59-71. <http://dx.doi.org/10.5746/LEiA/10/V1/A14/Thornton>
- Van Merriënboer, J. J. G. (1997). *Training complex cognitive skills: A four-component instructional design model for technical training*. Educational Technology Publications.
- Van Merriënboer, J. J.G. (2020). Das Vier-Komponenten Instructional Design (4C/ID) Modell. In H. Niegemann, & A. Weinberger, (Eds.), *Handbuch Bildungstechnologie*. Springer. https://doi.org/10.1007/978-3-662-54368-9_8
- Van Merriënboer, J. J. G., Clark, R. E., De Crook, & M. B. M. (2002). Blueprints for complex learning: The 4C/ID-Model. *Educational Technology Research and Development*, 50(2), 39–64. <https://doi.org/10.1007/BF02504993>
- Van Zyl, S., & Mentz, E. (2019). Moving to deeper self-directed learning as an essential competency for the 21st century. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century: Implications for higher education* (pp. 67-102). AOSIS. (NWU Self-Directed Learning Series, Vol. 1).
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

- Warburton, N., & Volet, S. (2013). Enhancing self-directed learning through a content quiz group learning assignment. *Active Learning in Higher Education*, 14(1), 9-22.
<https://doi.org/10.1177%2F1469787412467126>
- Wessner, M., & Pfister, H.-Rr. (2000). Points of cooperation: Integrating cooperative learning into web-based courses. In H. U. Hoppe, H. Ogata, & A. Soller, (Eds.), *The role of technology in CSCL. Computer-Supported Collaborative Learning*, 9. Springer.
https://doi.org/10.1007/978-0-387-71136-2_3
- Wittmann, G.-E., & Olivier, J. (2019). Professional development in fostering self-directed learning in German second additional language teachers. *Per Linguam*, 35(3), 125-142.
<https://dx.doi.org/10.5785/35-3870>
- Wittmann, G.-E., & Olivier, J. (2020). Professional development needs of teachers of German second additional language in South Africa. *Acta Germanica* (in press).

CHAPTER 6 IMPLEMENTING AN ONLINE COLLABORATIVE LEARNING TEACHER PROFESSIONAL DEVELOPMENT PROGRAMME FOR TEACHERS OF GERMAN SAL IN SOUTH AFRICA

6.1 Abstract

Teachers of German Second Additional Language (SAL) in South Africa face a number of obstacles in teaching, as well as in their own professional development, mostly due to their working environment and official policies. After a comprehensive needs assessment, which was the focus of a previous article, a professional development model was designed focusing on collaborative learning and self-directed learning. In the design, close attention was paid to overcoming the obstacles to teacher professional development, while allowing for sufficient individualisation of learning aims. The design was based on the Four-Component Instructional Design (4C/ID). A first phase of the model was evaluated by local and international subject and instructional design experts, after which the model was implemented and evaluated by teachers of German SAL in South Africa. Participants in the trial implementation judged the programme to be relevant to their needs. Their ratings indicated that there was a high likelihood that they would use the model themselves in future. However, a need was identified for the model to be revised in order to facilitate asynchronous collaborative learning more effectively. In this article, which forms part of a larger study, insights gained from the design, testing and evaluation of the model are highlighted.

6.2 Keywords

Collaborative learning, evaluation, German SAL, professional development

6.3 Introduction

Regardless of the education system employed in a country, the nature and quality of what teachers bring to education could arguably be considered as key to that educational system (Misra, 2018). The teaching competence of individual teachers is said to have a significant influence not only on their teaching but also on students' success (Krille, 2020). As demands for deeper and more complex student learning intensify (Darling-Hammond et al., 2017), so do the demands on teachers and teacher professional development programmes. In addition to the existing demands, Darling-Hammond et al. (2017) propose that:

[s]ophisticated forms of teaching are needed to develop 21st century student competencies, such as deep mastery of challenging content, critical thinking, complex problem-solving, effective communication and collaboration, and self-direction. (p. 1)

While professional development opportunities afford teachers the opportunity to keep abreast of changes regarding subject content, regulations, standards and teaching methods, and are intended to assist teachers to bring positive change to their professional behaviour, certain barriers do exist that prevent teachers from participating in professional development opportunities (Krille 2020). While not limiting the barriers to their own examples, Yoon et al. (2020) identify a number of major barriers to learning in professional development activities, namely, professional development opportunities' lack of usefulness in teachers' real-life working contexts, the quality of delivery, and the lack of customisation to teachers' needs. Teachers of German Second Additional Language (SAL)³² face additional barriers and challenges to those already mentioned due to their professional contexts and lack of specialised professional development opportunities (Wittmann & Olivier, in press).

This article forms part of a larger study which is intended to provide a basis for recommendations to expand professional development opportunities for teachers of German SAL in South Africa. As was shown in a comprehensive analysis of the professional development needs of teachers of German SAL in South Africa (Wittmann & Olivier, in press), not only is there a lack of opportunities for teachers of German SAL to participate in relevant development programmes, but the entire field of professional development of these teachers remains under-researched in the South African context (Wittmann & Olivier, 2019; Wittmann & Olivier, in press). This study aims to address these shortcomings by making recommendations for developing online development programmes for teachers of German SAL. The researcher seeks to answer the question of what a context-specific professional development programme designed to equip teachers of German SAL to become self-directed learners through collaborative and individualised learning should entail.

In order to address the question above, a brief contextualisation of the teaching and learning of German SAL in South Africa, the design and theory behind an online professional development model focusing on self-directed and collaborative learning are presented. Furthermore, national

³² In this study, the term "German as a Foreign Language" applies to the general teaching of this discipline worldwide. "German Second Additional Language" (SAL) refers to the school subject as it exists in South Africa.

and international expert evaluations of the proposed model, as well as teachers' responses from testing the model and their resulting evaluations, have been analysed. This article concludes with recommendations as to how the model could be improved, as well as discussion on the role of collaborative learning in the process.

6.4 Background: German SAL teaching in South Africa

This article is part of the wider discourse of German language teaching. According to a report published by the German Federal Foreign Office every five years, 7 330 learners in South Africa are currently learning German, and German as a Foreign Language is taught at 74 South African schools. Compared to 2015, the number of learners of German in schools in South Africa has therefore decreased by 578 (Auswärtiges Amt, 2020). According to Von Maltzan (2009), a decline in the number of learners of German could already be noted by 2009. She ascribes the growing decline in the number of learners of German SALs and other SALs partially to the fact that the National Education Policy Act 27 of 1996 (Von Maltzan, 2009, p. 208) requires learners to study only their home language³³ and one of the official languages. As a result, learners tend not to opt for an additional language (Von Maltzan, 2009).

German as a Foreign Language is classified as an SAL in terms of the South African *National Curriculum Statement Grades 10 – 12 (General) Languages: German Second Additional Language* (DoE, 2003). As is the case with all SALs, the teaching of German SAL is further complicated by the *Curriculum and Assessment Policy Statement, English*³⁴ as a *Second Additional Language* (CAPS) of 2011 (DBE, 2011), which stipulates that schools may offer additional languages at SAL level but must do so outside the allocated 27.5 school hours per week (DBE, 2011, p. 8), which may only be used for the minimum required NCS³⁵ subjects.

German SAL is therefore limited to being taught outside of school hours. Mbohwa-Pagels and Rode (2014) identified the time constraints as engendered by CAPS as a major threat to German SAL. Wittmann and Olivier (in press) concurred; however, in a comprehensive needs analysis, they identified further factors, namely, “a lack of subject advisors”, “a lack of in-service training opportunities”, “the cost of professional development opportunities”, “isolation / distance between schools”, and “the attitude of the headmaster / school governing body” as threats to the teaching

³³ Provided that the home language is a South African language.

³⁴ Although the title states English, the body of the policy statement also covers non-official languages such as German.

³⁵ National Curriculum Statement.

of German SAL. It is within this context, that this article explores a professional development model for German SAL teachers.

6.5 Design and Theory Underpinning a Professional Development Model: Self-directed and Collaborative Learning

The above-mentioned in-depth needs analysis was conducted amongst a variety of stakeholders (Wittmann and Olivier, forthcoming). It was established that teachers of German SAL faced pressing challenges and that the most critical professional development needs were as follows:

- knowing what to teach at which grade level (clear learning outcomes are given only for Grade 12);
- knowing how to identify suitable teaching materials;
- being able to adapt partly suitable material;
- being able to generate own teaching material;
- keeping up to date with teaching approaches and material used in class; and
- more cooperation between teachers to reduce their feeling of isolation (Wittmann & Olivier, in press).

Taking into consideration the time constraints under which teachers of German SAL work (Mbohwa-Pagels & Rode, 2014; Wittmann & Olivier, in press; Wittmann & Olivier, forthcoming) and the considerable heterogeneity reported amongst teachers of German SAL (Mbohwa-Pagels & Rode, 2014; Wittmann & Olivier, 2019), a model focusing on self-directed learning (SDL) through cooperative and collaborative learning was designed (Wittmann & Olivier, in press). SDL is an educational approach where participants assume responsibility for their own learning (Bosch 2017; Bosch et al., 2019).

Initially, a *blended learning* approach was identified as an appropriate means to implement the programme (Wittmann & Olivier, forthcoming). However, this became impractical when, on 15 March 2020, the President of South Africa, Cyril Ramaphosa, declared a state of national disaster in South Africa due to the World Health Organization's announcement of the coronavirus (COVID-19) pandemic. The pandemic crisis led to schools closing down (Manderson & Levine, 2020) and tertiary institutions implementing measures to ensure social isolation while still continuing with their core business (Motala & Menin, 2020). Under these circumstances, a decision was made to implement the entire testing phase for this study online.

6.6 The Design Process

Van Merriënboer's (1997) Four-Component Instructional Design (4C/ID) was selected as the underlying instructional design model (Wittmann & Olivier, in press) for this study. The 4C/ID model focuses on complex tasks and is used to plan educational interventions (Susilo et al., 2013; Van Merriënboer, 2020). As it is based on tasks that are designed to imitate real-life situations that participants may face in their professional lives (Susilo et al., 2013), 4C/ID was deemed particularly suitable for the purposes of this research. There are several examples of how this model has been applied elsewhere: In the Netherlands, Frerejean et al. (2019) developed a course at the Amsterdam University of Applied Sciences, which focused on the development of mobile apps. At the Iselinge University of Professional Teacher Education, a course was developed, which focuses on the integration of information problem-solving skills (Frerejean et al., 2019). Furthermore, 4C/ID was successfully implemented in Belgium in the development of a general practice education course at the KU Leuven (Frerejean et al., 2019). Similarly, Kolcu et al. (2019) demonstrated the use of 4C/ID and the subsequent evaluation of the course in continuing endodontics education.

Since the professional development opportunity in the current study was intended to foster the skills of SDL in participating teachers of German SAL and enhance individualised learning through collaborative learning, only the first cycle was fully developed; the SDL aspect of the study required that subsequent cycles be based on the participants' reflections after each cycle. Based on the above-mentioned needs analysis, the first cycle of the programme was developed to focus on the aspect of working with texts in teaching but allowed individual participants to consider their own contexts and to formulate their individual aims.

The collaborative learning element was integrated in this design in that participants could view each other as collaborators and could build on each other's knowledge, use one another as resources, and increase their personal confidence through their peer relationships (Yoon et al., 2020). While Yoon et al. refer to collaborative learning, the concept is not new; the technique of assisting students to exploit their own experiences as valuable resources was identified as far back as 1973 as being one of the key concepts of SDL (Knowles, 1973). Both SDL and collaborative learning emphasise the idea that knowledge is constructed through interaction with others (Boyer et al., 2014). Similarly, SDL and collaborative learning alike advocate that the instructor should not be the main source of information as is the case in more traditional teaching

concepts (Bosch et al., 2019). The theory underlying these processes is discussed in the next section.

6.7 The Underlying Learning Theory

The terms *collaborative learning* and *cooperative learning* are often used interchangeably (Bruffee, 1995; Jacobs, 2015). However, as Bruffee (1995) elucidates, there are certain marked differences between the two methods, even though their goals might overlap. According to Bruffee (1995), the main difference between the two methods lies in the fact that they were originally developed for people of differing age groups and levels of experience and interdependence, but it also lies in the assumption teachers make about the nature and authority of knowledge when selecting one method or the other. While Kyndt et al. (2013) concur that the terms were initially used to distinguish between age groups and types of knowledge, they add that collaboration could be described as a philosophy of interaction, while cooperation should rather be interpreted as the structure of an interaction.

In cooperative learning, individual students are collectively held accountable for the whole group reaching the group goal (Davidson & Major, 2014; Jolliffe & Snaith, 2017). Individuals are further expected to accept accountability for the entire content of the task (Felder & Brent, 2007), which ties in with the aim of SDL (Knowles, 1975). In comparison, collaborative learning focuses on shifting the authority from the instructor to the student group, leading to a greater sense of student agency. It therefore renegotiates relationships between students themselves and between students and teachers (Bruffee, 1995). Johnson and Johnson (2018) emphasise the cooperative foundation of collaborative learning and propose that students work together to optimise not only their own but also each other's learning. However, Bruffee (1995) argues that, whereas cooperative learning attempts to eliminate competition between students, dissent may be aroused in collaborative learning (Bruffee, 1995), since the individuals in a group may disagree on the best way to achieve their goals in a task. Bruffee also posits that "trying to account for dissent – what may be motivating a group member to dissent against the prevailing opinion – is an especially powerful tool of understanding". (p. 17)

Davidson and Major (2014) furthermore underscore that the focus in collaborative learning is not on interdependence as is the case in cooperative learning; the focus is rather on working together (interdependently) "toward the discovering, understanding, or production of knowledge" (Davidson & Major, 2014, p. 21).

In the design of the model for this study, emphasis was placed on both SDL and collaborative learning. Morris (2019) drew attention to the fact that SDL does not take place in a societal vacuum and that there is a need to balance personal learning goals with societal needs. Morris (2018) thus highlighted the importance of factors inherent in the individual's context, while Tough (1971) mentioned practical reasons, a personal interest and curiosity as motivating factors for adult learning. Matsuo (2015), on the other hand, explicated the importance of a developmental network in participants' workplaces.

SDL and collaborative learning have also been found to be mutually enhancing (Mawas & Muntean, 2018). In the design and development of the professional development programme for teachers of German SAL in this study, activities set up for participants on the learning platform were therefore designed to serve a dual purpose. Individualisation has its roots in constructivism and professional development refers to one-on-one instruction through which individual participants' specific learning needs are addressed (McDonald 2016). Linder and Schwab (2020) emphasise that individualisation respects the individual learning aims and needs of participants at the microlevel. In addition to individualisation, activities were also structured to give participants the feeling of belonging to a community of practice. This was done by encouraging them to comment on each other's activities and, more especially, to give advice on problems reported by other participants, thus building on each other's experiences. This focus on participants' experiences is a key component of andragogy (Knowles, 1973), which serves as a basis for SDL.

The aim was that the community of practice developed would include "groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis" (Wenger et al., 2002). A community of practice is characterised by "mutual engagement", "joint enterprise" and a "shared repertoire" (Wenger, 2011). Feick (2016) explains how, in contrast to other groups and networks, membership in a community of practice arises from a connection to said community. As a result, members share an identity derived from a common field of interest. In contrast to outsiders, members therefore share a specific competence. Establishing a community of practice seemed especially relevant for teachers of German SAL in light of one of the professional development needs established by Wittmann and Olivier (2020), namely, the need for more collaboration between teachers in order to reduce their feeling of isolation.

6.8 Implementing and Evaluating the Model in Practice: Methodology

This research article forms part of a study on the professional development needs of teachers of German SAL in South Africa. An in-depth needs analysis was conducted, after which a theoretical model based on the needs analysis was designed. An embedded mixed-method design was used, based mainly on qualitative data but with quantitative data playing a supportive, secondary role (Creswell 2009; Creswell & Plano Clark, 2011; Ziegler, 2014). More details on the sampling strategy, data collection and data analysis follow below.

6.8.1 Sampling Strategy

Before the model was presented to the participants themselves, seven expert participants were selected by means of purposeful sampling on the grounds that they were “especially knowledgeable about, or experienced with a phenomenon of interest” (Palinkas et al., 2015, p. 534). The group of experts consisted of local and international experts in the field of professional development of teachers of either DaF (German as a Foreign Language) or SAL (as the school subject is known in South Africa). An effort was made to include speakers of German as a first language, as well as speakers of German as a foreign language. Furthermore, experts with varying degrees of knowledge concerning the use of digital media were also included. Due to the researcher’s prolonged engagement with and familiarity in the field of professional development of teachers of German as a Foreign Language or SAL, it was possible to identify particularly knowledgeable and influential interviewees, as deemed acceptable in terms of the requirements set by Shenton (2004). All experts gave full informed consent.

After the expert evaluation, all participants who had participated in the original needs analysis (N=14) (Wittmann & Olivier, forthcoming) were invited to evaluate the programme in order to determine whether the professional needs identified during the needs analysis were, in fact, met. All participants who evaluated the programme were practising teachers of German SAL.

6.8.2 Data Collection

As the focus in this study was not only on the academic value of the devised model, but also on its usefulness as perceived by participants themselves, two different evaluation forms were created. The information-rich participants (experts) were asked to complete a more objective, non-standardised evaluation form (see Addendum A) to offer their professional opinions, while in the second evaluation form, participants in the programme itself were encouraged to convey their subjective opinions and experiences, especially as to whether they would be likely to use the

programme in future. This evaluation form (see Addendum B) was informed by the Technology Acceptance Model 2 (TAM 2). Like its predecessor, Davis' original Technology Acceptance Model (TAM) (Putra, 2018), TAM 2 determines the likelihood of users' adoption of new information technologies based on perceived usefulness and ease of use (Putra, 2018; Venkatesh & Bala, 2008); however, it also introduces the additional concepts of "social influence" and "cognitive instrumental processes" (Putra, 2018, p. 27). A basic questionnaire (see Addendum B) consisting of short and longer questions measuring the above-mentioned factors was therefore created, and participants were asked to complete the questionnaire after testing the model.

The main focus of the qualitative data analysis section was on the experiences of the participants³⁶ themselves, while reference was also made to the expert evaluations. In line with the regulations of the provincial Departments of Education, as well as with established research practice in South Africa, permission to conduct research at schools was obtained from the relevant provincial departments. Similarly, the headmasters of the relevant schools granted permission for their teachers to participate in the research. Of the original 14 participants, six participants gave full informed consent to participate in the programme evaluation. When the study commenced, two of the original 14 participants had since retired, while others had either given up teaching German SAL (n=2) or had left the country (n=1). Two further participants felt so overwhelmed by their current workload that they declined to participate in the programme evaluation.

The participants tested the programme and gave input on it for three consecutive weeks. As the programme was intended to be a collaborative learning opportunity, only Cycle 1 was set up before commencement of the programme in order to allow for participants to provide input concerning the content of the programme based on their learning needs. After the three weeks had elapsed, participants completed a basic, non-standardised evaluation questionnaire, which was approved by the North-West University (NWU) Faculty of Education Research Ethics Committee. The questionnaires were submitted via Google Forms, as all participants had previously indicated that they would have access to this avenue of submission.

6.8.3 Data Analysis

In order to determine experts' and participants' level of satisfaction with various aspects of the programme (see Addenda A and B), average Likert-scale responses were analysed. Open-ended

³⁶ For the sake of clarity, information-rich participants are hereafter referred to as *experts*, while teachers are referred to as *participants*.

qualitative questions were included in the questionnaire, not only to supplement the quantitative data but also to collect more detailed information about the participant group's perceptions as well as their suggestions for the improvement of the programme. As the quantitative data collected on the experts' evaluations have already been submitted for publication in a separate article and were also utilised to improve on the initial programme design, previously unpublished qualitative data and quotes by the experts are used to supplement participant data in this case.

6.9 Discussion and Findings

Questions were posed to the participants to determine their general impressions of the model, its perceived relevance, the impact participants predicted participation in the programme could have on their own teaching, the model's perceived usefulness and its ease of use, as well as the likelihood of their using the programme should it be developed further.

Quantitative ratings were on a range of one to five, and average rating are given below in Table 6-1.

Table 6-1: Summary of quantitative ratings

Indicator	Range		Average rating
	From	To	
General impression	1 extremely negative	5 very positive	4.5
Relevance	1 completely irrelevant	5 highly relevant	4.67
Impact on teaching	1 no influence	5 very high influences	4.3
Usefulness	1 useless	5 very useful	4.67
Ease of use	1 very easy	5 extremely difficult	2.8

Likelihood of future use	1 highly unlikely	5 very likely	4.5
--------------------------	-------------------	---------------	-----

While the ratings in the quantitative section seem very positive, the limited number of participants may have hindered the purely quantitative data from being completely reliable. Much emphasis was therefore placed on the qualitative data and statements by participants. While participants gave relatively short answers to questions regarding their general impressions and the programme's relevance and usefulness, they were somewhat critical of its impact on their teaching, its ease of use and its usefulness. In the coding of the qualitative responses to the open-ended questions, *time constraints*, *collaboration* and *ease of access* emerged as dominant themes. Each of these themes are discussed in greater detail below. Verbatim responses of participants are also included to support the findings. The quotation references are provided in square brackets. Participant quotations are referenced as [Participant number: Question number: Line number], while an "E" in front denotes an expert participant versus the rest of the teacher participants.

6.9.1 Time Constraints

The words "time", "time constraints", "flexibility" and "pressure" were mentioned in the responses to several questions, most notably regarding the programme's ease of use and the likelihood of participants using the programme in future. One participant, when asked about her general impression of the programme, found the flexibility that the programme offers to be the most notable aspect:

I found it good that the program (sic) was flexible enough to make room for users to work independently. [1:2: 1].

Another participant, when asked how the programme should be changed to have a greater influence on teaching, mentioned that

...one should be able to use it in a short period of time [4:6:6].

When asked what changes could be made to make the programme easier to use, another participant commented:

As a teacher you are under constant pressure for time [6:9:10].

These answers were indicative of the fact that, while participants regarded the programme as being relevant, they would prefer that the programme consumes as little time as possible. In comparison, the experts referred to the time factor less often, their comments on this aspect being related to enabling participants to plan and structure their learning:

In order to allow for orientation, one could also give an estimate of the expected time it would take to complete the entire cycle [E6:1.2:7–8]

Even when participants were asked about the extent to which the programme had served its purpose of fostering self-directed and collaborative learning, the time factor was mentioned:

Time is always of the essence [6:12:14].

Although this response did not directly answer the question, it did give a clear indication as to how relevant the time factor was to participants. Data collected from participants and experts alike confirmed Mbohwa-Pagels and Rode's (2014) and Wittmann and Olivier's (in press) findings that time constraints are a major factor in the professional development of teachers of German SAL. While participants expressed a preference that professional opportunities take up as little time as possible, experts advised that participants be informed about the estimated time that completion of an activity or cycle would take. This information might indeed be of assistance to participants in enabling them to plan their learning more efficiently. Another theme that emerged dominantly, and that may have an impact on the time it takes participants to complete activities, was ease of access. This aspect is discussed in the next subsection.

6.9.2 Ease of Access

Ease of access, which, as mentioned above, may in some cases be linked to time constraints, was a major theme for participants and was mentioned as a limiting factor affecting how likely they were to use the programme again. Similarly, participants were somewhat critical of the ease of use of the programme.

I must admit that I had some trouble navigating the Moodle site. I was able to find my way, but would suggest an introduction for first time users. [1: 8: 1–2]

The programme should not require more than basic computer skills from its users. [2:8:3]

Perhaps a workshop on the programme could make it even more accessible. [5:8:9]

As a teacher you are under constant pressure for time. Easy instructions and access will make it easier. [6:8:10]

As mentioned under subsection 4.4, participants rated the ease of use of the programme as 2.8, with 1 being extremely easy and 5 being extremely difficult. While the participants were asked only about the ease of use in general, experts were asked about the ease related to language use and the ease of technological navigation. As was the case with the participants' questionnaire, 1 referred to access being very easy, while 5 referred to a high level of difficulty. Ease of use regarding the technology scored 1.83, while ease of use relating to language scored 2.0.

Where experts made recommendations on how to make the programme easier to use, these recommendations focused on language use (an aspect which none of the participants commented on in their suggestions):

One hopes that all participants have reached at least language level C1, our German as Foreign Language teachers are seldomly Germans, they are South-Africans (sic). [E2:4:2–3]

Similarly, experts' recommendations focused largely on the clarity of the instructions and navigational details, while participants' comments were at a more macro-level and related to the programme as a whole. For example, where participants recommended an introductory meeting (see above), experts recommended changes to specific activities and settings:

"Meine persönliche Schatzsuche"³⁷ starts a bit abruptly. Perhaps add an introduction (scenario/setting the scene). Schritt 1: upload material only as attachment or possibly as text in the text box also possible? [E1:2.2:1–2].

Ease of use was the only theme in which the opinions and approaches of the participants and the experts differed significantly.³⁸ This variance was of value to the researchers, as it stressed the relevance of keeping participants' needs, experiences and opinions in focus when planning a professional development opportunity. Unfortunately, this is often neglected in practice (Yoon et al. 2020, p. 353).

³⁷ "Meine persönliche Schatztruhe" is translated as "My personal treasure chest". In this activity, participants were requested to upload a text or a resource of their choice which they had found to be exceptionally useful in their own teaching, and then to establish criteria for useful texts and resources, based on their own personal 'treasures'.

³⁸ In spite of the fact that participants and experts were given different questionnaires, certain questions were purposefully kept the same in order to facilitate the comparison between opinions.

A further need, which was emphasised by participants and experts alike, forms the third theme, collaboration, which is discussed next.

6.9.3 Collaboration

The opportunity for collaboration was seen by participants as both a strong and a weak point of the programme. As explained under §4.1, only a limited number of participants could be included. In spite of the limited number, the heterogeneity of the participant population – which Wittmann and Olivier (forthcoming) and Mbohwa-Pagels and Rode (2014) observed amongst teachers of German SAL in general – once again became apparent in relation to participants' teaching and learning needs. One activity comprised two parts: one part was designed to assist participants in identifying and formulating their needs; the second part was aimed at allowing participants to find solutions to individual needs collaboratively. When asked to describe what kind of text participants still needed for use in their own classroom, one participant expressed a need for a text suited to Level B2 of the Common European Framework of Reference for Languages: Learning, Teaching, Assessment, while another participant was looking for a text suited to Level A1.³⁹

Furthermore, not only the language level taught but also the themes of the texts sought differed greatly. The participant looking for a text on B2 level needed a crime story to serve as an example to her learners for composing their own texts, while the participant needing a text on A1 level wanted to teach her learners basic facts about Germany.

A possible explanation for this great variance in teaching and learning needs might be found in the fact that CAPS of 2011 allows for, but does not require, SALs to be taught as from Grade 4 (DBE, 2011, p. 9). This guideline results in schools starting with SAL instruction in different grades (usually Grade 4, 8 or 10), and teachers are therefore faced with highly diverse classroom contexts and setups. This creates a further challenge, since all learners of German SAL must write the same Grade 12 examinations.

In facing the challenges of widely differing contexts and populations, collaboration with others facing the same obstacles could be of great benefit. Collaboration and exchange of information

³⁹ Level B2 of the CEFL is defined as “Vantage” stage for independent users, while A1 is the “Breakthrough” stage for beginners (CoE, 2001, p. 23).

emerged as being among the greatest needs in relation to the programme, and participants commented on the possibilities for collaboration the programme offers. However, they saw the small number of participants as a limiting factor:

There is no improvement necessary. The relevance of the content of the program will increase as the number of participants increase. [1:4:1]

I can see how exchanging information with other teachers of German SAL would contribute directly to my own teaching and I would be excited if more teachers/lecturers would participate. [2:6:2–3].

One participant further suggested what could, in essence, be the start of a community of practice:

The programme will be very helpful if teachers can upload texts they found and the added questions they have created for the text. If the programme can then make those texts available for other teachers to use it will be great. [6: 4: 9–11]

A similar sentiment was echoed by another participant.

I would like a [d]atabase of worksheets and texts that are easy to access. Relevant key words should be added to each document for ease of access. [1:10: 1–2].

One of the experts made a similar suggestion regarding a shared database:

Whoever has a computer and WiFi connection has various Cloud-options, regardless of where s/he is. A self-help door is opened. Documents can even be made available for cooperation (engagement/ support) in a text processing programme like Pages. [E5:4:19–21].

This expert furthermore placed emphasis on participants' willingness to access the available offer. The metaphor of a self-help door was deemed relevant by the researcher, as it established a connection to SDL, requiring learners to take responsibility for their own learning (Bolhuis, 2003; Bosch et al., 2019).

The connection between collaboration and SDL was evident in other responses, too. When participants were asked about whether they felt that the programme had fulfilled its purpose of fostering the characteristics of SDL and promoting collaborative learning, one participant emphasised the aspect of reflection, which is an element of SDL (Kruger, 2019).

Yes. I had to think about my teaching methods as well as the material that I use. In the process I evaluated myself and was able to step back and look at my teaching from a different angle. [1:11 1–2]

Moreover, both an expert and participant and commented on heightened confidence and a sense of taking personal action, further elements of SDL (Kruger, 2019).

The proposed tasks enable teachers to reflect on central aspects of their own teaching (in this case the criteria for the choice of teaching texts). They identify concrete problems in their own teaching practice and are encouraged, by means of a variety of different tasks, to find possible solutions. In addition to this, they receive (meta) cognitive strategies which are directly related to their teaching practice, and which can immediately be applied. [E4:4:11–14].

It encourages the user not only to search for texts and possible solutions to one's teaching problems but to be bold enough to change existing material when necessary. By facilitating e-contact between teachers of German SAL the programme definitely promotes collaboration among them. [2: 11: 3-7]

The aforementioned participant's comment on the facilitation of e-contact and the promotion of collaboration was echoed by another participant.

It allowed one to see and learn from other teachers. You see what they see as useful for text selection. You learn a lot from the contribution of other teachers. [6: 11: 13–14]

While participants mentioned certain aspects of SDL which they had discovered for themselves, an international expert commended the programme for its focus on participants' own experiences and the contexts they work in:

The proposed activities enable teachers to reflect about central aspects of their own teaching [...]. They identify concrete problems from their own teaching practice and are encouraged to find possible solutions through a variety of activities. In addition to this, they learn (meta) cognitive skills, which are directly related to their teaching practice, which they can apply immediately. [E4: 7: 1–4]

Similarly, another expert highlighted the important interplay between personal reflection and collaborative efforts:

I think the activities combine reflective exercises with collaborative exercises quite effectively. I like that the emphasis is on helping one another come up with solutions for problems. I particularly like the “Mein Wunschttext” exercise, through which educators can benefit by receiving help as well as demonstrating their own expertise [E2: 4: 4–7].

While the participants would have wished for the inclusion of more participants, participants and experts agreed that collaboration and SDL were encouraged in the programme. A synthesis of the information relating to SDL, individualised learning and collaborative learning, as garnered from the responses above, are presented in the next section.

6.10 Synthesis

Participants found that, in principle, the professional development opportunity embodied in the study programme was highly relevant and useful. They commended the programme’s flexibility and the fact that much emphasis was put on their personal experiences and needs. Responses from both participants and experts indicated that the programme facilitated SDL in that it put emphasis on participants’ individual agency. While broad learning outcomes were given, participants were able to work on texts of their choice, suited to their own teaching contexts. Furthermore, participants reported a heightened sense of confidence in their ability to adapt learning material according to their own needs.

A definite need for increased collaboration between teachers of German SAL emerged in this research. In spite of the heterogeneity of the study population, participants found it rewarding to discuss and exchange ideas and experiences with each other. Participants further indicated that they would welcome the formation of an online community in which resources could be shared and solutions to challenges found collaboratively.

6.11 Recommendations

The professional development programme in this study was designed and implemented only after an in-depth needs analysis in which participants were encouraged to formulate their personal learning needs. The fact that the programme consequently scored so highly regarding its relevance and usefulness supports Yoon et al.’s (2020) finding that lack of usefulness of training programmes, failure to address challenges in teachers’ real-life working contexts and lack of customisation to teachers’ needs may act as major barriers to teacher professional development.

Flexibility, which a participant mentioned as one of the study programme's strongest points, might also be essential. After evaluation of the programme by participants, as well as by experts in the field of teacher professional development and/or the teaching of German as a Foreign Language, the following recommendations are made relating to individualisation, self-directed learning and collaborative learning in the professional development of teachers of German SAL in South Africa.

6.11.1 Recommendations for Individualisation

During the initial needs analysis, as described earlier, only the first cycle of a programme was developed. This open-ended approach allowed for flexibility, which was welcomed by participants. In this regard, it is important to be mindful of the fact that participants' needs develop and change with time. A programme allowing for individualisation should therefore not only allow participants to formulate their own learning aims relevant to the contexts in which they teach but should also allow for individual differences regarding time constraints, language level and familiarity with technology.

Furthermore, while providing an overarching framework, such a programme would need to be easily adaptable. It would need to allow for the inclusion of new learning aims that might arise at short notice and might not only be directly related to the planned content (for example, a short information session or activity on the use of an online platform; adapting to sudden changes in the teaching context during a pandemic) but should also allow for the heterogeneity of participants' learner populations.

6.11.2 Recommendations for SDL

As mentioned in the introduction, a lack of usefulness of professional development opportunities to participants' working contexts is a major obstacle to their learning. Therefore, professional development should build on participants' experiences and allow them to formulate learning aims based on these experiences. Through regular reflection, participants should remain aware of their learning progress and possible changes in their learning needs, and adapt accordingly, as proposed by Lin and Hong (2020).

Furthermore, there should be a focus on improving participants' self-confidence. As Expert 4 mentioned, by identifying concrete problems in their teaching contexts and by finding the solutions themselves through various activities, participants gain metacognitive skills which they can transfer to their students. Reinforcement of participants' ability to solve their own

problems and manage their own learning results in their becoming increasingly confident to adapt and change material according to their own needs.

By sharing their knowledge and experience with other participants and exchanging ideas with their peers during collaborative activities, participants gain further confidence to take responsibility for their own learning, as is discussed in the next section.

6.11.3 Recommendations for CL

The sharing and exchange of ideas, the collaborative efforts at problem-solving and the sharing of resources were welcomed by participants in the programme. However, the flexibility that was identified regarding individualisation and SDL would likewise be advisable in the choice of collaborative activities. Furthermore, since time constraints are a major limiting factor in the professional development of teachers of German SAL in South Africa, greater focus should be placed on facilitating asynchronous collaborative learning (cf. Yoon et al., 2020).

A further suggestion from participants was the establishment of a communal database of texts and questions through which they would be able to share their knowledge and experience. It might thus be appropriate to establish such a platform and to allow that platform to grow as the number and experience of participants increase. Such a database would ideally be shared as an open educational resource (Olivier, 2019) and would foster collaborative learning in that it would challenge the view of the instructor as the absolute authority on the subject matter (Ponti, 2014). In addition, proper use and maintenance of such an open educational resource would reinforce the need for SDL, as argued by Olivier (2019).

Moreover, instead of requiring participants to log onto a learning platform and to work solely on that platform during the professional development activity, other media that are easier to access might be utilised to supplement the tools on the learning platform. In this regard, La Hanisi et al. (2018) have investigated the use of WhatsApp in collaborative learning. Kukulska-Hulme and Viberg (2018) have investigated how mobile technologies may support collaborative learning; and Sun et al. (2018) conducted a study on discussion forums and mobile instant messaging apps in collaborative learning. While a learning platform like *Moodle* might serve as a basis, WhatsApp, mobile technologies and instant messaging apps could additionally facilitate collaboration and collaborative learning.

6.12 Conclusion

It was established that a context-specific professional development programme for teachers of German SAL should be brief, easily accessible and collaborative. This article briefly contextualised the real-life situation regarding the teaching and professional development of teachers of German SAL. The design and implementation of a context-specific professional development programme customised to the participants' needs was described, and opinions of and recommendations from participants as well as experts were analysed in order to make specific recommendations towards the development of a professional development programme for a heterogeneous group of participants, focusing on SDL and collaborative learning. Collaborative learning was seen by participants as being essential, while flexibility was highly recommended in the design and execution of the programme. Recommendations as to the inclusion of individualisation, SDL and collaborative learning in the design of such a programme were made. Since collaborative learning is characterised by the renegotiation of relationships between participants and also of the relationships between participants and instructors, as argued by Bruffee (1995), it remains imperative to keep in mind the constant need to renegotiate such relationships in addition to the content and the mode of delivery of any professional development activity.

6.13 Acknowledgements

This article is based on research funded and supported in part by the National Research Foundation of South Africa (Grant Number: 112143).

6.14 Conflict of interest

The authors declare that there are no known conflicts of interest.

6.15 Ethics approval

Ethics approval was granted by the North-West University Faculty of Education Research Ethics Committee with the ethics number NWU-00471-16-A2.

6.16 Reference list

Auswärtiges Amt. (2020). *Deutsch als Fremdsprache weltweit*. Datenerhebung 2020. Retrieved October 01, 2020, from <https://www.auswaertiges->

amt.de/blob/2344738/b2a4e47fdb9e8e2739bab2565f8fe7c2/deutsch-als-fremdsprache-data.pdf

- Bolhuis, S. (2003). Towards process-oriented teaching for self-directed lifelong learning: A multidimensional perspective. *Learning and Instruction*, 13(3), 327-347.
[https://doi.org/10.1016/S0959-4752\(02\)00008-7](https://doi.org/10.1016/S0959-4752(02)00008-7)
- Bosch, C. (2017). *Promoting self-directed learning through the implementation of cooperative learning in a higher education blended learning environment*. Unpublished PhD thesis) North-West University, Potchefstroom Campus.
https://repository.nwu.ac.za/bitstream/handle/10394/26102/Bosch_C_2017.pdf?sequence=1&isAllowed=y
- Bosch, C., Mentz, E., & Goede, R. (2019). Self-directed learning: A conceptual overview. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century: Implications for higher education* (pp.1-36). AOSIS. (NWU Self-Directed Learning Series, Vol. 1). <https://doi.org/10.4102/aosis.2019.BK134.01>
- Boyer, S. L., Edmondson, D. R., Artis, A. B., & Fleming, D. (2014). Self-directed learning: A tool for lifelong learning. *Journal of Marketing Education*, 36(1), 20–32.
<https://doi.org/10.1177/0273475313494010>
- Bruffee, K. A. (1995). Sharing our toys: Cooperative learning versus collaborative learning. *Change: The Magazine of Higher Learning*, 27(1), pp.12-18.
<https://doi.org/10.1080/00091383.1995.9937722>
- Council of Europe. Council for Cultural Co-operation. Education Committee. Modern Languages Division (CoE). (2001). *Common European Framework of Reference for Languages: learning, teaching, assessment*. Cambridge University Press.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.

- Davidson, N., & Major, C. H. (2014). Boundary crossings: Cooperative learning, collaborative learning, and problem-based learning. *Journal on Excellence in College Teaching*, 25(3 & 4), 7–55.
- Department of Basic Education (DBE). (2011b). *Curriculum and Assessment Policy Statement English as a Second Additional Language*. Retrieved September 30, 2020, from <https://www.education.gov.za/Portals/0/CD/National%20Curriculum%20Statements%20and%20Vocational/CAPS%20FET%20%20SAL%20%20ENGLISH%20GR%2010-12%20%20Web%201BB7.pdf?ver=2015-01-27-155020-433>
- Department of Education (DoE) (South Africa). (2003). *National curriculum statement grades 10 – 12 (general) languages. German second additional language*. Retrieved March 20, 2020, from <https://dlvsa.co.za/files/2015/04/German-2nd-Add-Language.pdf>
- Feick, D. (2016). *Autonomie in der Lernendengruppe. Entscheidungsdiskurs und Mitbestimmung in einem DaF-Handyvideoprojekt. Giessener Beiträge zur Fremdsprachendidaktik*. Narr Francke Attempto Verlag.
- Felder, R. M., & Brent, R. (2007). Cooperative learning. In P. A. Mabrouk, (Ed.), *Active learning: Models from the analytical sciences* (pp. 34–53). American Chemical Association.
- Frerejean, J., Van Merriënboer, J. J. G., Kirschner, P. A., Roex, A., Aertgeerts, B., & Marcellis, M. (2019). Designing instruction for complex learning: 4C/ID in higher education. *European Journal of Education Research, Development and Policy*, 54(4), 513–524. <https://doi.org/10.1111/ejed.12363>.
- Jacobs, G. M. (2015). Collaborative learning or cooperative learning? The name is not important; flexibility is. *Beyond Words*, 3(1), 32–52. <https://eric.ed.gov/?id=ED574149>
- Johnson, D. W., & Johnson, R. T. (2018). Cooperative learning: The foundation for active learning, active learning - beyond the future. In S. M. Brito, (Ed.), *IntechOpen*. 10.5772/intechopen.81086 Retrieved November 09, 2020, from <https://www.intechopen.com/books/active-learning-beyond-the-future/cooperative-learning-the-foundation-for-active-learning>
- Jolliffe, W., & Snaith, J. (2017). Developing cooperative learning in initial teacher education: Indicators for implementation. *Journal of Education for Teaching*, 43(3), 307–315. <https://doi.org/10.1080/02607476.2017.1319507>

- Knowles, M. S. (1973). *The adult learner: A neglected species*. Gulf Publishing Company.
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Association Press.
- Kolcu, M. I. B., Öztürkçü, Ö. S. K., & Kaki, G. D. (2019). Evaluation of a distance education course using the 4C-ID Model for continuing endodontics education. *Journal of Dental Education*, 84(1), 62–71. <https://doi.org/10.21815/JDE.019.138>
- Krille C. (2020) Individual and Context Characteristics Related to Teachers' Professional Development Behavior. In *Teachers' Participation in Professional Development. SpringerBriefs in Education* (pp.41-90). Springer. https://doi.org/10.1007/978-3-030-38844-7_5
- Kruger, C. (2019). In pursuit of accomplished teacher development through praxis in a South African distance learning programme. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-Directed Learning for the 21st Century: Implications for Higher Education* (pp.133-165). AOSIS. (NWU Self-Directed Learning Series Volume 1). <https://doi.org/10.4102/aosis.2019>
- Kukulska-Hulme, A., & Viberg, O. (2018). Mobile collaborative language learning: State of the art. *British Journal of Educational Technology*, 49(2), 207–218. doi: [10.1111/bjet.12580](https://doi.org/10.1111/bjet.12580)
- Kushatmaja, R. P., & Suryani, E. (2019). Analysis of factors affecting edmodo adoption as learning media using Technology Acceptance Model 2 (TAM 2). In *IPTEK Journal of Proceedings Series, 5: The 1st International Conference on Business and Management of Technology (IConBMT)* (pp. 574–582). <http://dx.doi.org/10.12962/j23546026.y2019i5.6436>
- Kyndt, E., Raes, E., Lismont, B., Timmers, F., Cascallar, E., & Dochy, F. (2013). A meta-analysis of the effects of face-to-face cooperative learning: Do recent studies falsify or verify earlier findings? *Educational Research Review*, 10, 133–149. <https://doi.org/10.1016/j.edurev.2013.02.002>
- La Hanisi, A., Risdiyany, R., Dwi Utami, Y., & Sulisworo, D. (2018). The use of WhatsApp in collaborative learning to improve English teaching and learning process. *International Journal of Research Studies in Educational Technology*, 7(1), 29–35. Do: [10.5861/ijrset.2018.3004](https://doi.org/10.5861/ijrset.2018.3004)

- Lin, C. C., & Hong, T. K. (2020). Skills building towards self-directed learning via action research reflections. In *Proceedings of the 16th International CDIO Conference*, hosted on-line by Chalmers University of Technology, Gothenburg, Sweden (pp. 251–262). Retrieved October 19, 2020, from https://research.chalmers.se/publication/519263/file/519263_Fulltext.pdf#page=265
- Lindner, K. T., & Schwab, S. (2020). Differentiation and individualisation in inclusive education: A systematic review and narrative synthesis. *International Journal of Inclusive Education*. <https://doi.org/10.1080/13603116.2020.1813450>
- Manderson, L., & Levine, S. (2020). COVID-19, risk, fear, and fall-out. *Medical Anthropology*, 39(5), 367–370. <https://doi.org/10.1080/01459740.2020.1746301>
- Matsuo, M. (2015). A framework for facilitating experiential learning. *Human Resource Development Review* 14, 442–461. <https://doi.org/10.1177%2F1534484315598087>
- Matthews, R. S. (1996). Collaborative learning: Creating knowledge with students. In R. J. Menges, M. Weimer, & Associates, (Eds.), *Teaching on solid ground: Using scholarship to improve practice* (pp. 101-124). Jossey-Bass.
- Mawas, N. E. & Muntean, C. (2018). Supporting lifelong learning through development of 1st century skills. Paper delivered at the *10th International Conference on Education and New Learning Technologies*, Palma de Mallorca. Retrieved October 20, 2020, [ffhal-02250150f](https://hal-02250150f)
- Mbohwa-Pagels, K., & Rode, R. (2014). DaF im SA Schulsystem. *eDusa*, 9(1), 13-19.
- McDonald, B. (2016). Individualised professional development in higher education. Paper delivered at the *5th International Conference on Research in Humanities, Sociology and Education (RHSCE'16)*, London. Retrieved November 09, 2020, from <http://icehm.org/upload/4871ED1116067.pdf>
- Misra, P. K. (2018). MOOCs for Teacher professional development: Reflections, and suggested actions. *Open Praxis*, 10(1), 67–77. Retrieved November 09, 2020, from <https://www.learntechlib.org/p/183570/>
- Morris, T. H. (2018). Vocational education of young adults in England: A systemic analysis of teaching-learning transactions that facilitate self-directed learning. *Journal of Vocational Education & Training* 70, 619–643. [10.1080/13636820.2018.1463280](https://doi.org/10.1080/13636820.2018.1463280)

- Morris, T. H. (2019). Adaptivity through self-directed learning to meet the challenges of our ever-changing world. *Adult Learning*, 30(2), 56–66. <https://doi.org/10.1177/1045159518814486>
- Motala, S., & Menon, K. (2020). In search of the 'new normal': Reflections on teaching and learning during Covid-19 in a South African university. *Southern African Review of Education*, 26(1), 80–99.
- Olivier, J. (2019). Towards a multiliteracies framework in support of self-directed learning through open educational resources' skills. In E. Mentz, J. De Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century. implications for Higher Education* (pp. 167-201). AOSIS. (NWU Self-Directed Learning Series Volume 1). <https://doi.org/10.4102/aosis.2019.BK134.06>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. <https://doi.org/10.1007/s10488-013-0528-y>
- Ponti, M. (2014). Self-directed learning and guidance in non-formal open courses. *Learning, Media and Technology*, 39(2), 154–168. <https://doi.org/10.1080/17439884.2013.799073>
- Putra, I. D. G. R. G. (2018). The evolution of Technology Acceptance Model (TAM) and recent progress on technology acceptance research in ELT: State of the art article. *Yavana Bhāshā: Journal of English Language Education*, 1(2), 25- 37.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63-75. Doi: [10.3233/EFI-2004-22201](https://doi.org/10.3233/EFI-2004-22201)
- Sun, Z., Lin, C.-H., Wu, M., Zhou, J., & Luo, L. (2018). A tale of two communication tools: Discussion-forum and mobile instant-messaging apps in collaborative learning. *British Journal of Educational Technology*, 49(2), 248–261. <https://doi.org/10.1111/bjet.12571>
- Susilo, A. P., Van Merriënboer, J., Van Dalen, J., Claramita, M., & Scherpbier, A. (2013). From lecture to learning tasks: Use of the 4C/ID Model in a communication skills course in a continuing professional education context. *Journal of Continuing Education in Nursing*, 44(6), 278–84. <https://doi.org/10.3928/00220124-20130501-78>

- Tough, A. M. (1971). *The adults' learning projects: A fresh approach to theory and practice in adult education*. Ontario Institute for Studies in Education Retrieved October 26, 2020, from <http://ietj.org/tough/books/alp.htm>.
- Van Merriënboer, J. J. G. (1997). *Training complex cognitive skills: A four-component instructional design model for technical training*. Educational Technology Publications.
- Van Merriënboer, J. J.G. (2020). Das Vier-Komponenten Instructional Design (4C/ID) Modell. In H. Niegemann, & A. Weinberger, (Eds.), *Handbuch Bildungstechnologie*. Springer. https://doi.org/10.1007/978-3-662-54368-9_8
- Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273–315. <https://doi.org/10.1111/j.1540-5915.2008.00192.x>
- Von Maltzan, C. (2009). Sprachenpolitik und die Rolle der Fremdsprachen (Deutsch) in Südafrika. *Stellenbosch Papers in Linguistics PLUS*, 38, 205-214. <https://hdl.handle.net/10520/EJC143430>
- Wenger, E. (2011). *Communities of practice: A brief introduction*. Retrieved October 05, 2020, from <https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/11736/A%20brief%20introduction%20to%20CoP.pdf>
- Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Harvard Business School Press.
- Wittmann, G.-E., & Olivier, J. (2019). Professional development in fostering self-directed learning in German Second Additional Language teachers. *Per Linguam*, 35(3), 125-142. <https://dx.doi.org/10.5785/35-3-870>
- Wittmann, G.-E., & Olivier, J. (2020). Professional development needs of teachers of German second additional language in South Africa. *Acta Germanica* (in press).
- Wittmann, G.-E., & Olivier, J. (In press). Blended learning as an approach to foster self-directed learning in teacher professional development programmes. *Independent Journal of Teaching and Learning*.

- Wittmann, G.-E., & Olivier, J. (In press). Collaborative self-directed learning for teachers of German Second Additional Language teacher professional development in South Africa: Putting theory into practice. *Africa Education Review*.
- Yoon, S. A., Miller, K., Richman, T., Wendel, D., Schoenfeld, I., Anderson, E., & Shim, J. (2020). Encouraging collaboration and building community in online asynchronous professional development: Designing for social capital. *International Journal of Computer-Supported Collaborative Learning*, 15, 351-371. <https://doi.org/10.1007/s11412-020-09326-2>.
- Ziegler, N. A. (2014). Fostering self-regulated learning through the European language portfolio: An embedded mixed methods study. *The Modern Language Journal*, 98(4), 921–936. <https://doi.org/10.1111/modl.12147>

6.17 Addendum A: Expert Evaluation Questionnaire

Dear Participant,

Thank you for your willingness to complete the following questionnaire. Your input as an information-rich participant is highly appreciated. Please answer the following questions in either German, English or Afrikaans

1. 1. On a scale of 1 to 5 (one being very easy and 5 being extremely difficult), please indicate how easy it was to navigate through the course with regard to the technology used.

1	2	3	4	5
---	---	---	---	---

1.2 What can you recommend to make navigation easier?

2. 1. On a scale of 1 to 5 (1 being very easy and 5 being extremely difficult), please indicate how easy it was to understand the instructions, based purely on language use?

1	2	3	4	5
---	---	---	---	---

2.2 What can you recommend to make instructions clearer?

3. 1. On a scale of 1 to 5 (1 being very relevant and 5 being completely irrelevant), please indicate how relevant you deem the content of the course for teachers of German SAL or Deutsch als Fremdsprache?

1	2	3	4	5
---	---	---	---	---

3.2 What can you recommend to make the content more relevant?

4. The aim of the course is to foster self-directed learning⁴⁰, partly through collaborative learning,⁴¹ in teachers of German SAL. To what extent do you regard this course to have fulfilled its purpose? Please elaborate.

5. Do you have any further suggestions on how to make the course more relevant or more user-friendly for teachers of German SAL?

⁴⁰ As defined by Malcolm Knowles (1975, p. 18) as “[...] a process in which individuals take initiative, with or without the help of others, in diagnosing their learning needs, formulating learner goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes”.

⁴¹ Collaborative learning, as defined by Matthews (1996, p. 101) “occurs when students and faculty work together to create knowledge. [...] It is a pedagogy that has at its centre the assumption that people make meaning together and that the process enriches and enlarges them. In order for cooperative learning to take place, Johnson & Johnson mention the need for five conditions, being

- positive interdependence,
- individual accountability,
- promotive interaction,
- social skills and
- group processing” (2019, p. 47)

6. What did you find to be the strongest aspects of the course?

6.18 Addendum B: Participant Evaluation Questionnaire

Dear Participant,

Thank you for your willingness to complete the following questionnaire. Your input as participant is highly appreciated. Please answer the following questions in either German, English or Afrikaans

1. 1. On a scale of 1 to 5 (one being very negative and 5 being extremely positive), please indicate your general impression of the programme.

1	2	3	4	5
---	---	---	---	---

1.2 What can you recommend to improve on the programme?

2.1. On a scale of 1 to 5 (one being irrelevant and 5 being very relevant), please indicate how relevant this programme is for your own teaching.

1	2	3	4	5
---	---	---	---	---

2.2 What can you recommend to improve the programme's relevance?

3.1 On a scale of 1 to 5 (one being no influence and 5 being a very high influence), please indicate how influential this programme will be on your own teaching.

1	2	3	4	5
---	---	---	---	---

3.2 What can you recommend for the programme to have a more direct influence on your own teaching and learning?

4.1 On a scale of 1 to 5 (one being completely useless and 5 being extremely useful), please indicate how useful the programme seems to your work life?

1	2	3	4	5
---	---	---	---	---

4.2 What can you recommend to make the programme more useful?

5.1 On a scale of 1 to 5 (1 being very easy and 5 being extremely difficult), please indicate how easy it was to use the programme?

1	2	3	4	5
---	---	---	---	---

5.2 What can you recommend to make the programme easier to use?

6.1 If the programme was to be developed further, how likely would you be to use it? On a scale of 1 to 5 (1 being highly unlikely and 5 being very likely), please indicate how likely you would choose to continue using this programme?

1	2	3	4	5
---	---	---	---	---

6.2 What can you recommend to increase the likeliness of your use of this programme?

7. The aim of the programme is to foster self-directed learning⁴² the characteristics of self-directed learners, partly through collaborative learning,⁴³ in teachers of German SAL. To what extent do you regard this programme to have fulfilled its purpose? Please elaborate.

⁴² As defined by Malcolm Knowles (1975, p. 18) as "[...] a process in which individuals take initiative, with or without the help of others, in diagnosing their learning needs, formulating learner goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes".

⁴³ Collaborative learning, as defined by Matthews (1996, p. 101) "occurs when students and faculty work together to create knowledge. [...] It is a pedagogy that has at its centre the assumption that people make meaning together and that the process enriches and enlarges them. In order for cooperative learning to take place, Johnson & Johnson mention the need for five conditions, being

- positive interdependence,
- individual accountability,
- promotive interaction,
- social skills and
- group processing" (2019, p. 47)

CHAPTER 7 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

The aim of this study was to make a practical and theoretical contribution towards the professional development of teachers of German SAL in South Africa. Due to the researcher's prolonged involvement in this field, she was aware of these teachers' frustrations arising from the expectations placed on them by policies that required teachers to remain lifelong learners, which stood in stark contrast to the limited number of professional development opportunities available to teachers of German SAL. Where professional development opportunities for teachers of German SAL existed, they were offered by European institutions such as the Goethe-Institut Johannesburg or the Central Agency for German Schools Abroad (ZfA) and were informed by the mandates of these institutions. A specialised professional development programme for teachers of German SAL focusing on the South African context, as well as on teachers' context-specific needs, was therefore lacking.

Moreover, existing research on the teaching and learning of German as a Foreign Language (DaF) remains largely descriptive (Annas, 2016; Groenewald, 2019a; Groenewald, 2019b; Von Maltzan, 2009) or is located firmly in the tertiary education sector (Engelbrecht, 2020). Furthermore, this descriptive research (Annas, 2016; Groenewald, 2019a; Groenewald, 2019b; Von Maltzan, 2009) focuses on the teaching and learning of DaF in South Africa in general, with only one article on the teaching and learning of German SAL (Mbohwa-Pagels & Rode, 2014), which is specific to schools, published in 2014.

This study therefore aimed to contribute to the field of teachers of German SAL education, as well as to the field of DaF, by proposing a pertinent staff development programme. This entailed establishing the needs of teachers of German SAL in South Africa by means of a comprehensive needs analysis and designing a trial programme. This programme was implemented and then evaluated by experts and the participants who participated in the needs analysis. With a strong focus on SDL, blended learning (BL) and collaborative learning (CL), the study also aimed to make a contribution to these fields by highlighting opportunities they offered to designers of such programmes and participants in the field of teacher professional development. Although the programme was implemented and evaluated only by teachers of German SAL, it is hoped that the recommendations may be applied to the professional development of teachers of all SALs in South Africa.

To achieve these aims, the overall question that guided the study was as follows:

- How can the principles of blended learning, collaborative learning and self-directed learning be applied so as to enable and promote individualised learning in the professional development of teachers of German SAL?

Moreover, the following subquestions were addressed:

- How can SDL benefit the professional development of teachers of German SAL?
- How can BL enhance SDL in teachers of German SAL?
- What are the most pressing developmental needs for German SAL teachers?
- How can CL address existing needs within a teacher professional development programme focusing on SDL, taking into consideration existing German SAL teacher support structures as well as internal and external limitations on German SAL teacher development?
- What content and skills should be focused on in a professional development programme designed to equip teachers of German SAL to become self-directed learners?

This chapter provides an overview of how these questions were answered. After an explanation of the article-model approach, which was followed in this PhD process, a brief summary of each chapter/article is provided. Thereafter, two sets of conclusions are presented. The conclusions drawn from the literature study (Chapter 2/Article 1 and Chapter 3/Article 2) are presented first, followed by the conclusions drawn from the empirical study (Chapter 4/Article 3, Chapter 5/Article 4, and Chapter 6/Article 5). Recommendations for the development of a professional development opportunity for teachers of German SAL in South Africa are then made based on both sets of conclusions.

The recommendations are followed by a discussion of the significance and implications of the research. The limitations of the study are discussed, and suggestions are made for future research, followed by the conclusion of the study.

7.2 Chapter / article overview

The content of the chapters/articles – which were submitted to accredited peer-reviewed journals as part of the article-model PhD process (cf. §1.8) – is summarised below.

7.2.1 Chapter 2/ Article 1: “Professional development in fostering self-directed learning in German Second Additional Language teachers”

In Chapter 2/Article 1, literature on SDL was reviewed. First, SDL was defined, and its underlying principles were discussed. This was followed by a brief reflection on the nature of teaching as a profession and the demands of lifelong learning experienced by teachers worldwide. After presenting a broader view of expectations placed on teachers internationally, the focus was narrowed down to the specific context of South African teachers. A critical consideration was presented of requirements relating to teaching qualifications and professional development for South African teachers. These requirements are set out by the *National Qualifications Framework Act (67/2008)*, as well as the *Revised Policy on the Minimum Requirements for Teacher Education Qualifications* (DHET, 2015) and the *Continuing Professional Teacher Development (CPTD) Management System Handbook* of the South African Council for Educators (SACE) (2013).

The critical consideration was followed by a brief discussion of the matter that teachers, especially teachers of German SAL, struggle to meet said requirements as stipulated in aforementioned policies and by SACE. A shift in focus towards individualised, participant-centred professional development opportunities was recommended. After a discussion of relevant theories of SDL, it was recommended that teacher professional development programmes, particularly those aimed at teachers of German SAL, focus on fostering SDL. Hereby, teachers would be enabled to actively participate in planning and taking responsibility for their own learning. By means of a strong focus on SDL, participants might develop individual strategies to overcome potential developmental shortcomings. Recommendations were made as to how SDL could be fostered in teacher professional development programmes to empower teachers to gradually develop into self-directed life-long learners.

While international research has been on fostering SDL in teachers of German as a Foreign Language, teachers of German SAL and their specific working and professional development conditions have thus far remained largely under-researched. The article in question addressed a particular research gap by proposing SDL as a real means to overcome certain obstacles to professional development in specifically the context of teachers of German SAL.

7.2.2 Chapter 3 /Article 2: “Blended learning as an approach to fostering self-directed learning in teacher professional development programmes”

This article provided the second part of the literature review and focused on BL and the affordances it could offer teachers of German SAL in their professional development. The article started by noting how trends in research on teacher development in recent years have shown a shift away from studying merely *what* teachers learn to *how* they learn, how they improve their learning, and how they transform their skills and knowledge into practice in order to offer their own learners an improved educational experience. The article highlighted the fact that, although BL has been proposed as a means to enhance student learning and engagement, little research has been done on BL in teacher professional development programmes, especially in the context of teachers of German SAL in South Africa.

While existing research on BL generally relates to higher education settings, the focus in this article shifted to teacher professional development programmes for teachers of German SAL, and BL was proposed as an approach to fostering SDL in such programmes. After existing definitions and models on BL were considered, a synthesis of models was proposed which could be adjusted to the South African teaching context. The new model offered certain opportunities for fostering the characteristics of SDL, which were subsequently highlighted in the article.

Blended learning and SDL have already been widely researched nationally and internationally, as was proposed in Chapters 2 and 3. However, aforementioned new model synthesises the benefits of SDL and BL, specifically for the South African context. While said model was designed for teachers of German SAL in South Africa, it could be adapted for teachers of other SALs in South Africa, therefore addressing a need beyond the admittedly small population of teachers of German SAL.

Chapters 2 and 3 provided the literature review of this study. In Chapter 4 there was a shift to the partial implementation of the theory discussed in Chapters 2 and 3.

7.2.3 Chapter 4/ Article 3: “Professional development needs of teachers of German Second Additional Language in South Africa”

The third article in this study marked a shift from the literature reviews discussed in the first two articles to empirical research that was described in the remaining three articles. After the

theoretical applicability of SDL and BL to the professional development of teachers of German SAL was established, the exact nature of the professional development needs of teachers of German SAL in South Africa was discussed.

The article initially highlighted various studies that had been undertaken on the teaching and learning of German in South Africa (cf. Annas, 2016; Augart, 2012; Groenewald, 2019a). However, it demonstrated that these studies had been descriptive and more focused on the tertiary education sector. Of the studies mentioned, only one study focused on the teaching and learning of German SAL in schools in South Africa as well as on teachers of German SAL (Mbohwa-Pagels & Rode, 2014). However, while said study gave a concise overview of the teaching of German SAL in South Africa in 2014, it was already several years old at the time of conclusion of this research, and the existing work remained largely descriptive.

Furthermore, this third article aimed to fill a research gap in the field of DaF and teacher professional development by presenting a thorough analysis of the professional development needs of teachers of German SAL in South Africa. The mixed-methods research involved interviews with experts in the field as well as a questionnaire administered to teachers of German SAL. Results of the research indicated that, while teachers of German SAL in South Africa do receive support from German institutions, there is a lack of support focused specifically on the context of these teachers in South Africa. Various sources were consulted and triangulated to formulate recommendations as to what a professional development programme based on the needs of German SAL teachers in South Africa should entail.

7.2.4 Chapter 5/ Article 4: “Collaborative self-directed learning for teachers of German Second Additional Language teacher professional development in South Africa: Putting theory into practice”

In Chapter 5/Article 4, the recommendations made in Chapter 4/Article 3 served as a basis for the design of a professional development programme for teachers of German SAL. In Article 4, theory of CL and SDL was integrated with principles of instructional design. After a short overview of the typology of instructional design models as suggested by Colpaert (2014, p. 6), the Four-Component Instructional Design (4C/ID) model was proposed as a suitable model to form the basis of a professional development programme for teachers of German SAL and was applied to principles of CL and SDL. Based on this model, an initial cycle of the programme was developed on the *Moodle* learning management system.

Independent experts were then invited to evaluate the first cycle based on their expertise in the teaching of DaF or teacher professional development for teachers of DaF and SAL. These experts included both national and international experts in various relevant fields. The experts deemed the content of the cycle, as well as the model itself, highly relevant to teachers of German SAL. They based their positive evaluation of the model on its support for individual learning needs, the high level of collaboration between participants, and its reliance on participants' own experiences. Chapter 4/Article 3 thus presented an empirical overview of the design and evaluation of a professional development programme for teachers of German SAL in the South African context.

7.2.5 Chapter 6/ Article 5: “Implementing a collaborative online teacher professional development programme for teachers of German SAL in South Africa”

Chapter 6/Article 5 described the implementation and evaluation of the model mentioned in the previous section. As the researcher did not want to expose participants to possible COVID-19 infection, a decision was made to adapt the programme to an online mode for the implementation and evaluation phase, while keeping BL in mind as an approach to be considered during the development of the entire programme, an aspect which exceeds the scope of this study.

This article started with a brief overview of the obstacles that teachers of German SAL experienced in their teaching contexts and in their own professional development. It seemed that most of these obstacles were a product of their working environment and of official policies relevant to the teaching of German SAL. Based on the comprehensive needs assessment (cf. §7.2.3) and the insights gained during the design of a professional development model focusing on CL and SDL (cf. §7.2.4), the programme was implemented. It was then evaluated by those teachers of German SAL who had participated in the aforementioned needs analysis in order to establish whether this programme did in fact meet their professional development needs. In the design of the model and the subsequent programme, close attention was paid to overcoming the obstacles to teacher professional development, while also allowing for sufficient individualisation of learning aims.

Participants in the trial implementation and evaluation judged the programme to be relevant to their needs and rated as high the likelihood of their using the model themselves. Participant evaluations were compared with expert evaluations to gain a balanced view. Recommendations were then made with regard to individualised learning, CL and SDL, based on certain themes established during the coding of the predominantly qualitative data collected as part of the implementation and evaluation processes.

7.3 Conclusions

Next, conclusions from the literature study (Chapter 2/Article 3 and Chapter 3/Article 2) are drawn (§7.3.1), followed by conclusions from the empirical study (§7.3.2). A synthesis of both sets of conclusions is provided in the form of recommendations (§7.4).

7.3.1 Conclusions from the literature review

This section focuses on the first two research subquestions (see §7.1):

- How can SDL benefit the professional development of teachers of German SAL?
- How can BL enhance SDL in teachers of German SAL?

A brief definition of SDL and the core principles thereof were presented. It was suggested that specific values of SDL form the foundation of a professional development programme. These values would include, but would not be limited to, participants being expected to play an active role in planning their own learning (Beavers, 2009); a strong focus on the participants' existing knowledge and experiences; and consideration of the experience that practising teachers, as participants, can contribute to the educational discourse (Smith, 2017). Participants would also be encouraged to apply these to relevant teaching and learning situations (Trotter, 2006).

Furthermore, the literature suggested that fostering SDL could benefit the professional development of teachers of German SAL by enabling participants to define their own learning needs and then collaborate with each other and the facilitator in finding ways to meet those needs. Moreover, individual reflection would remain highly relevant throughout the programme, as this would allow both the participants and instructor to make adaptations where necessary. Ideally, this approach would turn participants into empowered learners who are inquisitive, enthusiastic, reflective and increasingly autonomous, and able to translate their new-found skills in their classroom (Cannella & Reiff, 1994). The researcher deemed such a programme especially suitable for German SAL teachers. While many challenges exist for effective teacher development (Aldridge et al., 2004), fostering SDL could possibly, or at least partly, be a way for teachers to overcome challenges by assisting them to recognise and develop their own problem-solving skills as well as by encouraging peer education and support (Mushayikwa & Lubben, 2009).

Chapter 3/Article 2 built on the above-mentioned findings on SDL and suggested that BL might be a suitable approach for fostering SDL in teachers of German SAL. If one chose BL as an approach to deliver the professional development programme described above, it would be

imperative to focus not only on the content to be taught but also particularly on the skills to be learnt in order for participants to develop into lifelong self-directed learners. A professional development model strongly aligned with Picciano's (2009) multimodal model was proposed and was firmly situated in the *enriched virtual model* of Staker and Horn (2012). This model focused primarily on fostering the skills of self-directed learners and on participants improving their pedagogical knowledge in contrast to the more traditional teacher professional development models focusing on content knowledge. If this model were to be implemented in practice, BL could enhance SDL in teachers of German SAL by enabling participants to simultaneously improve their pedagogical and technical knowledge of digital media while improving their SDL skills. They would also be able to assist their own learners in doing the same.

7.3.2 Conclusions from the empirical chapters

From the literature review, it was established that SDL and BL might be appropriate approaches in designing a professional development programme for teachers of German SAL. This section focuses on the third, fourth and fifth research subquestions:

- What are the most pressing developmental needs for German SAL teachers?
- How can CL address existing needs within a teacher professional development programme focusing on SDL, taking into consideration existing German SAL teacher support structures, as well as internal and external limitations on German SAL teacher development?
- What content and skills should be focused on in a professional development programme designed to equip teachers of German SAL to become self-directed learners?

In light of the theoretical foundation discussed in §7.3.1, it was necessary to establish the nature of the required participant population as well as the participants' learning needs.

Relevant scholarly research and information collected from both information-rich participants and the general German SAL teacher population were collated to provide the basis for a thorough needs analysis, as described in Chapter 4 (Article 3). The needs analysis highlighted the following most pressing professional development needs:

- knowing what to teach at which grade level (clear learning outcomes are given only for Grade 12);
- knowing how to identify suitable teaching material;
- being able to adapt partly suitable material;

- being able to generate own teaching material;
- keeping up to date with teaching approaches and material used in class;
- more cooperation between teachers to reduce the feeling of isolation they experience.

As teachers reported a lack of time to prepare for classes (but also to further their own learning) as one of their main constraints, a teacher development programme such as *DLL (Deutsch Lehren Lernen)* – which is currently regarded internationally as the market leader in professional development programmes for German Foreign Language – was found not to be fully suited to the needs of German SAL teachers. This can be ascribed to the challenging requirement that, to complete one module, participants in the programme should set aside eight hours per week for a total of 10 weeks in addition to the necessary reading time.

Based on the results of the needs analysis, the theoretical scholarship of CL and SDL was applied to principles of instructional design in order to devise a teacher professional development model based on 4C/ID, as discussed in Chapter 5/Article 4. As 4C/ID places emphasis on complex skills and their transfer, this model was deemed especially suitable for the teacher professional development programme with a strong emphasis on SDL and CL. Due to the programme's intended strong focus on SDL, it seemed sensible to develop only the first cycle of the programme based on the results of aforementioned needs analysis. Participants' feedback and reflections on the first cycle and changing learning needs could inform the development of further cycles. Hereby, CL could address existing needs in a teacher professional development programme focusing on SDL, taking into consideration existing German SAL teacher support structures as well as internal and external limitations on German SAL teacher development.

After expert consultants had evaluated the first cycle of the professional development programme, adaptations were made based on their recommendations, after which the programme was implemented. It was then evaluated by those teachers who had participated in the needs analysis and were still able and willing to participate in the study. The design and implementation of a context-specific professional development programme customised to the participants' needs were described in Chapter 6/Article 5. The opinions and suggestions from participants and experts were then analysed in order to make specific recommendations for the development of a professional development programme for a heterogeneous group of participants, focusing on CL and SDL. CL was seen by participants as being essential to their needs, while flexibility was highly recommended as an element in the design and execution of the programme. In this article, it was found that a strong emphasis on individual development, CL and the emphasis on participants' learning needs and experiences, as well as the mastering of learning strategies, which would

enable participants to fulfil their individual learning needs, should be the focal point of a professional development programme designed to equip teachers of German SAL to become self-directed learners.

7.4 Recommendations for the development of a teacher professional development programme for teachers of German SAL

In light of the conclusions drawn in §7.3.1 and §7.3.2, in this section, recommendations are made for the development of a full professional development programme for teachers of German SAL, which might also be adapted for teachers of other SALs.

Firstly, it is recommended that a teacher development programme for South African teachers of German SAL be brief, collaborative in nature, and leave sufficient room for a heterogeneous group of teachers to work on reaching their own learning outcomes. An efficient professional development programme for this target group should not only encourage reflection and lifelong learning but should be strongly adapted to both the real needs and the working and learning environments of teachers of German SAL. While such a professional development programme should provide an overarching framework, it should remain easily adaptable throughout the entire course. It should also allow for teacher agency through the inclusion of new learning aims that might arise at short notice and might not be directly related to the planned content. Furthermore, it should remain responsive to changes in the participant group as well as to changing circumstances in the participants' living and working lives.

A further recommendation for future developers of a teacher professional development model for teachers of German SAL is to keep in mind that the participants' development is dependent on the possibilities and experiences afforded in interactions with others. Hence, opportunities should be created for such interactions.

Since CL is characterised by the renegotiation of relationships between participants and also between participants and instructors (Bruffee, 1995), it remains imperative to keep in mind the constant need to renegotiate such relationships in addition to the content and the mode of delivery of any professional development activity. Instructors should, in this context, fulfil a supportive facilitation role.

In order to ensure continued collaboration after the programme has ended, it is recommended that a communal database of texts and questions be established through which not only

participants in the programme itself but also other teachers of German SAL would be able to share their knowledge and experience. Such a platform would grow as the number and experience of participants increase. If such a database could be made available as an open educational resource (Olivier, 2019), it would be possible to foster CL in teachers of German SAL in the long term, thus not limiting their learning opportunities to the programme itself. Furthermore, the establishment of said database would challenge the view of the instructor as the absolute authority on the subject matter (Ponti, 2014). This would be in line with Bruffee's (1995) recommendations to constantly renegotiate relations not only among participants but also between participants and the instructor. Proper use and maintenance of such an open educational resource would furthermore promote SDL, as argued by Olivier (2019), once participants take ownership of and responsibility for the database.

A further aspect to be addressed, was that of improving ease of access to the programme and taking into account the time constraints that were established to be an important factor limiting the professional development of teachers of German SAL. To this end, instead of participants being constantly required to log on to a learning platform and work solely on that platform during the course of the professional development programme, other media which are easier to access might be utilised to supplement the tools on the learning platform. While a learning platform like *Moodle* might serve as a basis, WhatsApp, mobile technologies and other instant messaging apps could additionally facilitate additional collaboration and CL.

7.5 Significance and implications of the research

An important contribution of this study is that during the course of this research, principles of SDL, BL and CL were applied to the planning, design, implementation and evaluation of a professional development opportunity for teachers of German SAL in the South African context. Next, conclusions were drawn and applied to make recommendations for the development of a professional development programme for teachers of German SAL in South-Africa.

Although there is well-established research on professional development for teachers of DaF internationally, at the time of this study, no research could be found on teachers of German SAL in South Africa other than descriptive articles on German in South Africa (cf. Annas, 2016; Von Maltzan, 2009) and a similarly descriptive article on German SAL in South African schools (Mbohwa-Pagels & Rode, 2014). Hence this study addressed the empirical content gap in this context.

This study also contributes to the discourse on professional development of teachers of German SAL by making recommendations for the development of a programme based on the context-specific needs of those teachers. Furthermore, it contributes to the body of knowledge on DaF, teacher professional development, SDL, BL and CL by combining principles from these learning fields and applying them to a specific South African context.

7.6 Limitations of the study

After the literature study, empirical research and results of the investigation had been taken into consideration, the following limitations were identified:

- The population of teachers of German SAL in South Africa is very small, and due to time constraints and a high workload on the side of teachers, a number of teachers of German SAL were unable to participate in the study. This resulted in a small number of participants in the initial needs analysis.
- The number of participants in the implementation and evaluation phase was further reduced because initial participants had retired, had discontinued teaching German SAL, or had left the country.
- Even though blended learning was found to be a suitable approach in theory, the approach to implementing and evaluating the concept of professional development opportunity was adapted to full online learning in order to adhere to governmental regulations on COVID-19. While the researcher would have liked to implement and evaluate a complete blended learning programme, a decision was made to ensure the safety of the participants, even after government regulations allowed for travel between provinces again. An implementation and evaluation of a blended learning teacher professional development programme might be sensible and yield interesting results in either confirming or refuting the theoretical findings on BL in this study.
- It should be taken into account that the researcher was also the facilitator during the implementation of the professional development programme. However, care was taken to avoid any bias or undue influence or coercion.
- The lack of existing research on professional development for teachers of German SAL in South Africa made it difficult to draw comparisons between existing teacher professional development programmes for and pertinent research on these teachers.

7.7 Suggestions for future research

While the needs analysis was conducted only on teachers of German SAL, a similar needs analysis and profiling of teachers of other SALs in South Africa could yield valuable results, enabling other researchers to evaluate whether the recommendations made in this study would be equally relevant to the development of professional development programmes for those teachers.

Moreover, it may be relevant to conduct a longitudinal study in which the recommendations made in this study are applied to the development of a complete professional development programme for teachers of German SAL. Conducting such a study would enable a researcher to gain insights into how a more comprehensive professional development programme might be received by teachers of German SAL. Similarly, researchers could repeat the study and compare results between a BL approach and an online learning approach in relation to the programmes' reception among participants. A further longitudinal study aimed at the establishment of the suggested database could similarly yield insights into whether the establishment of said database as an open educational resource for teachers of German SAL in South Africa would be feasible in the long term. Similarly, an investigation into whether the establishment and maintenance of such a database does indeed promote SDL, could provide valuable information.

The research design and methodology implemented in this study could also be used as a roadmap for studies on the development of professional development programmes for teachers of other SALs in South Africa as well as for teachers of DaF in other countries. Such studies would allow researchers to draw comparisons between participant populations and identify difficulties encountered when designing a professional development programme for a different target group. A comparison of the design processes and difficulties encountered would allow researchers to draw conclusions about the broader validity of the methodology in this study.

Finally, repeating this study using only open educational resources, social media and tools and applications that participants are familiar with could yield valuable data on whether ease of access would be improved by incorporating media that participants are more confident in using, as they use these technologies in their daily lives.

7.8 Conclusion

This chapter concluded the study. It started with an introduction in which a brief overview of the context, the methodology and the research questions were provided. Each chapter/article was subsequently summarised. Two sets of conclusions were drawn: the first set focused on the literature review, and the second set focused on the empirical part of the study. Based on the conclusions, recommendations for the development of a professional development programme for teachers of German SAL were made. These recommendations were followed by a summary of the significance and contribution of this study. Limitations of the study were discussed, followed by suggestions for future research.

In conclusion, this study has reached its aim of making recommendations towards the development of a teacher professional development programme for teachers of German SAL which fosters SDL. These recommendations were based on a literature overview, a needs analysis involving various stakeholders, and the design, development, implementation and evaluation of a model for a professional development model. Hopefully, the recommendations made in this study will assist developers of teacher professional development programmes for teachers of German SAL or others SALs to develop relevant, context-specific programmes for the participant groups in question.

7.9 References

- Aldridge, J. M., Fraser, B. J., & Sebela, M. P. (2004). Using teacher action research to promote constructivist learning environments in South Africa. *South African Journal of Education*, 24(4), 245-253.
- Annas, R. (2016). Deutsch an Universitäten im südlichen Afrika Zur Entwicklung des Fachs seit 2003: Afrika schreiben/writing Africa. *Acta Germanica: German Studies in Africa*, 44(1), 105-118. <https://hdl.handle.net/10520/EJC194887>
- Augart, J. (2012). (Süd-)Afrikanische Germanistik – Zur Positionierung und Professionalisierung der Germanistik im südlichen Afrika. *eDusa*, 7(1), 7-22. <http://repository.unam.edu.na/handle/11070/972>
- Beavers, A. (2009). Teachers as learners: Implications of adult education for professional development. *Journal of College Teaching & Learning*, 6(7), 25-30. <https://doi.org/10.19030/tlc.v6i7.1122>

- Bruffee, K. A. (1995). Sharing our toys: Cooperative learning versus collaborative learning. *Change: The Magazine of Higher Learning*, 27(1), pp.12-18.
<https://doi.org/10.1080/00091383.1995.9937722>
- Cannella, G. S., & Reiff, J. C. (1994). Individual constructivist teacher education: Teachers as empowered learners. *Teacher Education Quarterly*, 21(3), 27-38.
<https://www.jstor.org/stable/23475804>
- Colpaert, J. (2014). *Educational engineering and distributed design: A research report*. University Antwerpen. Institute for Education and Information Sciences. Retrieved November 15, 2020, from <http://www.jozefcolpaert.net/EE.pdf>
- Department of Higher Education and Training (DHET) (South Africa). (2015). National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for teacher education qualifications. *Government Gazette*, 596(38487). Government Printers. Retrieved September 20, 2020, from https://www.dhet.gov.za/Teacher%20Education/National%20Qualifications%20Framework%20Act%2067_2008%20Revised%20Policy%20for%20Teacher%20Education%20Qualifications.pdf
- Engelbrecht, N. (2020). A reflection on the 'non-place' character of German foreign language (GFL) courses and coursebooks in South African higher education. *Independent Journal of Teaching and Learning*, 15(2) 36- 50.
- Groenewald, K. (2019a). Lernmotivationen für Deutsch in Stellenbosch. *eDUSA* 14(1), 38-58.
- Groenewald, K. (2019b). Motivations for learning German in the South African context with Stellenbosch as case study-an investigation into knowledge production and the decolonising of the curriculum: Afrika schreiben/writing Africa. *Acta Germanica*:
- Mushayikwa, E., & Lubben, F. (2009). Self-directed professional development – Hope for teachers working in deprived environments? *Teaching and Teacher Education*, 25(3), 375-382. <https://doi.org/10.1016/j.tate.2008.12.003>
- Olivier, J. (2019). Towards a multiliteracies framework in support of self-directed learning through open educational resources' skills. In E. Mentz, J. De Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century. implications for Higher Education* (pp. 167-

- 201). AOSIS. (NWU Self-Directed Learning Series Volume 1).
Doi:[10.4102/aosis.2019.BK134.06](https://doi.org/10.4102/aosis.2019.BK134.06)
- Picciano, A. G. (2009). Blending with purpose: The multimodal model. *Journal of Asynchronous Learning Networks*, 13(1), 7-18. <https://eric.ed.gov/?id=EJ837540>
- Ponti, M. (2014). Self-directed learning and guidance in non-formal open courses. *Learning, Media and Technology*, 39(2), 154–168. <https://doi.org/10.1080/17439884.2013.799073>
- South African Council for Educators (SACE). (2013). *The CPTD management system handbook*. SACE. Retrieved January 08, 2019, from https://sace.org.za/assets/documents/uploads/sace_30373-2016-08-31-CPTD%20Handbook.pdf
- SACE (South African Council for Educators). (2019). *Teacher professionalisation*. Retrieved March 28, 2020, from <https://www.sace.org.za/pages/teacher-professionalisation-faqs>
- Smith, K. (2017). *Teachers as self-directed learners: Active positioning through professional learning*. Springer.
- Staker, H., & Horn, M. B. (2012). *Classifying K-12 blended learning*. Innosight Institute.
- Trotter, Y. D. (2006). Adult learning theories: Impacting professional development programs. *Delta Kappa Gamma Bulletin*, 72(2), 8-13.
- Von Maltzan, C. (2009). Sprachenpolitik und die Rolle der Fremdsprachen (Deutsch) in Südafrika. *Stellenbosch Papers in Linguistics PLUS*, 38, 205-214.
<https://hdl.handle.net/10520/EJC143430>

BIBLIOGRAPHY

- Abendroth-Timmer, D. (2011). Reflexive Lehrerbildung: Konzepte und Perspektiven für den Einsatz von Unterrichtssimulation und Videographie in der fremdsprachendidaktischen Ausbildung. *Zeitschrift für Fremdsprachenforschung*, 22, 3-41.
- Adeola, A., & Ngoitima, Z. (2006). Managing self-directed learning in African universities: The case of Nigeria and Botswana. *Journal of Adult Education, Tanzania* (14), 59-85.
- Akyol, Z., Garrison, D. R., & Ozden, M. Y. (2009). Online and blended communities of inquiry: Exploring the developmental and perceptual differences. *International Review of Research in Open and Distributed Learning*, 10(6), 65-83.
<https://doi.org/10.19173/irrodl.v10i6.765>
- Aldridge, J. M., Fraser, B. J., & Sebela, M. P. (2004). Using teacher action research to promote constructivist learning environments in South Africa. *South African Journal of Education*, 24(4), 245-253.
- Allen, I. E., & Seaman, J. (2005). Growing by degrees: Online education in the United States. Sloan – Consortium.
- Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, 84(3), 261-271. <https://psycnet.apa.org/doi/10.1037/0022-0663.84.3.261>
- Anderman, E. M., & Young, A. J. (1994). Motivation and strategy use in science: Individual differences and classroom effects. *Journal of Research in Science Teaching*, 31(8), 811-831. <https://doi.org/10.1002/tea.3660310805>
- Anderson, T., & Dron, J. (2010). Three generations of distance education pedagogy. *The International Review of Research in Open and Distributed Learning*, 12(3), 80-97.
<https://doi.org/10.19173/irrodl.v12i3.890>
- Annas, R. (2016). Deutsch an Universitäten im südlichen Afrika Zur Entwicklung des Fachs seit 2003: Afrika schreiben/writing Africa. *Acta Germanica: German Studies in Africa*, 44(1), 105-118. <https://hdl.handle.net/10520/EJC194887>

- Arkoudis, F. (2003). Teaching English as a second language in Science classes: Incommensurate epistemologies? *Language and Education*, 17(3),161-174.
<https://doi.org/10.1080/09500780308666846>
- Augart, J. (2012). (Süd-)Afrikanische Germanistik – Zur Positionierung und Professionalisierung der Germanistik im südlichen Afrika. *eDusa*, 7(1), 7-22.
<http://repository.unam.edu.na/handle/11070/972>
- Auswärtiges Amt. (2020). *Deutsch als Fremdsprache weltweit*. Datenerhebung 2020. Retrieved October 1, 2020, from <https://www.auswaertiges-amt.de/blob/2344738/b2a4e47fdb9e8e2739bab2565f8fe7c2/deutsch-als-fremdsprache-data.pdf>
- Avalos, B. (2011). Teacher professional development in teaching and teacher education over ten years. *Teaching and Teacher Education*, 27(1), 10-20.
<https://doi.org/10.1016/j.tate.2010.08.007>
- Bagheri, M., Ali, W. Z. W., Abdullah, M. C. B., & Daud, S. D. (2013). Effects of project-based learning strategy on self-directed learning skills of educational technology students. *Contemporary Educational Technology*, 4(1), 15-29.
<http://files.eric.ed.gov/fulltext/EJ1105523.pdf>
- Baker, J. (1997). The importance of the role of language in fostering multilingualism in educational contexts in South Africa. *Per Linguam*, 13(2),50-58.
<https://doi.org/10.5785/13-2-188>
- Baker, A. (2011). Teaching German as a foreign language in a multilingual South African context. *Per Linguam*, 23(1), 30-44.
- Ballweg, S., Drumm, S., Hufeisen, B., Klippel, J., & Pilypaityt, L. (2013). *Wie lernt man die Fremdsprache Deutsch?* (Vol. 2). Klett-Langenscheidt.
- Banerjee, G. (2011). Blended environments: Learning effectiveness and student satisfaction at a small college in transition. *Journal of Asynchronous Learning Networks*, 15(1), 8-19.
<http://files.eric.ed.gov/fulltext/EJ918215.pdf>
- Barab, S., & Squire, K. (2004). Design-based research: Putting a stake in the ground. *Journal of the Learning Sciences*, 13(1), 1-14. https://doi.org/10.1207/s15327809jls1301_1

- Barkowski, H., Grommes, P., Lex, B., Vicente, S., Wallner, F., & / Britta Winzer-Kiontke, B. (2014). *Deutsch als fremde Sprache* (Vol. 3). Ernst Klett Sprachen.
- Bath, D., & Bourke, J. (2010). *Blended learning*. Griffith University.
- Beavers, A. (2009). Teachers as learners: Implications of adult education for professional development. *Journal of College Teaching & Learning*, 6(7), 25-30.
<https://doi.org/10.19030/tlc.v6i7.1122>
- Benitt, N. (2019). Campus meets classroom: Video conferencing and reflective practice in language teacher education. *European Journal of Applied Linguistics and TEFL*, 8(2), 121-140.
- Berry, A. (2009). Professional self-understanding as expertise in teaching about teaching. *Teachers and Teaching: Theory and practice*, 15(2), 305-318.
<https://doi.org/10.1080/13540600902875365>
- Blommaert, J., Muyliaert, N., Huysmans, M., & Dyers, C. (2005). Peripheral normativity: Literacy and the production of locality in a South African township school. *Linguistics and Education*, 16(4), 378-403. <https://doi.org/10.1016/j.linged.2006.03.001>
- Boitshwarelo, B. (2009). Exploring blended learning for science teacher professional development in an African context. *International Review of Research in Open and Distributed Learning*, 10(4), 1-19. <https://doi.org/10.19173/irrod.v10i4.687>
- Bolhuis, S. (2003). Towards process-oriented teaching for self-directed lifelong learning: A multidimensional perspective. *Learning and Instruction*, 13(3), 327-347.
[https://doi.org/10.1016/S0959-4752\(02\)00008-7](https://doi.org/10.1016/S0959-4752(02)00008-7)
- Bonk, C. J., & Graham, C. R. (2006). *The handbook of blended learning – Global perspectives, local designs*. Pfeiffer.
- Bonk, C. J., Kim, K.-J., & Zeng, T. (2005). Future directions of blended learning in higher education and workplace learning settings. In P. Kommers, & G. Richards, (Eds.), *EdMedia+ Innovate Learning* (pp. 3644-3649). Association for the Advancement of Computing in Education (AACE).
- Bosch, C. (2017). *Promoting self-directed learning through the implementation of cooperative learning in a higher education blended learning environment*. Unpublished PhD thesis)

- Bosch, C., Mentz, E., & Goede, R. (2019). Self-directed learning: A conceptual overview. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century: Implications for higher education* (pp.1-36). AOSIS. (NWU Self-Directed Learning Series, Vol. 1).
- Bosch, C., Mentz, E., & Reitsma, G. M. (2019). Integrating cooperative learning into the combined blended learning design model: Implications for students' intrinsic motivation. *International Journal of Mobile and Blended Learning*, 11(1), 58-73.
Doi:[10.4018/IJMBL.2019010105](https://doi.org/10.4018/IJMBL.2019010105)
- Bosch, C., & Pool, J. (2019). Establishing a learning presence: Cooperative learning, blended learning, and self-directed learning. In L.N. Makewa, B.M. Ngussa, & J.M. Kuboja, (Eds.), *Technology-supported teaching and research methods for educators* (pp. 51-74). IGI Global.
- Bouchard, P. (2009). Pedagogy without a teacher: What are the limits. *International Journal of self-directed learning*, 6(2), 13-22. <https://oltraining.com/SDLwebsite/IJSDL/IJSDL6.2-2009.pdf#page=18>
- Boyer, S. L., Edmondson, D. R., Artis, A. B., & Fleming, D. (2014). Self-directed learning: A tool for lifelong learning. *Journal of Marketing Education*, 36(1), 20–32.
<https://doi.org/10.1177/0273475313494010>
- Bransford, J., Darling-Hammond, L., & Lepage, P. (2005). Introduction. In L. Darling-Hammond, & Bransford, J., (Eds.), *Preparing teachers for a changing world - what teachers should learn and be able to do*. Jossey-Bass.
- Breed, B., & Bailey, R. (2018). The influence of a metacognitive approach to cooperative pair problem-solving on self-direction in learning. *The Journal for Transdisciplinary Research in Southern Africa*, 14 (1), a516. <https://doi.org/10.4102/td.v14i1.516>
- Brockett, R. G., & Hiemstra, R. (1991). A conceptual framework for understanding of self-direction in adult learning. In R. G. Brockett, & R. Hiemstra (Eds.), *Self-direction in adult learning: Perspectives on theory, research, and practice* (pp. 18-33). Routledge.

- Brooks, J. G., & Brooks, M. G. (1999). *In search of understanding: The case for constructivist classrooms*. ASCD.
- Brown, A. H., & Green, T. D. (2015). *The essentials of instructional design: Connecting fundamental principles with process and practice*. Routledge.
- Brown, J. D. (2009). Foreign and second language needs analysis. In M. Long, & C. Doughty, (Eds.), *The handbook of language teaching* (pp. 269-293). Wiley-Blackwell.
- Bruffee, K. A. (1993). *Collaborative learning: Higher education, interdependence, and the authority of knowledge*. Johns Hopkins University Press.
- Bruffee, K. A. (1995). Sharing our toys: Cooperative learning versus collaborative learning. *Change: The Magazine of Higher Learning*, 27(1), pp.12-18.
<https://doi.org/10.1080/00091383.1995.9937722>
- Cannella, G. S., & Reiff, J. C. (1994). Individual constructivist teacher education: Teachers as empowered learners. *Teacher Education Quarterly*, 21(3), 27-38.
<https://www.jstor.org/stable/23475804>
- Castellanos-Reyes, D. (2020). 20 Years of the Community of Inquiry Framework. *TechTrends*, 64, 557–560. <https://doi.org/10.1007/s11528-020-00491-7>
- Christ, I. (2002). Die Ausbildung von Lehrkräften für Fremdsprachen und bilingualen Unterricht in der Sicht der Kultusverwaltungen. *Fremdsprachen Lehren und Lernen*, 31, 42-63.
<http://pascal-francis.inist.fr/vibad/index.php?action=getRecordDetail&idt=14859958>
- Christensen, C. M., Horn, M. B., & Staker, H. (2013). *Is K-12 blended learning disruptive? An introduction to the theory of hybrids*. Clayton Christensen Institute for Disruptive Innovation.
- Churcher, K. M. A., Downs, E., & Tewksbury, D. (2014). “Friending’ Vygotsky: A social constructivist pedagogy of knowledge building through classroom social media use. *Journal of Effective Teaching*, 14(1), 33–50. <https://eric.ed.gov/?id=EJ1060440>
- Clark, D. (2003). *Blended learning*. Epic Group.
- Clark, R. C., & Mayer, R. E. (2016). *E-learning and the science of instruction: Proven guidelines for consumers and designers of multimedia learning*. John Wiley.

- Coldwell, M. (2017). Exploring the influence of professional development on teacher careers: A path model approach. *Teaching and Teacher Education*, 61, 189-198.
<https://doi.org/10.1016/j.tate.2016.10.015>
- Colpaert, J. (2014). *Educational engineering and distributed design: A research report*. University Antwerpen. Institute for Education and Information Sciences. Retrieved November 15, 2020, from <http://www.jozefcolpaert.net/EE.pdf>
- Comas-Quinn, A. (2011). Learning to teach online or learning to become an online teacher: An exploration of teachers' experiences in a blended learning course. *ReCALL*, 23(3), 218-232. <https://doi.org/10.1017/S0958344011000152>
- Constitution of the Republic of South Africa 1996. Retrieved March 30, 2020, from <https://www.justice.gov.za/legislation/constitution/SACConstitution-web-eng.pdf>
- Cooker, L., & Benson, P. (2013). *The applied linguistic individual: Sociocultural approaches to identity, agency and autonomy*. Equinox.
- Corbin, J., & Strauss, A. (2014). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage.
- Council of Europe. Council for Cultural Co-operation. Education Committee. Modern Languages Division. (2001). *Common European Framework of Reference for Languages: learning, teaching, assessment*. Cambridge University Press.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Sage.
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.
- Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Sage.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Sage.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.

- Davidson, N., & Major, C. H. (2014). Boundary crossings: Cooperative learning, collaborative learning, and problem-based learning. *Journal on Excellence in College Teaching*, 25(3 & 4), 7–55.
- De Clerq, F. (2008). Teacher quality, appraisal and development: The flaws in the IQMS. *Perspectives in Education*, 26(1), 7-18.
- Dehnad, A., Afsharian, F., Hosseini, F., Arabshahi, S. K. S., & Bigdeli, S. (2014). Pursuing a definition of self-directed learning in literature from 2000–2012. *Procedia-Social and Behavioral Sciences*, 116, 5184-5187. <https://doi.org/10.1016/j.sbspro.2014.01.1097>
- Department of Basic Education (DBE) (South Africa). (1997). *Language in Education Policy in Terms of Section 3 (4) of the National Education Policy Act, 1996 (Act 27 of 1996)*. Government Printers. Retrieved March, 20, 2020, from <https://www.education.gov.za/Portals/0/Documents/Policies/GET/LanguageEducationPolicy1997.pdf?ver=2007-08-22-083918-000>
- Department of Basic Education (DBE) (South Africa). (2011a). *Action plan to 2014: Towards the realisation of schooling 2025*. Government Printers. Retrieved March, 20, 2020, from https://www.gov.za/sites/default/files/gcis_document/201409/dobeshortened-action-plan-2025031120100.pdf
- Department of Basic Education (DBE). (2011b). *Curriculum and Assessment Policy Statement Grade 10-12: English as a Second Additional Language*. Retrieved September 30, 2020, from https://www.education.gov.za/Portals/0/CD/National%20Curriculum%20Statements%20and%20Vocational/CAPS%20FET%20_%20SAL%20_%20ENGLISH%20GR%2010-12%20_%20Web_1BB7.pdf?ver=2015-01-27-155020-433
- Department of Basic Education (DBE) (South Africa). (2011c). *Integrated Strategic Planning Framework for Teacher Education and Development in South Africa, 2011-2025: Technical Report*. Government Printers. Retrieved March, 20, 2020, from <https://www.dhet.gov.za/Teacher%20Education/Technical%20Report%20-%20Integrated%20Strategic%20Planning%20Framework%20for%20Teacher%20Education%20and%20Development%20In%20SA,%2012%20Apr%202011.pdf>
- Department of Basic Education (DBE) (South Africa). (2014). *Report on the Annual National Assessment of 2014 Grades 1 to 6 & 9*. Government Printers. Retrieved September 30,

2020, from

https://www.saga.org.za/docs/rep_annual/2014/REPORT%20ON%20THE%20ANA%20OF%202014.pdf

Department of Education (DoE) (South Africa). (2003). *National curriculum statement grades 10 – 12 (general) languages. German second additional language*. Retrieved March 20, 2020, from <https://dlvsa.co.za/files/2015/04/German-2nd-Add-Language.pdf>

Department of Education (DoE) (South Africa). (2004). *White Paper on e-Education: Transforming learning and teaching through information and communication technologies*. Government Printers. Retrieved March, 20, 2020, from https://www.gov.za/sites/default/files/gcis_document/201409/267341.pdf

Department of Education (DoE) (South Africa). (2005). *A national framework for teacher education in South Africa: Report of the Ministerial Committee on teacher education*. Government Printers. Retrieved March, 20, 2020, from <https://www.education.gov.za/Portals/0/Documents/Reports/Ministerial%20Committee%20on%20Teacher%20Education.pdf?ver=2008-03-05-111025-000>

Department of Education (DoE) (South Africa). (2006). National policy framework for teacher education and development in South Africa (NPFTED). *Government Gazette*, 29832, Section 53. Retrieved March, 20, 2020, from https://www.gov.za/sites/default/files/gcis_document/201409/teachereducdev0.pdf

Department of Education (DoE) (South Africa). (2007). *Guidelines for teacher training and professional development in ICT*. Government Printers. Retrieved March, 20, 2020, from https://www.schoolnet.org.za/sharing/guidelines_teacher_training.pdf

Department of Higher Education and Training (DHET) (South Africa). (2011). *Integrated strategic planning framework for teacher education and development in South Africa, 2011-2025*. Government Printers. Retrieved September 20, 2020, from <https://www.dhet.gov.za/Teacher%20Education/Technical%20Report%20-%20Intergrated%20Strategic%20Planning%20Framework%20for%20Teacher%20Education%20and%20Development%20In%20SA,%2012%20Apr%202011.pdf>

Department of Higher Education and Training (DHET) (South Africa). (2015). National Qualifications Framework Act (67/2008): Revised policy on the minimum requirements for teacher education qualifications. *Government Gazette*, 596(38487). Government

- Printers. Retrieved September 20, 2020, from https://www.dhet.gov.za/Teacher%20Education/National%20Qualifications%20Framework%20Act%2067_2008%20Revised%20Policy%20for%20Teacher%20Education%20Qualifications.pdf
- Doering, A., Veletsianos, G., Scharber, C., & Miller, C. (2009). Using the technological, pedagogical, and content knowledge framework to design online learning environments and professional development. *Journal of Educational Computing Research*, 41(3), 319-346. <https://doi.org/10.2190%2FEC.41.3.d>
- Donitsa-Schmidt, S., & Ramot, R. (2020). Opportunities and challenges: teacher education in Israel in the Covid-19 pandemic. *Journal of Education for Teaching*, 1-10. <https://doi.org/10.1080/02607476.2020.1799708>
- Dos Santos, Y., Kleinbing, H., Scribelk, L., & Voerkele, P. (2019). Platz zum Denken!? Praxis und Reflexion als entscheidende Impulse in der brasilianischen Deutschlehrerausbildung. *Pandaemonium Germanicum*, 22(36), 178-206. <https://doi.org/10.11606/1982-88372236178>
- Dreyer, C., & Nel, C. (2003). Teaching reading strategies and reading comprehension within a technology-enhanced learning environment. *System*, 31(3), 349-365. [https://doi.org/10.1016/S0346-251X\(03\)00047-2](https://doi.org/10.1016/S0346-251X(03)00047-2)
- Driscoll, M. (2002). Blended learning: Let's get beyond the hype. *Journal of E-learning*, 1(4), 1-4.
- Driscoll, M. P. (2005). *Psychology of learning for instruction*. Pearson.
- Du, F. (2012). Using study plans to develop self-directed learning skills: Implications from a pilot project. *College Student Journal*, 46(1), 223 - 232.
- Duff, P. (2008). *Case study research in applied linguistics*. Taylor & Francis.
- Dziuban, C., Moskal, P., & Hartman, J. (2005). Higher education, blended learning, and the generations: Knowledge is power: No more. In J. Bourne, & J. C. Moore, (Eds.), *Elements of quality online education: Engaging communities* (pp. 88-105). Sloan Center for Online Education.

- Ende, K., Grotjahn, K., Kleppin, K., & Mohr, I. (2013). *Curriculare Vorgaben und Unterrichtsplanung* (Vol. 6). Klett-Langenscheidt.
- Engelbrecht, N. (2020). A reflection on the 'non-place' character of German foreign language (GFL) courses and coursebooks in South African higher education. *Independent Journal of Teaching and Learning*, 15(2) 36- 50.
- Enns, E. E. (1996) Hilfe zur Selbsthilfe: Das Leitmotiv eines neuen Fortbildungsmodells für DaF in Kanada. *Die Unterrichtspraxis / Teaching German*, 29(1), 37-41.
<https://doi.org/10.2307/3531639>
- Ermeling, B. A. (2010). Tracing the effects of teacher inquiry on classroom practice. *Teaching and Teacher Education*, 26(3), 377-388. <https://doi.org/10.1016/j.tate.2009.02.019>
- Escobar Urmeneta, C. (2013). Learning to become a CLIL teacher: Teaching, reflection and professional development. *International Journal of Bilingual Education and Bilingualism*, 16(3):334-353. <https://doi.org/10.1080/13670050.2013.777389>
- Esteve, O. (2011). Fremdsprachenforschung, Unterrichtspraxis und Lehrerweiterbildung in Spanien. *Fremdsprachen Lehren und Lernen*, 40(1), 100-114.
- Fee, K. (2009). *Delivering e-learning: A complete strategy for design application and assessment*. Kogan Page Publishers.
- Feick, D. (2016). *Autonomie in der Lernendengruppe. Entscheidungsdiskurs und Mitbestimmung in einem DaF-Handyvideoprojekt. Giessener Beiträge zur Fremdsprachendidaktik*. Narr Francke Attempto Verlag.
- Felder, R. M., & Brent, R. (2007). Cooperative learning. In P. A. Mabrouk, (Ed.), *Active learning: Models from the analytical sciences* (pp. 34–53). American Chemical Association.
- Frambach, J. M., Driessen, E. W., Chan, L. C., & Van der Vleuten, C. P. (2012). Rethinking the globalisation of problem-based learning: How culture challenges self-directed learning. *Medical Education*, 46(8), 738-747. <https://doi.org/10.1111/j.1365-2923.2012.04290.x>
- Francom, G. M. (2010). Teach me how to learn: Principles for fostering students' self-directed learning skills. *International Journal of Self-directed Learning*, 7(1), 29-44.

- Freeman, D., & Johnson, K. E. (1998). Reconceptualizing the knowledge-base of language teacher education. *TESOL Quarterly*, 32(3), 397-417. <https://doi.org/10.2307/3588114>
- Frerejean, J., Van Merriënboer, J. J. G., Kirschner, P. A., Roex, A., Aertgeerts, B., & Marcellis, M. (2019). Designing instruction for complex learning: 4C/ID in higher education. *European Journal of Education Research, Development and Policy*, 54(4), 513–524. <https://doi.org/10.1111/ejed.12363>.
- Funk, H. (2010). Berufsorientierter Deutschunterricht. In H.-J. Krumm, C. Fandrych, B. Hufeisen, & C. Riemer, (Eds.), *Handbuch zur Sprach- und Kommunikationswissenschaft. Deutsch als Fremd-und Zweitsprache: ein internationales Handbuch* (pp. 1145-1151). De Gruyter Mouton.
- Funk, H., Kuhn, C., & Skiba, D. (2014). *Aufgaben, Übungen, Interaktion* (Vol. 4). Klett-Langenscheidt.
- Gabela, R. V. (2004). What makes a good teacher? In R. Balfour, T. Buthelezi, & C. Mitchell, (Eds.), *Teacher development at the centre of change* (pp. 55-57). KZNDE Teacher Development Directorate.
- Gagné, R. M. (1985). *The conditions of learning and theory of instruction* (4th ed.). Holt, Rinehart and Winston.
- Ganz, A., & Reinmann, G. (2007). Blended Learning in der Lehrerfortbildung-Evaluation einer Fortbildungsinitiative zum Einsatz digitaler Medien im Fachunterricht. *Unterrichtswissenschaft*, 35(2), 169-191.
- Garrett, N. (1991). Technology in the service of language learning: Trends and issues. *Modern Language Journal*, 75(1), 74-101. <https://doi.org/10.2307/329836>
- Garrison, D. R. (1992). Critical thinking and self-directed learning in adult education: An analysis of responsibility and control issues. *Adult Education Quarterly*, 42(3), 136-148. <https://doi.org/10.1177%2F074171369204200302>
- Garrison, D. R. (1997). Self-directed learning: Toward a comprehensive model. *Adult Education Quarterly*, 48(1), 18-33. <https://doi.org/10.1177%2F074171369704800103>

- Garrison, D. R. (2003). Cognitive presence for effective asynchronous online learning: The role of reflective inquiry, self-direction and metacognition. *Elements of Quality Online Education: Practice and Direction*, 4(1), 47-58.
- Garrison, D.R., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *The Internet and Higher Education*, 7(2), 95-105.
<https://doi.org/10.1016/j.iheduc.2004.02.001>
- Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. John Wiley.
- Garrison, D. R., & Vaughan, N. D. (2013), Institutional change and leadership associated with blended learning innovation: Two case studies. *The Internet and Higher Education*, 18, 24-28. <https://doi.org/10.1016/j.iheduc.2012.09.001>
- Garrison, R. (2000). Theoretical challenges for distance education in the 21st century: A shift from structural to transactional issues. *The International Review of Research in Open and Distributed Learning*, 1(1). <https://doi.org/10.19173/irrodl.v1i1.2>
- Garrison, R. (2009). Implications of online and blended learning for the conceptual development and practice of distance education. *International Journal of E-Learning & Distance Education*, 23(2), 93-104.
- Gay, L. R., Mills, G. E., & Airasian, P. W. (2011). *Educational research: Competencies for analysis and applications*. Pearson Higher Education.
- George-Walker, L. D., & Keeffe, M. (2010). Self-determined blended learning: A case study of blended learning design. *Higher Education Research & Development*, 29(1), 1-13.
<https://doi.org/10.1080/07294360903277380>
- Girvan, C., Conneely, C., & Tangney, B. (2016). Extending experiential learning in teacher professional development. *Teaching and Teacher Education*, 58:129-139.
<https://doi.org/10.1016/j.tate.2016.04.009>
- Gleason, J. (2013). Dilemmas of blended language learning: Learner and teacher experiences. *CALICO Journal*, 30(3), 323 - 341. <https://www.jstor.org/stable/calicojournal.30.3.323>
- Graham, C. R. (2006). Blended learning systems. In C. J. Bonk, & C. R. Graham, (Eds.), *The Handbook of Blended Learning* (pp. 3-21). Pfeiffer.

- Graham, C. R., Allen, S., & Ure, D. (2003). *Blended learning environments: A review of the research literature*. Provo, UT. Retrieved March 2, 2020, from https://www.researchgate.net/publication/267774009_Blended_Learning_Environments
- Graham, C. R., Woodfield, W., & Harrison, J. B. (2013). A framework for institutional adoption and implementation of blended learning in higher education. *The Internet and Higher Education, 18*, 4-14. <https://doi.org/10.1016/j.iheduc.2012.09.003>
- Gray, D. (2004). *Doing research in the real world: Qualitative and quantitative approaches*. Sage.
- Groenewald, K. (2019a). Lernmotivationen für Deutsch in Stellenbosch. *eDUSA 14*(1), 38-58.
- Groenewald, K. (2019b). Motivations for learning German in the South African context with Stellenbosch as case study-an investigation into knowledge production and the decolonising of the curriculum: Afrika schreiben/writing Africa. *Acta Germanica: German Studies in Africa, 47*(1), 11-22. <https://hdl.handle.net/10520/EJC-19c7240888>
- Grow, G. O. (1991). Teaching learners to be self-directed. *Adult Education Quarterly, 41*(3), 125-149. <https://doi.org/10.1177%2F0001848191041003001>
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. Sage.
- Guglielmino, L. M. (1978). Development of the self-directed learning readiness scale. *Dissertation Abstracts International Section A: Humanities and Social Sciences, 38*(11-A), 6467.
- Guglielmino, L. M. (2008). Why self-directed learning. *International Journal of Self-Directed Learning, 5*(1), 1-14.
- Guglielmino, L. M. (2013). The case for promoting self-directed learning in formal educational institutions. *SA-eDUC, 10*(2), 1-18.
- Guglielmino, P. J., & Guglielmino, L. M. (2006). Culture, self-directed learning readiness, and per capita income in five countries. *SAM Advanced Management Journal, 71*(2), 21-28.
- Gureckis, T. M., & Markant, D. B. (2012). Self-directed learning a cognitive and computational perspective. *Perspectives on Psychological Science, 7*(5), 464-481. <https://doi.org/10.1177%2F1745691612454304>

- Harber, C., & Mncube, V. (2011). Is schooling good for the development of society? The case of South Africa. *South African Journal of Education*, 31(2), 233-245.
<https://doi.org/10.15700/saje.v31n2a483>
- Hawker, D. (2013). Thousands of unqualified teachers are teaching SA children. Retrieved August 21, 2017, from <http://www.enca.com/south-africa/thousands-unqualified-teachers-sa-schools>
- Hew, K. F., & Cheung, W. S. (2014). *Using blended learning: Evidence-based practices*. Springer.
- Hiemstra, R. (2003). More than three decades of self-directed learning: From whence have we come? *Adult Learning*, 14(4), 5-8. <https://doi.org/10.1177%2F104515950301400402>
- Hofmann, J. (2006). Why blended learning hasn't (yet) fulfilled its promises. In C. J. Bonk, & C. R. Graham, (Eds.), *Handbook of blended learning: Global perspectives, local designs* (pp. 27-40). Pfeiffer.
- Hong, J. Y. (2012). Why do some beginning teachers leave the school, and others stay? Understanding teacher resilience through psychological lenses. *Teachers and Teaching*, 18(4), 417-440. <https://doi.org/10.1080/13540602.2012.696044>
- Hong, Z. C. (2019). Einsatzmöglichkeiten einer Bedarfsanalyse zur Curriculum-Entwicklung für berufsorientierten DaF-Unterricht in China. *Informationen Deutsch als Fremdsprache*, 46(1), 159-177. <https://doi.org/10.1515/infodaf-2019-0012>
- Howard, L., Remenyi, Z., & Pap, G. (2006) Adaptive blended learning environments. *International Conference on Engineering Education Session T3K-11* (pp.23-28). Retrieved February 18, 2020, from http://w3.isis.vanderbilt.edu/Projects/VaNTH/papers/icee_2006_p1.pdf#
- Howie, S., Combrinck, C., Roux, K., Tshele, M., Mokoena, G., & Palane, N. M. (2017). Progress in International Reading Literacy Study (PIRLS) 2016: South African children's reading literacy achievement. University of Pretoria: Centre for Evaluation and Assessment.
https://www.up.ac.za/media/shared/164/ZP_Files/pirls_2016_final_16_03_2018_high_quality-1.zp146890.pdf

- Hudson, L. A., & Ozanne, J. L. (1988). Alternative ways of seeking knowledge in consumer research. *Journal of Consumer Research*, 14(4), 508-521.
<https://doi.org/10.1086/209132>
- Hufeisen, B. (2003). L1, L2, L3, L4, Lx - alle gleich? Linguistische, lernerinterne und lernerexterne Faktoren in Modellen zum multiplen Spracherwerb. In N. Baumgarten, C. Böttger, M. Motz, & J. Probst (Eds.), *Übersetzen, Interkulturelle Kommunikation, Spracherwerb und Sprachvermittlung - das Leben mit mehreren Sprachen Festschrift für Juliane House zum 60. Geburtstag. Zeitschrift für Interkulturellen Fremdsprachenunterricht* [Online], 8(2/3), 97-109. <http://www.ualberta.ca/~german/ejournal/Hufeisen.pdf>
- Irani, T. A., Wilson, S. B., Slough, D. L., & Rieger, M. (2014). Graduate student experiences on- and off-campus: Social connectedness and perceived isolation. *International Journal of E-Learning & Distance Education*, 28(1), 1-16.
- Jacobs, G. M. (2015). Collaborative learning or cooperative learning? The name is not important; flexibility is. *Beyond Words*, 3(1), 32–52. <https://eric.ed.gov/?id=ED574149>
- Jessner, U. (2008). Teaching third languages: Findings, trends and challenges. *Language Teaching*, 41(1), 15-56. <https://doi.org/10.1017/S0261444807004739>
- Jita, L. C., & Ndjalane, T. C. (2009). Teacher clusters in South Africa: opportunities and constraints for teacher development and change. *Perspectives in Education*, 27(1), 58-68.
- John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, 31(3/4), 191–206.
<https://doi.org/10.1080/00461520.1996.9653266>
- Johnson, D. W., & Johnson, R. T. (2015). Theoretical approaches to cooperative learning. In R. Gillies, (Ed.), *Collaborative learning: Developments in research and practice* (pp. 17-46). Nova.
- Johnson, D. W., & Johnson, R. T. (2018). Cooperative learning: The foundation for active learning, active learning - beyond the future. In S. M. Brito, (Ed.), *IntechOpen*. 10.5772/intechopen.81086 Retrieved November 09, 2020, from <https://www.intechopen.com/books/active-learning-beyond-the-future/cooperative-learning-the-foundation-for-active-learning>

- Johnson, D. W., & Johnson, R. T. (2019). The impact of cooperative learning on self-directed learning. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century: Implications for higher education* (pp.37-66). AOSIS. (NWU Self-Directed Learning Series, Vol. 1).
- Johnson, S., Hodges, M., & Monk, M. (2000). Teacher development and change in South Africa: A critique of the appropriateness of transfer of northern/western practice. *Compare: A Journal of Comparative and International Education*, 30(2), 179-192. <https://doi.org/10.1080/713657456>
- Jolliffe, W., & Snaith, J. (2017). Developing cooperative learning in initial teacher education: Indicators for implementation. *Journal of Education for Teaching*, 43(3), 307–315. <https://doi.org/10.1080/02607476.2017.1319507>
- Kerres, M. (2020). Against all odds: Education in Germany coping with Covid-19. *Postdigital Science and Education*, 2, 690-694. <https://doi.org/10.1007/s42438-020-00130-7>
- Kim, J. (2013). Types of blended instructions: Different approaches to different mixes. In *36th Annual Proceedings of Association for Educational Communications and Technology* (pp. 474-484). Nova South-Eastern University. Association for Educational Communications and Technology. Retrieved February 15, 2020, from https://members.aect.org/pdf/Proceedings/proceedings13/2013i/13_21.pdf
- Kim, R., Olfman, L., Ryan, T., & Eryilmaz, E. (2014). Leveraging a personalized system to improve self-directed learning in online educational environments. *Computers and Education*, 70, 150–60. <https://doi.org/10.1016/j.compedu.2013.08.006>
- Knowles, M. S. (1968). Andragogy, not pedagogy. *Adult Leadership*, 16(10), 350-352.
- Knowles, M. S. (1973). *The adult learner: A neglected species*. Gulf Publishing Company.
- Knowles, M. S. (1975). *Self-directed learning: A guide for learners and teachers*. Association Press.
- Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.

- Kolcu, M. I. B., Öztürkçü, Ö. S. K., & Kaki, G. D. (2019). Evaluation of a distance education course using the 4C-ID Model for continuing endodontics education. *Journal of Dental Education*, 84(1), 62–71. <https://doi.org/10.21815/JDE.019.138>
- Kothari, C. R. (2004). *Research methodology methods and techniques* (2nd rev. ed.). New Age International Publishers.
- Krille C. (2020) Individual and Context Characteristics Related to Teachers' Professional Development Behavior. In *Teachers' Participation in Professional Development. SpringerBriefs in Education* (pp.41-90). Springer. https://doi.org/10.1007/978-3-030-38844-7_5
- Kruger, C. (2019). In pursuit of accomplished teacher development through praxis in a South African distance learning programme. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-Directed Learning for the 21st Century: Implications for Higher Education* (pp.133-165). AOSIS. (NWU Self-Directed Learning Series Volume 1). <https://doi.org/10.4102/aosis.2019>
- Krumm, H.-J., & Legutke, M. (2001). Ausbildung und Fortbildung von Lehrerinnen und Lehrern für Deutsch als Fremd-und Zweitsprache: Inhalte und Formen. In G. Helbig (Ed.), *Deutsch als Fremdsprache. Ein internationales Handbuch* (pp. 1123-1139). Walter de Gruyter.
- Kukulska-Hulme, A., & Viberg, O. (2018). Mobile collaborative language learning: State of the art. *British Journal of Educational Technology*, 49(2), 207–218. doi: [10.1111/bjet.12580](https://doi.org/10.1111/bjet.12580)
- Kushatmaja, R. P., & Suryani, E. (2019). Analysis of factors affecting edmodo adoption as learning media using Technology Acceptance Model 2 (TAM 2). In *IPTEK Journal of Proceedings Series, 5: The 1st International Conference on Business and Management of Technology (IConBMT)* (pp. 574–582). <http://dx.doi.org/10.12962/j23546026.y2019i5.6436>
- Kyndt, E., Raes, E., Lismont, B., Timmers, F., Cascallar, E., & Dochy, F. (2013). A meta-analysis of the effects of face-to-face cooperative learning: Do recent studies falsify or verify earlier findings? *Educational Research Review*, 10, 133–149. <https://doi.org/10.1016/j.edurev.2013.02.002>

- La Hanisi, A., Risdiyany, R., Dwi Utami, Y., & Sulisworo, D. (2018). The use of WhatsApp in collaborative learning to improve English teaching and learning process. *International Journal of Research Studies in Educational Technology*, 7(1), 29–35. Do: [10.5861/ijrset.2018.3004](https://doi.org/10.5861/ijrset.2018.3004)
- Labonté, C., & Smith, V. R. (2019). Validation of a questionnaire assessing students' self-directed and collaborative learning with and without technology in Canadian middle school classrooms. *Canadian Journal of Learning and Technology*, 45(2), 1–19. <https://eric.ed.gov/?id=EJ1232515>
- Lam, D., Ardington, C., & Leibbrandt, M. (2011). Schooling as a lottery: Racial differences in school advancement in urban South Africa. *Journal of Development Economics*, 95(2), 121-136. <https://doi.org/10.1016/j.jdeveco.2010.05.005>
- Launer, R. (2011). Blended Learning für den Fremdsprachenunterricht aus Perspektive der Wirksamkeitsforschung. *Grenzen überwinden mit Deutsch*, 37, 179-191. <https://dnb.info/115382888X/34#page=189>
- Laurien, I. (2006). Das Fach Deutsch an Universitäten im» Neuen Südafrika «–Eine» Laborsituation «für Europa? *Informationen Deutsch als Fremdsprache*, 33(5), 438-445. http://www.daf.de/downloads/InfoDaF_2006_Heft_5.pdf#page=46
- Lee, K., Tsai, P.-S., Chai, C. S., & Koh, J. H. L. (2014). Students' perceptions of self-directed learning and collaborative learning with and without technology. *Journal of Computer Assisted Learning*, 30(5), 425-437. <https://doi.org/10.1111/jcal.12055>
- Legutke, M. (2010). Fort-und Weiterbildung von Lehrkräften für Deutsch als Fremdsprache. *Deutsch als Fremd-und Zweitsprache*, 2, 1351-1357.
- Legutke, M., & Rotberg, S. (2018). Deutsch Lehren Lernen (DLL) – das weltweite Fort-und Weiterbildungsangebot des Goethe-Instituts. *Informationen Deutsch als Fremdsprache*, 45(5), 605-634.
- Legutke, M. K., & Schart, M. (2016). Fremdsprachliche Lehrerbildungsforschung: Bilanz und Perspektiven. In M. Legutke, & M. Schart, (Eds.), *Fremdsprachendidaktische Professionsforschung: Brennpunkt Lehrerbildung* (pp. 9-46). Narr.

- Liddell, T. N. (2008). Executive women's self-directed learning and leading in charitable foundations. *International Journal of Self-Directed Learning*, 5(1), 15-29.
- Lin, C. C., & Hong, T. K. (2020). Skills building towards self-directed learning via action research reflections. In *Proceedings of the 16th International CDIO Conference*, hosted on-line by Chalmers University of Technology, Gothenburg, Sweden (pp. 251–262). Retrieved October 19, 2020, from https://research.chalmers.se/publication/519263/file/519263_Fulltext.pdf#page=265
- Lindner, K. T., & Schwab, S. (2020). Differentiation and individualisation in inclusive education: A systematic review and narrative synthesis. *International Journal of Inclusive Education*. <https://doi.org/10.1080/13603116.2020.1813450>
- Long, H. B. (2000). Understanding self-direction in learning. In H. B. Long, (Ed.), *Practice & theory in self-directed learning* (pp. 11-24). Motorola University Press.
- Long, M. H. (2005a). Methodological issues in learner needs analysis. In M. Long, (Ed.), *Second language needs analysis* pp. 19-76). Cambridge University Press.
- Long, M. H. (2005b). *Second language needs analysis*. Cambridge University Press.
- Long, M. H. (2015). *Second language acquisition and task-based language teaching*. John Wiley & Sons.
- Loyens, S. M., & Gijbels, D. (2008). Understanding the effects of constructivist learning environments: Introducing a multi-directional approach. *Instructional Science*, 36(5), 351-357. Doi: [10.1007/s11251-008-9059-4](https://doi.org/10.1007/s11251-008-9059-4)
- Loyens, S. M., Magda, J., & Rikers, R. M. (2008). Self-directed learning in problem-based learning and its relationships with self-regulated learning. *Educational Psychology Review*, 20(4), 411-427. Doi: [10.1007/s10648-008-9082-7](https://doi.org/10.1007/s10648-008-9082-7)
- Lubbe, A. & Mentz, E. (2019). Participative assessment practices and its contribution to the development of self-directed learning skills. In E. Mentz, J. De Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century: Implications for Higher Education* (pp. 341-368). AOSIS. (NWU Self-Directed Learning Series Vol. 1).
- Lynch, B. K. (1990). A context-adaptive model for program evaluation. *TESOL quarterly*, 24(1), 23-42. <https://doi.org/10.2307/3586850>

- Lynch, B. K. (1996). *Language program evaluation: Theory and practice*. Cambridge University Press.
- Lynch, R., & Dembo, M. (2004). The relationship between self-regulation and online learning in a blended learning context. *International Review of Research in Open and Distributed Learning*, 5(2), 1-16. <https://doi.org/10.19173/irrodl.v5i2.189>
- MacDonald, J. (2008). *Blended learning and online tutoring: Planning learner support and activity design* (2nd ed.). Gower Publishing.
- Mackey, T. P., & Jacobson, T. E. (2011). Reframing information literacy as a metaliteracy. *College and Research Libraries*, 72(1), 62–78. <https://doi.org/10.5860/crl-76r1>
- Manderson, L., & Levine, S. (2020). COVID-19, risk, fear, and fall-out. *Medical Anthropology*, 39(5), 367–370. <https://doi.org/10.1080/01459740.2020.1746301>
- Marsh, G. E., & Ketterer, J. J. (2005). Situating the zone of proximal development. *Online Journal of Distance Learning Administration*, 8(2). <http://www.westga.edu/~distance/ojdla/summer82/marsh82.htm>
- Masie, E. (2006). The blended learning imperative. In C. Bonk & C. Graham (Eds.), *The handbook of blended learning: Global perspectives, local designs* (pp. 22-27). Pfeiffer.
- Matheos, K., Daniel, B. K., & McCalla, G. I. (2012). Dimensions for blended learning technology: Learners' perspectives. *Journal of Learning Design*, 1(1), 56-76. <https://eric.ed.gov/?id=EJ1066473>
- Matsuo, M. (2015). A framework for facilitating experiential learning. *Human Resource Development Review* 14, 442–461. <https://doi.org/10.1177%2F1534484315598087>
- Matthews, R. S. (1996). Collaborative learning: Creating knowledge with students. In R. J. Menges, M. Weimer, & Associates, (Eds.), *Teaching on solid ground: Using scholarship to improve practice* (pp. 101-124). Jossey-Bass.
- Matzat, U. (2013). Do blended virtual learning communities enhance teachers' professional development more than purely virtual ones? A large scale empirical comparison. *Computers & Education*, 60(1), 40-51. <https://doi.org/10.1016/j.compedu.2012.08.006>

- Mawas, N. E. & Muntean, C. (2018). Supporting lifelong learning through development of 1st century skills. Paper delivered at the *10th International Conference on Education and New Learning Technologies*, Palma de Mallorca. Retrieved October 20, 2020, [ffhal-02250150f](#)
- Mbohwa-Pagels, K. (2011). DaF im Kontext der sich wandelnden Rahmenbedingungen für Sprach- und Literaturstudien. *eDusa*, 6(1), 33-47.
- Mbohwa-Pagels, K., & Rode, R. (2014). DaF im SA Schulsystem. *eDusa*, 9(1), 13-19.
- McArdle, G. E. (2010). *Instructional design for action learning*. American Management Association.
- McDonald, B. (2016). Individualised professional development in higher education. Paper delivered at the *5th International Conference on Research in Humanities, Sociology and Education (RHSCE'16)*, London. Retrieved November 09, 2020, from <http://icehm.org/upload/4871ED1116067.pdf>
- McLoughlin, C., & Lee, M. J. (2010). Personalised and self- regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software. *Australasian Journal of Educational Technology*, 26(1), 28-43. <https://doi.org/10.14742/ajet.1100>
- McMillan, J., & Schumacher, S. (2001). *Research in education: A conceptual introduction*. Longman.
- Mentz, E. (2014). Preparing pre-service teachers to support self-directed learning [Blog]. (Vol. 2018.): Washington: Partnership for 21st Century Skills. Retrieved February 20, 2020, from <http://www.p21.org/news-events/p21blog/1477-mentz-preparing-pre-service-teachers-to-support-self-directedlearning>
- Mentz, E., & Bailey, R. (2019). A systematic review of research on the use of technology-supported cooperative learning to enhance self-directed learning. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century: Implications for higher education* (pp. 203-38). AOSIS. (NWU Self-Directed Learning Series, Vol. 1).
- Merriam, S. B. (1985). The case study in educational research: A review of selected literature. *The Journal of Educational Thought (JET) / Revue de la Pensée Educative Journal*, 19(3), 204-217. <https://www.jstor.org/stable/23768608>

- Merriam, S. B. (2001). Andragogy and self-directed learning: Pillars of adult learning theory. *New Directions for Adult and Continuing Education*, (89), 3-14. <https://doi-org.nwulib.nwu.ac.za/10.1002/ace.3>
- Merriam, S. B., & Brockett, R. G. (2011). *The profession and practice of adult education: An introduction*. John Wiley & Sons.
- Merrill, M. D. (1983). Component display theory. In C. Reigeluth, (ed.), *Instructional design theories and models*. Erlbaum Associates.
- Mills, A. J., Durepos, G., & Wiebe, E. (2010). *Encyclopedia of case study research*, vol. 1. Sage.
- Mills, J., Bonner, A., & Francis, K. (2006). The development of constructivist grounded theory. *International Journal of Qualitative Methods*, 5(1), 25-35. <https://doi.org/10.1177%2F160940690600500103>
- Minott, M. A. (2010). Reflective teaching as self-directed professional development: Building practical or work-related knowledge. *Professional Development in Education*, 36(1-2), 325-338. <https://doi.org/10.1080/19415250903457547>
- Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, 108(6), 1017-1054. <https://www.learntechlib.org/p/99246/>
- Misra, P. K. (2018). MOOCs for Teacher professional development: Reflections, and suggested actions. *Open Praxis*, 10(1), 67–77. Retrieved November 09, 2020, from <https://www.learntechlib.org/p/183570/>
- Modisaotsile, B. M. (2012). The failing standard of basic education in South Africa. *Policy Brief*, 72, 1-7.
- Mokhele, M. L., & Jita, L. C. (2010). South African teachers' perspectives on continuing professional development: a case study of the Mpumalanga Secondary Science Initiative. *Procedia-Social and Behavioral Sciences*, 9, 1762-1766. <https://doi.org/10.1016/j.sbspro.2010.12.396>

- Moore-Adams, B. L., Jones, W. M., & Cohen, J. (2016). Learning to teach online: A systematic review of the literature on K-12 teacher preparation for teaching online. *Distance Education*, 37(3), 333–48. <https://doi.org/10.1080/01587919.2016.1232158>
- Morris, T. H. (2018). Vocational education of young adults in England: A systemic analysis of teaching-learning transactions that facilitate self-directed learning. *Journal of Vocational Education & Training* 70, 619–643. [10.1080/13636820.2018.1463280](https://doi.org/10.1080/13636820.2018.1463280)
- Morris, T. H. (2019). Adaptivity through self-directed learning to meet the challenges of our ever-changing world. *Adult Learning*, 30(2), 56–66. <https://doi.org/10.1177/1045159518814486>
- Morrison, G. R., Ross, S. M., Kalman, H. K., & Kemp, J. E. (2011). *Designing effective instruction* (6th ed.). John Wiley and Sons.
- Motala, S., & Menon, K. (2020). In search of the 'new normal': Reflections on teaching and learning during Covid-19 in a South African university. *Southern African Review of Education*, 26(1), 80–99.
- Murray, G. (2014) Exploring the social dimensions of autonomy in language learning. In G. Murray, (Ed.), *Social dimensions of autonomy in language learning* (pp. 3-11). Palgrave Macmillan. https://doi.org/10.1057/9781137290243_1
- Murray, J. (2008). Towards the re-articulation of the work of teacher educators in Higher Education institutions in England. *European Journal of Teacher Education*, 31(1), 17-34. <https://doi.org/10.1080/02619760701845073>
- Murray, M. C., & Pérez, J. (2015). Informing and performing: A study comparing adaptive learning to traditional learning. *Informing Science: The International Journal of an Emerging Transdiscipline*, 18, 111-125. <http://www.inform.nu/Articles/Vol18/ISJv18p111-125Murray1572.pdf>
- Murray, S. (2013). The challenges of designing a common, standards-based curriculum for all South Africa's languages. *Per Linguam*, 28(2), 84-94. <https://hdl.handle.net/10520/EJC133552>
- Murray, S., Ma, X., & Mazur, J. (2009). Effects of peer coaching on teachers' collaborative interactions and students' mathematics achievement. *Journal of Educational Research*, 102(3), 203-212. <https://doi.org/10.3200/JOER.102.3.203-212>

- Mushayikwa, E., & Lubben, F. (2009). Self-directed professional development – Hope for teachers working in deprived environments? *Teaching and Teacher Education*, 25(3), 375-382. <https://doi.org/10.1016/j.tate.2008.12.003>
- Nepal, K. P., & Stewart, R. A. (2010). Relationship between self-directed learning- readiness factors and learning outcomes in third year project-based engineering design course. In *Proceedings of the 21st Annual Conference for the Australasian Association for Engineering Education* (pp. 496-503). Sydney.
<https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.1034.4214&rep=rep1&type=pdf>
- Neumeier, P. (2005). A closer look at blended learning—parameters for designing a blended learning environment for language teaching and learning. *ReCALL*, 17(2), 163-178. Doi: [10.1017/S0958344005000224](https://doi.org/10.1017/S0958344005000224)
- O'Brien, K. Y., Forte, M., Mackey, T. P., & Jacobson, T. E. (2017). Metaliteracy as pedagogical framework for learner-centered design in three MOOC platforms: Connectivist, Coursera and Canvas. *Open Praxis*, 9(3), 267–86.
<https://openpraxis.org/index.php/OpenPraxis/article/view/553>
- Oliver, M., & Trigwell, K. (2005). Can 'blended learning' be redeemed? *E-learning and Digital Media*, 2(1), 17-26. <https://doi.org/10.2304%2Felea.2005.2.1.17>
- Olivier, J. (2019). Towards a multiliteracies framework in support of self-directed learning through open educational resources' skills. In E. Mentz, J. De Beer, & R. Bailey, (Eds.), *Self-directed learning for the 21st century. implications for Higher Education* (pp. 167-201). AOSIS. (NWU Self-Directed Learning Series Volume 1).
Doi:[10.4102/aosis.2019.BK134.06](https://doi.org/10.4102/aosis.2019.BK134.06)
- Ono, Y., & Ferreira, J. (2010). A case study of continuing teacher professional development through lesson study in South Africa. *South African Journal of Education*, 30(1), 59-74.
Doi: <https://doi.org/10.15700/saje.v30n1a320>
- Osburg, T., & Todorova, A. (2009). Online platform support for sustained, collaborative and self-directed engagement of teachers in a blended professional development program. In M. Spaniol, Q. Li, R. Klamka, & R. W. H. Lau, (Eds.), *Advances in Web Based Learning – ICWL 2009. Lecture Notes in Computer Science*, vol 5686, pp. 312-321. Springer https://doi.org/10.1007/978-3-642-03426-8_38

- Osguthorpe, R. T., & Graham, C. R. (2003). Blended learning environments: Definitions and directions. *Quarterly Review of Distance Education*, 4(3), 227-233.
<https://www.learntechlib.org/p/97576/>
- Özhan, Ş. Ç., & Kocadere, S. A. (2020). The effects of flow, emotional engagement, and motivation on success in a gamified online learning environment. *Journal of Educational Computing Research*, 57(8), 2006-2031. <https://doi.org/10.1177/0735633118823159>.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533-544. <https://doi.org/10.1007/s10488-013-0528-y>
- Patterson, C., Crooks, D., & Lunyk-Child, O. (2002). A new perspective on competencies for self-directed learning. *Journal of Nursing Education*, 41(1), 25-31.
<https://doi.org/10.3928/0148-4834-20020101-06>
- Petersen, N., & Mentz, E. (2016). The influence of cooperative learning methods on second-year tertiary student-teachers' levels of self-directedness in learning. In M.A. Mokoena, & I. Oosthuizen, (Eds.), *A Kaleidoscope of advances in modern day education* (pp. 41-63). Ivyline Academic Publishers.
- Picciano, A. G. (2009). Blending with purpose: The multimodal model. *Journal of Asynchronous Learning Networks*, 13(1), 7-18. <https://eric.ed.gov/?id=EJ837540>
- Plowright, D. (2011). *Using mixed methods: Frameworks for an integrated methodology*. Sage.
- Ponti, M. (2014). Self-directed learning and guidance in non-formal open courses. *Learning, Media and Technology*, 39(2), 154–168. <https://doi.org/10.1080/17439884.2013.799073>
- Poon, J. (2013). Blended learning: An institutional approach for enhancing students' learning experiences. *Journal of Online Learning and Teaching*, 9(2), 271-288.
<http://hdl.handle.net/10536/DRO/DU:30057995>
- Porter, W. W., Graham, C. R., Spring, K. A., & Welch, K. R. (2014). Blended learning in higher education: Institutional adoption and implementation. *Computers & Education*, 75, 185-195. <https://doi.org/10.1016/j.compedu.2014.02.011>
- Powell, K. C., & Kalina, C. J. (2009).

- Cognitive and social constructivism: Developing tools for an effective classroom. *Education*, 130(2), 241-250.
- Powell, K. C., & Kalina, C. J. (2009). Cognitive and social constructivism developing tools for an effective classroom. *Education*, 130(2), 241–50. <https://eric.ed.gov/?id=EJ871658>
- Pretorius, E. J., & Klapwijk, N. M. (2016). Reading comprehension in South African schools: Are teachers getting it, and getting it right? *Per Linguam: Journal of Language Learning /Per Linguam: Tydskrif vir Taalaanleer*, 32(1), 1-20.
- Puentedura, R. (2012). The SAMR model: Six exemplars. Retrieved August 14, 2019, from http://www.hippasus.com/rrpweblog/archives/2012/08/14/SAMR_SixExemplars.pdf
- Puljić, B. K. (2010). Lehrerausbildung und das Reflexive Denken Zwischen Wissen und Handeln. *Educational Sciences / Odgojne Znanosti*, 12(1), 119-129. <https://hrcak.srce.hr/59606>
- Putra, I. D. G. R. G. (2018). The evolution of Technology Acceptance Model (TAM) and recent progress on technology acceptance research in ELT: State of the art article. *Yavana Bhāshā: Journal of English Language Education*, 1(2), 25- 37.
- Raidal, S., & Volet, S. (2009). Preclinical students' predispositions towards social forms of instruction and self-directed learning: A challenge for the development of autonomous and collaborative learners. *Higher Education*, 57(5), 577-596. Doi: [10.1007/s10734-008-9163-z](https://doi.org/10.1007/s10734-008-9163-z)
- Ranieri, M., Giampaolo, M., & Bruni, I. (2019). Exploring educators' professional learning ecologies in a blended learning environment. *British Journal of Educational Technology*, 50(4), 1673-1686. <https://doi.org/10.1111/bjet.12793>
- Reigeluth, C. M. (1983). Meaningfulness and instruction: Relating what is being learned to what a student knows. *Instructional Science*, 12(3) 197–218. <https://doi.org/10.1007/BF00051745>
- Reigeluth, C. M. (1992). Elaborating the elaboration theory. *Educational Technology Research and Development*, 40(3), 80–6. <https://doi.org/10.1007/BF02296844>

- Reinmann, G., Florian, A., Häuptle, E., & Metscher, J. (2009). *Wissenschaftliche Begleitung von Blended Learning in der Lehrerfortbildung: Konzept, Methodik, Ergebnisse, Erfahrungen und Empfehlungen am Beispiel" Intel® Lehren–Aufbaukurs Online*. MV - Wissenschaft.
- Richter, D., Kunter, M., Klusmann, U., Lüdtke, O., & Baumert, J. (2011). Professional development across the teaching career: Teachers' uptake of formal and informal learning opportunities. *Teaching and Teacher Education*, 27(1), 116-126.
- Robinson, M. (2003). Teacher education policy in South Africa: The voice of teacher educators. *Journal of Education for Teaching*, 29(1), 19-34.
<https://doi.org/10.1080/0260747022000057954>
- Rodgers, C. R., & Scott, K. H. (2008). The development of the personal self and professional identity in learning to teach. In M. Cochran- Smith, S. D. Feiman-Nemser, D. J. McIntyre, & K. E. Demers, (Eds.), *Handbook of Research on Teacher Education*. (pp.732-754). Routledge.
- Romrell, D., Kidder, L., & Wood, E. (2014). The SAMR model as a framework for evaluating mLearning. *Online Learning Journal* 18(2). <https://www.learntechlib.org/p/183753/>
- Rösler, D., & Würffel, N. (2014). *Lernmaterialien und Medien*. Klett-Langenscheidt.
- Ross, M. E., Shannon, D. M., Salisbury-Glennon, J. D., & Guarino, A. (2002). The patterns of adaptive learning survey: A comparison across grade levels. *Educational and Psychological Measurement*, 62(3), 483-497.
<https://doi.org/10.1177%2F00164402062003006>
- SACE (South African Council for Educators). (2013). *The CPTD management system handbook*. SACE. Retrieved January 08, 2019, from https://sace.org.za/assets/documents/uploads/sace_30373-2016-08-31-CPTD%20Handbook.pdf
- SACE (South African Council for Educators). (2019). *Teacher professionalisation*. Retrieved March 28, 2020, from <https://www.sace.org.za/pages/teacher-professionalisation-fags>
- Sahare, S., & Thampi, G. (2010). Blended learning: Current trends and issues. In Z. Abas, I. Jung, & J. Luca, (Eds.), In Z. Abas i. Jung, & J. Luca, (Eds.), *Proceedings of Global Learn Asia Pacific 2010--Global Conference on Learning and Technology* (pp.3970-

- 3977). Penang, Malaysia: Association for the Advancement of Computing in Education (AACE). Retrieved August 28, 2019, from <https://www.learntechlib.org/primary/p/34484/>
- Saldaña, J. (2009). *The coding manual for qualitative researchers*. Sage.
- Savides, M. (2017). South African schools have 5,139 teachers who are unqualified or under-qualified. Retrieved August 21, 2018, from <https://www.timeslive.co.za/news/south-africa/2017-06-06-south-african-schools-have-5139-teachers-who-are-unqualified-or-under-qualified/>
- Savin-Baden, M., & Major, C. H. (2004). *Foundations of problem-based learning*. SRHE & Open University Press.
- Schart, M., & Legutke, M. (2012). *Lehrkompetenz und Unterrichtsgestaltung*. Langenscheidt.
- Schart, M., & Ohta, T. (2018). Von den Lehrenden her denken–zur Konzeption von Fortbildungen am Beispiel eines Qualifizierungsangebots für Deutschlehrkräfte in Japan. *Informationen Deutsch als Fremdsprache*, 45(5), 672-694. <https://doi.org/10.1515/infodaf-2018-0085>
- Schmidt, H. G. (1983). Problem-based learning: Rationale and description. *Medical Education*, 17(1), 11-16. <https://doi.org/10.1111/j.1365-2923.1983.tb01086.x>
- Schocker-von Dittfurth, M. (2002). *Unterricht verstehen. Medienpaket zur Förderung reflektierter Unterrichtspraxis. Modul 1: Erfahrungswissen reflektieren und den eigenen Unterricht weiter entwickeln*. Goethe-Institut.
- Schrum, L., & Hong, S. (2002). Dimensions and strategies for online success: Voices from experienced educators. *Journal of Asynchronous Learning*, 6(1), 57–67. <http://actxelearning.pbworks.com/f/10.1.1.109.3649.pdf>
- Seel, N. M., Lehmann, T., Blumschein, P., & Podolskiy, O. A. (2017). *Instructional design for learning: Theoretical foundations*. Sense Publishers.
- Serafini, E. J., Lake, J. B., & Long, M. H. (2015). Needs analysis for specialized learner populations: Essential methodological improvements. *English for Specific Purposes*, 40, 11-26. <https://doi.org/10.1016/j.esp.2015.05.002>

- Shea, P., & Bidjerano, T. (2010). Learning presence: Towards a theory of self-efficacy, self-regulation, and the development of a communities of inquiry in online and blended learning environments. *Computers & Education*, 55(4), 1721-1731.
<https://doi.org/10.1016/j.compedu.2010.07.017>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63-75. Doi: [10.3233/EFI-2004-22201](https://doi.org/10.3233/EFI-2004-22201)
- Short, D. (2002). Language learning in sheltered social classes. *TESOL Journal*, 11(1), 18 - 24.
<https://eric.ed.gov/?id=EJ648995>
- Silva, B. (2017). Over 1700 unqualified teachers in South Africa. *West Cape News*, Retrieved August 21, 2018, from <http://westcapenews.com/?p=1431>
- Singh, G., & Richards, J. C. (2006). Teaching and learning in the language teacher education course room: A critical sociocultural perspective. *RELC journal*, 37(2), 149-175.
<https://doi.org/10.1177%2F0033688206067426>
- Singh, H., & Reed, C. (2001). A white paper: Achieving success with blended learning. Centra software. Retrieved February 18, 2020, from <http://www.leerbeleving.nl/wbts/wbt2014/blend-ce.pdf>
- Slavin, R. E. (1991). Synthesis of research of cooperative learning. *Educational Leadership*, 48(5), 71-82.
- Smith, K. (2017). *Teachers as self-directed learners: Active positioning through professional learning*. Springer.
- Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3rd ed.). Wiley.
- Song, L., Singleton, E. S., Hill, J. R., & Koh, M. H. (2004). Improving online learning: Student perceptions of useful and challenging characteristics. *The Internet and Higher Education*, 7(1), 59–70. <https://doi.org/10.1016/j.iheduc.2003.11.003>
- Spaull, N. (2013a). Poverty & privilege: Primary school inequality in South Africa. *International Journal of Educational Development*, 33(5), 436-447.
<https://doi.org/10.1016/j.ijedudev.2012.09.009>

- Spaull, N. (2013b). South Africa's education crisis: The quality of education in South Africa 1994-2011. *Centre for Development and Enterprise (SDE)*. Retrieved January 21, 2020, from <http://www.section27.org.za/wp-content/uploads/2013/10/Spaull-2013-CDE-report-South-Africas-Education-Crisis.pdf>
- Staker, H., & Horn, M. B. (2012). *Classifying K-12 blended learning*. Innosight Institute.
- Stein, J., & Graham, C. R. (2014). *Essentials for blended learning a standards-based guide*. Routledge.
- Strydom, M. (2020). *Developing a framework for promoting selfdirected learning in first-year English for Education*. (PhD thesis). Potchefstroom Campus: North-West University. <http://hdl.handle.net/10394/35058>
- Sun, Z., Lin, C.-H., Wu, M., Zhou, J., & Luo, L. (2018). A tale of two communication tools: Discussion-forum and mobile instant-messaging apps in collaborative learning. *British Journal of Educational Technology*, 49(2), 248–261. <https://doi.org/10.1111/bjet.12571>
- Susilo, A. P., Van Merriënboer, J., Van Dalen, J., Claramita, M., & Scherpbier, A. (2013). From lecture to learning tasks: Use of the 4C/ID Model in a communication skills course in a continuing professional education context. *Journal of Continuing Education in Nursing*, 44(6), 278–84. <https://doi.org/10.3928/00220124-20130501-78>
- Taylor, N. (2011). *The National School Effectiveness Study (NSES): Summary for the synthesis report*. JET Education Services.
- Taylor, N., Fleisch, B., & Schindler, J. (2008). Changes in education since 1994: Background paper for the fifteen year review of government business, commissioned by the Policy Unity, Office of the Presidency. Retrieved January 21, 2020, from <https://www.jet.org.za/resources/Taylor%20Fleisch%20Shindler%20Changes%20in%20Education%2015%20year%20review.pdf/@download/file/Taylor%20Fleisch%20Shindler%20Changes%20in%20Education%2015%20year%20review.pdf>
- Teo, T., & Lee, C. (2010). Fostering self-directed learning with ICT. In C. S. Chai & Q. Wang, (Eds.), *ICT for Self-Directed and Collaborative Learning* (pp. 39-51). Prentice-Hall. <http://handle.uws.edu.au:8081/1959.7/563251>

- Thornton, K. (2010). Supporting self-directed learning: A framework for teachers. *Research and Practice in English Language Teaching in Asia*, 59-71.
<http://dx.doi.org/10.5746/LEiA/10/V1/A14/Thornton>
- Tough, A. M. (1971). *The adult's learning projects: A fresh approach to theory and practice in adult learning*. Ontario Institute for Studies in Education. Retrieved October 26, 2020, from <http://ietj.org/tough/books/alp.htm>
- Trotter, Y. D. (2006). Adult learning theories: Impacting professional development programs. *Delta Kappa Gamma Bulletin*, 72(2), 8-13.
- Turner, I., & Daniel, W. (2010). Qualitative interview design: A practical guide for novice investigators. *The Qualitative Report*, 15(3), 754 -760.
<http://nsuworks.nova.edu/tqr/vol15/iss3/19?>
- Van der Walt, H. (2016). The feasibility of grafting self-directed learning theory onto capability theory. In E. Mentz, & I. Oosthuizen, (Eds.), *Self-directed learning research. An imperative for transforming the educational landscape*. AOSIS.
- Van Dyk, T., & Van de Poel, K. (2013). Towards a responsible agenda for academic literacy development: Considerations that will benefit students and society. *Journal for Language Teaching. Ijenali Yekufundzisa Lulwimi. Tydskrif vir Taalonderrig*, 47(2), 43-69.
<https://doi.org/10.4314/jlt.v47i2.3>
- Van Merriënboer, J. J. G. (1997). *Training complex cognitive skills: A four-component instructional design model for technical training*. Educational Technology Publications.
- Van Merriënboer, J. J.G. (2020). Das Vier-Komponenten Instructional Design (4C/ID) Modell. In H. Niegemann, & A. Weinberger, (Eds.), *Handbuch Bildungstechnologie*. Springer.
https://doi.org/10.1007/978-3-662-54368-9_8
- Van Merriënboer, J. J. G., Clark, R. E., De Crook, & M. B. M. (2002). Blueprints for complex learning: The 4C/ID-Model. *Educational Technology Research and Development*, 50(2), 39–64. <https://doi.org/10.1007/BF02504993>
- Van Zyl, S., & Mentz, E. (2019). Moving to deeper self-directed learning as an essential competency for the 21st century. In E. Mentz, J. de Beer, & R. Bailey, (Eds.), *Self-directed*

- learning for the 21st century: Implications for higher education* (pp. 67-102). AOSIS. (NWU Self-Directed Learning Series, Vol. 1).
- Vaughan, N. (2007). Perspectives on blended learning in higher education. *International Journal on E-learning*, 6(1), 81-94. <https://www.learntechlib.org/primary/p/6310/>
- Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a research agenda on interventions. *Decision Sciences*, 39(2), 273–315. <https://doi.org/10.1111/j.1540-5915.2008.00192.x>
- Vollmer, H. J., & Butzkamm, W. (1998). Denkschrift zur Neuorientierung der Fremdsprachenlehrrausbildung in der Bundesrepublik Deutschland. In W. Zydati (Ed.), *Fremdsprachenlehrrausbildung–Reform oder Konkurs* (pp. 19-70). Langenscheidt.
- Von Maltzan, C. (2009). Sprachenpolitik und die Rolle der Fremdsprachen (Deutsch) in Südafrika. *Stellenbosch Papers in Linguistics PLUS*, 38, 205-214. <https://hdl.handle.net/10520/EJC143430>
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Vygotsky, L. S., Hanfmann, E., & Vakar, G. (2012). *Thought and language*. MIT Press.
- Wang, M. (2010). Online collaboration and offline interaction between students using asynchronous tools in blended learning. *Australasian Journal of Educational Technology*, 26(6), 830-846. <https://doi.org/10.14742/ajet.1045>
- Wang, Q., & Huang, C. (2018). Pedagogical, social and technical designs of a blended synchronous learning environment. *British Journal of Educational Technology*, 49(3), 451-462. <https://doi.org/10.1111/bjet.12558>
- Warburton, N., & Volet, S. (2013). Enhancing self-directed learning through a content quiz group learning assignment. *Active Learning in Higher Education*, 14(1), 9-22. <https://doi.org/10.1177%2F1469787412467126>
- Webb, N. M. (2009). The teacher's role in promoting collaborative dialogue in the classroom. *British Journal of Educational Psychology*, 79(1), 1-28. <https://doi.org/10.1348/000709908X380772>

- Weber, A. (2018). Interkulturelles Lernen im südafrikanischen DaF-Unterricht: Eine Studie. *Acta Germanica*, 46, 94-108. <https://hdl.handle.net/10520/EJC-10e84ad7ff>
- Wenger, E. (2011). *Communities of practice: A brief introduction*. Retrieved October 05, 2020, from <https://scholarsbank.uoregon.edu/xmlui/bitstream/handle/1794/11736/A%20brief%20introduction%20to%20CoP.pdf>
- Wenger, E., McDermott, R. A., & Snyder, W. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Harvard Business School Press.
- Wessner, M., & Pfister, H.-R. (2000). Points of cooperation: Integrating cooperative learning into web-based courses. In H. U. Hoppe, H. Ogata, & A. Soller, (Eds.), *The role of technology in CSCL. Computer-Supported Collaborative Learning*, 9. Springer. https://doi.org/10.1007/978-0-387-71136-2_3
- West, R. (1994). Needs analysis in language teaching. *Language Teaching*, 27(1), 1-19. <https://doi.org/10.1017/S0261444800007527>
- Williamson, S. N. (2007). Development of a self-rating scale of self-directed learning. *Nurse Researcher*, 14(2), 66-83. Doi: [10.7748/nr2007.01.14.2.66.c6022](https://doi.org/10.7748/nr2007.01.14.2.66.c6022)
- Wittmann, G.-E., & Olivier, J. (2019). Professional development in fostering self-directed learning in German Second Additional Language teachers. *Per Linguam*, 35(3), 125-142. <https://dx.doi.org/10.5785/35-3-870>
- Wittmann, G.-E., & Olivier, J. (2020). Professional development needs of teachers of German second additional language in South Africa. *Acta Germanica* (in press).
- Wittmann, G.-E., & Olivier, J. (Forthcoming). Blended learning as an approach to foster self-directed learning in teacher professional development programmes. *Independent Journal of Teaching and Learning*.
- Wittmann, G.-E., & Olivier, J. (Submitted for publication). Collaborative self-directed learning for teachers of German Second Additional Language teacher professional development in South Africa: Putting theory into practice. *Africa Education Review*.

- Yamauchi, F. (2011). School quality, clustering and government subsidy in post-apartheid South Africa. *Economics of Education Review*, 30(1), 146-156. <https://doi.org/10.1016/j.econedurev.2010.08.002>
- Yoon, S. A., Miller, K., Richman, T., Wendel, D., Schoenfeld, I., Anderson, E., & Shim, J. (2020). Encouraging collaboration and building community in online asynchronous professional development: Designing for social capital. *International Journal of Computer-Supported Collaborative Learning*, 15, 351-371. <https://doi.org/10.1007/s11412-020-09326-2>
- Zwart, R., Wubbels, T., Bergen, T. C., & Bolhuis, S. (2007). Experienced teacher learning within the context of reciprocal peer coaching. *Teachers and Teaching: Theory and Practice*, 13(2), 165-187. <https://doi.org/10.1080/13540600601152520>
- Ziegler, N. A. (2014). Fostering self-regulated learning through the European language portfolio: An embedded mixed methods study. *The Modern Language Journal*, 98(4), 921–936. <https://doi.org/10.1111/modl.12147>

ADDENDUM A: INTERVIEW SCHEDULE

INTERVIEW SCHEDULE

RESEARCH PROJECT TITLE: Recommendations towards a self-directed blended-learning programme for German Second Additional Language teachers

Thank you for your willingness to answer a few questions. The purpose of this short interview is to determine what your views are on the contexts and needs. There are no right or wrong answers. Your real name will not be revealed when we report on the findings.

Name/ pseudonym:

1. For how long have you been involved in German SAL teaching or German teacher training?
2. Describe your involvement in German SAL teaching in South Africa.
3. In your opinion, describe the schools still offering German SAL as a subject (e.g. are they economically stronger or weaker, which resources do teachers have at their disposal)?
4. Which opportunities do German SAL teachers have to develop their own skills in South Africa?
5. Would you say that the existing German SAL teacher development opportunities are sufficient? Motivate your answer.
6. Which difficulties do German SAL teachers typically experience in fulfilling their functions?
7. How would you describe the typical German SAL teacher in South Africa?
8. In which developmental areas do you think German SAL teachers would particularly benefit?

9. Based on your experiences, would you recommend a blended learning German SAL teacher development programme? Please motivate your answer.

(Any other questions relevant to the research questions, based on the feedback by the respondent, may be asked at this point).

Thank you for making the time to be interviewed. I greatly appreciate your feedback.

ADDENDUM B CONSENT FORM AND QUESTIONNAIRE: NEEDS ANALYSIS



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222

Project leader, Faculty of Education:

Prof. Jako Olivier, jako.olivier@nwu.ac.za

Research Focus Area: Self-directed Learning

Director: Prof. Elsa Mentz, elsa.mentz@nwu.ac.za

28 February 2018

Dear German SAL teacher

PARTICIPANT INFORMATION AND CONSENT FORM

I herewith wish to request your consent to participate in this research, which involves German Second Additional Language (SAL) teachers at secondary schools. Before you give consent, please acquaint yourself with the information below. After reading the information, I hope that you will positively consider participating, in which case you please need to sign the consent form.

1. RESEARCH PROJECT

Title: Recommendations towards a self-directed blended learning programme for German Second Additional Language teachers

PROJECT SUPERVISOR: Prof. JAK Olivier

CO-SUPERVISOR: Dr Louise Strydom

ADDRESS: NWU, Private Bag x6001, Potchefstroom, 2520

CONTACT NUMBER: 018 285 2078

MEMBER OF PROJECT TEAM PhD Student: Gerda Wittmann

ADDRESS: School of Languages, NWU, Private Bag x6001, Potchefstroom, 2520

CONTACT NUMBER: 018 299 1560

2. ETHICAL CLEARANCE

This study has been approved by the Ethics committee of the Faculty of Education of the North-West University and will be conducted according to the ethical guidelines of this committee. Permission was also asked from the Department of Basic Education as well as the school principal.

The ethical clearance number for this project is: NWU-00471-16-S2

3. FOCUS OF THE RESEARCH

This research focuses on German SAL professional development needs in a South African context.

4. PARTICIPANTS

All German SAL language teaching at government schools will be invited to participate in this project.

5. EXPECTATIONS TO PARTICIPANTS

You are invited to take part in a needs analysis, by means of which these needs will be established. There are no right or wrong answers or views, and it would be appreciated if you could share your views openly and freely. Based on the needs analysis and subsequent focus group interviews, a self-directed blended learning programme will be conceptualised, developed and tested. Should you be willing, you are invited to take part in the programme at no cost to you. You will also be invited to participate (in a blended learning mode) on Moodle and to evaluate the programme after completion. During the course of the programme you will be requested to perform observations and to complete a reflective journal on the programme.

6. BENEFITS TO PARTICIPANTS

Participants will be able to voice their German SAL teaching needs in a safe environment. They will have the opportunity to participate in a teacher development programme at no charge to them. No financial compensation will be made to participants in the study.

7. RISKS INVOLVED FOR PARTICIPANTS

The study to be conducted will not cause any discomfort or expose participants to any risks.

8. CONFIDENTIALITY AND PROTECTION OF IDENTITY

By agreeing to take part in the research, you are also giving consent that the data may be used for publication purposes. However, you are assured of confidentiality, and your name will not be used at all (pseudonyms will be used)

9. DISSEMINATION OF FINDINGS

All knowledge generated in the conceptualisation and running of the programme will be made available to all German SAL teachers, regardless of their participation in the research project.

10. PARTAKING AND WITHDRAWAL

Participation in this research is completely voluntary and no pressure, however subtle, will be placed on you to take part. You may withdraw from this research at any stage, and there will be no consequences in doing so.

Yours sincerely

Gerda-Elisabeth Wittmann
Subject Chairperson: German

CONSENT LETTER

Research project: Recommendations towards a self-directed blended learning programme for German Second Additional Language teachers

Name of researcher: Ms G-E Wittmann ([Office] (018) 299 1560; gerda.wittmann@nwu.ac.za)

I, the undersigned(full names & surname of participant) have read the preceding premises in connection with the research and have also heard the oral version thereof and I declare that I understand it.

With this declaration I give my voluntarily consent to take part in the research. I also take note of the fact that I may withdraw from this research at any point, without any consequences for me. I understand that my participation in this research will mean that I will be asked to complete a needs analysis questionnaire. If I choose to participate in the second phase of this research, I understand that I will be asked to participate in a focus group interview and to follow a self-directed blended learning programme German SAL teacher development programme. Furthermore, I understand that I will be requested to evaluate said programme orally and by means of an evaluation questionnaire.

SIGNATURE OF PARTICIPANT

Information found above in English, Afrikaans and/or German was presented to me by Gerda Wittmann. I am able to interpret and comprehend what is said or written to me in this language. The researcher allowed questions with regard to the study and I am pleased with the responses.

I hereby give consent to be part of this study. I was provided a copy of this document.

_____ Name of participant

_____ Signature of participant

_____ Name of witness

_____ Signature of witness

Gerda Wittmann _____ Name of researcher

_____ Signature of the researcher

CONSENT TO PARTICIPATE IN RESEARCH

Signature _____

Date _____

Please tick the appropriate box

Participation in needs analysis	Participation in second phase

Dear German SAL teacher,

Thank you for your willingness to complete the following questionnaire. Your input is highly appreciated. Please answer the following questions:

1. Please complete the table.

Email address		
Cell phone number		
Age		
Province		
First Language		
Other languages spoken by you and language level (Beginner / Intermediate / Advanced)		
Highest qualifications		
Do you teach at a primary school or high school?		
Teaching experience (years)		
German Second Additional Language (SAL) teaching experience (years)		
Number of learners learning German	Grade 8	

	Grade 9	
	Grade 10	
	Grade 11	
	Grade 12	
First language(s) of learners		
Other subjects taught by you		
Extramural activities offered by you		
Number of other German SAL teachers in a 100km radius		

2. Do you receive any additional funding for your German SAL classes, either by the Goethe-Institut Johannesburg or another organization? Please elaborate.

3. Have you been able to attend any training opportunities in the German-speaking countries (Germany, Austria, Switzerland or Liechtenstein) in the last 5 years? If so, please elaborate.

Yes	No

4. Which textbook do you use in your class?

--

5. Which other media and teaching material do you use in class?

--

6. On a scale of 1 – 5 (one being the least likely and 5 being the most likely), please indicate the extent to which you would agree with the following statements.

6.1 Additional teaching material for German SAL is readily available to me.

1	2	3	4	5
---	---	---	---	---

6.2 It is possible to use digital media in my classroom.

1	2	3	4	5
---	---	---	---	---

6.3 My learners have access to digital media outside the classroom.

1	2	3	4	5
---	---	---	---	---

6.4 I confidently use digital media in my classroom.

1	2	3	4	5
---	---	---	---	---

6.5 I have experience with digital media in the classroom.

1	2	3	4	5
---	---	---	---	---

7. Do you have a degree or qualification in teaching? If yes, please provide details.

Yes	No

8. To function optimally as a German SAL teacher, what would you view to be your biggest needs?

9. In terms of teaching German SAL, what are the biggest other challenges you face?

10. What would you describe as your own biggest developmental need? Please explain your answer.

11. Please explain how it came about that you started teaching German SAL at your school.

ADDENDUM C: EVALUATION FORM: EXPERT PARTICIPANTS

Dear Participant,

Thank you for your willingness to complete the following questionnaire. Your input as an information-rich participant is highly appreciated. Please answer the following questions in either German, English or Afrikaans

1. 1. On a scale of 1 to 5 (one being very easy and 5 being extremely difficult), please indicate how easy it was to navigate through the course with regard to the technology used.

1	2	3	4	5
---	---	---	---	---

1.2 What can you recommend to make navigation easier?

2. 1. On a scale of 1 to 5 (1 being very easy and 5 being extremely difficult), please indicate how easy it was to understand the instructions, based purely on language use?

1	2	3	4	5
---	---	---	---	---

2.2 What can you recommend to make instructions clearer?

3. 1. On a scale of 1 to 5 (1 being very relevant and 5 being completely irrelevant), please indicate how relevant you deem the content of the course for teachers of German SAL or Deutsch als Fremdsprache?

1	2	3	4	5
---	---	---	---	---

3.2 What can you recommend to make the content more relevant?

4. The aim of the course is to foster self-directed learning⁴⁴, partly through collaborative learning⁴⁵, in teachers of German SAL. To what extent do you regard this course to have fulfilled its purpose? Please elaborate.

⁴⁴ As defined by Malcolm Knowles (1975: 18) as ‘[...] a process in which individuals take initiative, with or without the help of others, in diagnosing their learning needs, formulating learner goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes’

⁴⁵ Collaborative learning, as defined by Matthews (1996: 101) “occurs when students and faculty work together to create knowledge. [...] It is a pedagogy that has at its center the assumption that people make meaning together and that the process enriches and enlarges them. In order for cooperative learning to take place, Johnson & Johnson mention the need for five conditions, being

- positive interdependence,
- individual accountability,
- promotive interaction,
- social skills and
- group processing” (2019: 47)

--

5. Do you have any further suggestions on how to make the course more relevant or more user-friendly for teachers of German SAL?

6. What did you find to be the strongest aspects of the course?

ADDENDUM D: PARTICIPANT EVALUATION FORM

Dear Participant,

Thank you for your willingness to complete the following questionnaire. Your input as participant is highly appreciated. Please answer the following questions in either German, English or Afrikaans

1. 1. On a scale of 1 – 5 (one being very negative and 5 being extremely positive), please indicate your general impression of the programme.

1	2	3	4	5
---	---	---	---	---

1.2 What could you recommend to improve on the programme?

2.1. On a scale of 1 – 5 (one being irrelevant and 5 being very relevant), please indicate how relevant this programme is for your own teaching.

1	2	3	4	5
---	---	---	---	---

2.2 What could you recommend to improve on the programme's relevance?

3.1 On a scale of 1 – 5 (one being no influence and 5 being a very high influence), please indicate how influential this programme will be on your own teaching.

1	2	3	4	5
---	---	---	---	---

3.2 What could you recommend for the programme to have a more direct influence on your own teaching and learning?

--

4. 1. On a scale of 1 – 5 (one being very easy and 5 being extremely difficult), please indicate how useful the programme seems to your work life?

1	2	3	4	5
---	---	---	---	---

4.2 What could you recommend to make the programme more useful?

5. 1. On a scale of 1 to 5 (1 being very easy and 5 being extremely difficult), please indicate how easy it was to use the programme?

1	2	3	4	5
---	---	---	---	---

5.2 What could you recommend to make the programme easier to use?

6. 1. If the programme was to be developed further, how likely would you be to use it? On a scale of 1 to 5 (1 being highly unlikely and 5 being very likely), please indicate how likely you would choose to continue using this programme?

1	2	3	4	5
---	---	---	---	---

3.2 What could you recommend to increase the likeliness of your use of this programme?

ADDENDUM E: ETHICAL CLEARANCE



Private Bag X1290, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222
Fax: 018 299-4910
Web: <http://www.nwu.ac.za>

Senate Committee for Research Ethics
Tel: 018 299-4849
Email: nkosinathi.machine@nwu.ac.za

ETHICS APPROVAL LETTER OF STUDY

Based on approval by the **Faculty of Education Research Ethics Committee (EduREC)** on 19/07/2020, this committee hereby **approves** your study as indicated below. This implies that the North-West University Senate Committee for Research Ethics (NWU-SCRE) grants its permission that, provided the special conditions specified below are met and pending any other authorisation that may be necessary, the study may be initiated, using the ethics number below.

Study title: Recommendations towards a self-directed blended learning programme for German Second Additional Language teachers																																	
Study Leader/Supervisor (Principal Investigator)/Researcher: Prof JAK Olivier																																	
Student: GE Wittmann (PhD student – 22220917)																																	
Ethics number:	<table border="1"><tr><td>N</td><td>W</td><td>U</td><td>-</td><td>0</td><td>0</td><td>4</td><td>7</td><td>1</td><td>-</td><td>1</td><td>6</td><td>-</td><td>A</td><td>2</td></tr><tr><td colspan="3">Institution</td><td></td><td colspan="5">Study Number</td><td></td><td colspan="2">Year</td><td colspan="3">Status</td></tr></table>			N	W	U	-	0	0	4	7	1	-	1	6	-	A	2	Institution				Study Number						Year		Status		
N	W	U	-	0	0	4	7	1	-	1	6	-	A	2																			
Institution				Study Number						Year		Status																					
<u>Status:</u> S = Submission; R = Re-Submission; P = Provisional Authorisation; A = Authorisation																																	
Application Type: Single Study																																	
Commencement date: 30/07/2020		Risk:	Low																														
Expiry date: 30/07/2021																																	
Approval of the study is initially provided for a year, after which continuation of the study is dependent on receipt and review of the annual (or as otherwise stipulated) monitoring report and the concomitant issuing of a letter of continuation.																																	

Special in process conditions of the research for approval (if applicable):

General conditions: While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, the following general terms and conditions will apply: • The study leader/supervisor/principal investigator/researcher must report in the prescribed format to the EduREC: – annually (or as otherwise requested) on the monitoring of the study, whereby a letter of continuation will be provided, and upon completion of the study; and – without any delay in case of any adverse event or incident (or any matter that interrupts sound ethical principles) during the course of the study. • The approval applies strictly to the proposal as stipulated in the application form. Should any amendments to the proposal be deemed necessary during the course of the study, the study leader/researcher must apply for approval of these amendments at the EduREC, prior to implementation. Should there be any deviations from the study proposal without the necessary approval of such amendments, the ethics approval is immediately and automatically forfeited. • Annually a number of studies may be randomly selected for an external audit. • The date of approval indicates the first date that the study may be started. • In the interest of ethical responsibility, the NWU-SCRE and EduREC reserves the right to: – request access to any information or data at any time during the course or after completion of the study;
--

- *to ask further questions, seek additional information, require further modification or monitor the conduct of your research or the informed consent process;*
- *withdraw or postpone approval if:*
 - *any unethical principles or practices of the study are revealed or suspected;*
 - *it becomes apparent that any relevant information was withheld from the EduREC or that information has been false or misrepresented;*
 - *submission of the annual (or otherwise stipulated) monitoring report, the required amendments, or reporting of adverse events or incidents was not done in a timely manner and accurately; and / or*
 - *new institutional rules, national legislation or international conventions deem it necessary.*

The EduREC would like to remain at your service as scientist and researcher, and wishes you well with your study. Please do not hesitate to contact the EduREC or the NWU-SCRE for any further enquiries or requests for assistance.

Yours sincerely



Prof JJJ de Beer
Vice chairperson NWU Faculty of Education Research Ethics Committee

Original details: (22351930) C:\Users\22351930\Desktop\ETHICS APPROVAL LETTER OF STUDY.docm
8 November 2018

Current details: (22351930) M:\DSS1\9533\Monitoring and Reporting Cluster\Ethics\Certificates\Templates\Research Ethics Approval Letters\9.1.5.4.1 ES-REC Ethical Approval Letter.docm
5 December 2018

File reference: 9.1.5.4.2

ADDENDUM F: DEPARTMENTAL PERMISSION FREE STATE

Enquiries: BM Kitching
Ref: Notification of research: GE Wittman
Tel. 051 404 9221 / 082 454 1519
Email: berthakitching@gmail.com and B.Kitching@fseducation.gov.za



District Directors:
Motheo District
Thabo Mofutsanyana District

Dear Mr Moloi and Ms Mabaso

NOTIFICATION OF A RESEARCH PROJECT IN YOUR DISTRICT BY GE WITTMAN

1. The abovementioned candidate was granted permission to conduct research in your district as follows:

Research Topic: Recommendations towards a self-directed blended learning program for German second additional language teachers.

Schools: Grey College, Oranje Girls' School and Tsosetso in Motheo District and Witteberg in Thabo Mofutsanyana District.

Target Population: 4 Educators teaching German.

Period: From the date of signature of this letter until 30 September 2018 and again from February 2019 to September 2019. . Please note the department does not allow any research to be conducted during the fourth term / academic quarter of the year nor during normal school hours.

2. **Research benefits:** The study aims to address the developmental support needs of South African German SAL teachers by designing a blended-learning program, which focuses on self-directed learning in the South African context. In the course of the study, German SAL teachers' most pressing developmental needs, as well as the limiting factors posing a challenge to fulfilling these needs in the context of teaching and learning will be analysed. It will be investigated, how cooperation can be embedded in a self-directed blended learning program to satisfy the above needs beyond existing teacher support structures. It will furthermore be established which focus points a self-directed blended learning program, designed to equip German SAL teachers with high-level language proficiency as well as didactical skills, should have. The blended-learning program will be designed in such a way as to allow participants to support each other's individual learning.
3. Logistical procedures were met, in particular ethical considerations for conducting research in the Free State Department of Education.
4. The Strategic Planning, Policy and Research Directorate will make the necessary arrangements for the researcher to present the findings and recommendations to the relevant officials in your district.

Yours sincerely


DR JEM SEKOLANYANE
CHIEF FINANCIAL OFFICER

DATE: 08/02/2018

RESEARCH APPLICATION GE WITTMAN NOTIFICATION EDITED JAN 2018 MOTHEO & TM DISTRICT
Strategic Planning, Research & Policy Directorate
Private Bag X20565, Bloemfontein, 9300 - Old CNA Building, Room 318, 3rd Floor, Charlotte Mexeke Street, Bloemfontein
Tel: (051) 404 9283 / 9221 Fax: (086) 6678 678

ADDENDUM G: DEPARTMENTAL PERMISSION GAUTENG



GAUTENG PROVINCE

Department: Education
REPUBLIC OF SOUTH AFRICA

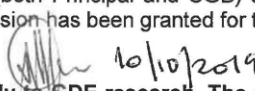
8/4/4/1/2

GDE AMENDED RESEARCH APPROVAL LETTER

Date:	09 October 2019
Validity of Research Approval:	10 February 2020 – 30 September 2020 2017/253A
Name of Researcher:	Wittmann G.E
Address of Researcher:	Private Bag X6001 Potchefstroom 2520
Telephone Number:	082 347 8203
Email address:	gerda.wittmann@nwu.ac.za
Research Topic:	Recommendations towards a self-directed blended learning performance for German Second Additional.
Type of qualification	PhD (Education: Curriculum Studies)
Number and type of schools:	Eight Secondary Schools
District/s/HO	Ekurhuleni South, Johannesburg North, Tshwane South and Tshwane North

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

 10/10/2019
The following conditions apply to GDE research. The researcher may proceed with the above study subject to the conditions listed below being met. Approval may be withdrawn should any of the conditions listed below be flouted:

1

Making education a societal priority

Office of the Director: Education Research and Knowledge Management

7th Floor, 17 Simmonds Street, Johannesburg, 2001

Tel: (011) 355 0488

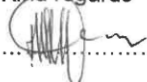
Email: Faith.Tshabalala@gauteng.gov.za

Website: www.education.gpg.gov.za

1. Letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.
2. The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.
3. A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.
4. A letter / document that outline the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.
5. The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.
6. Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.
7. Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year. If incomplete, an amended Research Approval letter may be requested to conduct research in the following year.
8. Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.
9. It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.
10. The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.
11. The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.
12. On completion of the study the researcher/s must supply the Director: Knowledge Management & Research with one Hard Cover bound and an electronic copy of the research.
13. The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.
14. Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards



Mr Gumani Mukatuni
Acting CES: Education Research and Knowledge Management

DATE: 10/10/2019

Office of the Director: Education Research and Knowledge Management

7th Floor, 17 Simmonds Street, Johannesburg, 2001

Tel: (011) 355 0488

Email: Faith.Tshabalala@gauteng.gov.za

Website: www.education.gpg.gov.za

ADDENDUM H: DEPARTMENTAL PERMISSION WESTERN CAPE



Directorate: Research

Audrey.wyngaard@westerncape.gov.za
tel: +27 021 467 9272
Fax: 0865902282
Private Bag x9114, Cape Town, 8000
wced.wcape.gov.za

REFERENCE: 20171206-7697

ENQUIRIES: Dr A T Wyngaard

Ms Gerda Wittmann
School of Languages
North-West University
Private Bag X6001
Potchefstroom
2520

Dear Ms Gerda Wittmann

RESEARCH PROPOSAL: RECOMMENDATIONS TOWARDS A SELF-DIRECTED BLENDED LEARNING PROGRAMME FOR GERMAN SECOND ADDITIONAL LANGUAGE TEACHERS

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from **20 January 2020 till 30 September 2020**
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

**The Director: Research Services
Western Cape Education Department
Private Bag X9114
CAPE TOWN
8000**

We wish you success in your research.

Kind regards.

Signed: Dr Audrey T Wyngaard

Directorate: Research

DATE: 20 July 2020

Lower Parliament Street, Cape Town, 8001
tel: +27 21 467 9272 fax: 0865902282
Safe Schools: 0800 45 46 47

Private Bag X9114, Cape Town, 8000
Employment and salary enquiries: 0861 92 33 22
www.westerncape.gov.za

ADDENDUM I: PERMISSION FORM PRINCIPALS



Private Bag X6001, Potchefstroom
South Africa 2520

Tel: 018 299-1111/2222

Project leader, Faculty of Education:

Prof. Jako Olivier, jako.olivier@nwu.ac.za

Research Focus Area: Self-directed Learning

Director: Prof. Elsa Mentz, elsa.mentz@nwu.ac.za

1 March 2018

Dear School Principal

PERMISSION TO CONDUCT RESEARCH WITH YOUR EMPLOYEE

Your school is one of a few select schools in South Africa that still offers German Second Additional Language as a subject. As part of research for a PhD I am investigating the unique teaching and learning situation of German SAL teachers in the country and would like to obtain permission to involve your employee.

The following general principles, which are applicable to the research project, are described below. After reading the information, I hope that you will positively consider giving Mr/s ...consent to participate.

1. RESEARCH PROJECT

Title: Recommendations towards a self-directed blended learning programme for German Second Additional Language teachers

PROJECT PROMOTER: Prof JAK Olivier

CO-PROMOTER: Dr Louise Strydom

ADDRESS: NWU, Private Bag X6001, Potchefstroom, 2520

CONTACT NUMBER: 018 285 2078

MEMBER OF PROJECT TEAM – PhD Student: Gerda Wittmann

ADDRESS: School of Languages, NWU, Private Bag X6001, Potchefstroom, 2520

CONTACT NUMBER: 018 299 1560

2. ETHICAL CLEARANCE

This study has been approved by the Ethics Committee of the Faculty of Education of the North-West University and will be conducted according to the ethical guidelines of this committee. Permission was also asked from the Provincial Department of Education and permission will also be obtained from the German SAL teachers.

The ethical clearance number for this project is NWU-00471-16-S2.

3. FOCUS OF THE RESEARCH

This research focuses on German SAL teachers' professional development needs in a South African context.

4. PARTICIPANTS

All German SAL language teachers at government schools will be invited to participate in this project.

5. EXPECTATIONS TO PARTICIPANTS

German SAL teachers are invited to take part in a needs analysis, by means of which their profiles and teaching needs will be established. There are no right or wrong answers or views, and it would be appreciated if they could share their views openly and freely. Based on the needs analysis and subsequent focus group interviews, a self-directed blended learning programme will be conceptualised, developed and tested. Should teachers be willing, they are invited to take part in the programme at no cost. They will also be invited to participate (in a blended learning mode) on Moodle and to evaluate the programme after completion. During the course of the programme they will be requested to perform observations and to complete a reflective journal on the programme.

6. BENEFITS TO PARTICIPANTS

German SAL teachers will be able to voice their teaching needs in a safe environment. Furthermore, they will have the opportunity to participate in a teacher development programme at no charge. They will receive no financial compensation for taking part in this study.

7. RISKS INVOLVED FOR PARTICIPANTS

The study to be conducted will not cause any discomfort or expose teachers to any risks.

8. CONFIDENTIALITY AND PROTECTION OF IDENTITY

By agreeing to take part in the research, you are also giving consent that the data may be used for publication purposes. However, you are assured of confidentiality, and neither your name, nor the teacher's name will be used (pseudonyms will be used).

9. DISSEMINATION OF FINDINGS

All knowledge generated in the conceptualisation and running of the programme will be made available to all German SAL teachers, regardless of their participation in the research project.

10. PARTAKING AND WITHDRAWAL

Participation in this research is completely voluntary and no pressure will be placed on teachers to take part. Teachers may withdraw from this research at any stage, and there will be no consequences in doing so.

Yours sincerely

Gerda-Elisabeth Wittmann
Subject Chairperson: German

PERMISSION LETTER

Research project: Recommendations towards a self-directed blended learning programme for German Second Additional Language teachers

Name of researcher: Ms G-E Wittmann; Office: 018 299 1560; E-mail: gerda.wittmann@nwu.ac.za

I, the undersigned(full names & surname of principal) have read the preceding information in connection with the research and have also heard the oral version thereof and I declare that I understand it.

With this declaration I give my voluntarily permission for my employee to take part in the research. I also take note of the fact that he / she may withdraw from this research at any point, without any consequences for him / her. I understand that his / her participation in this research will mean that he / she will be asked to complete a needs analysis questionnaire. If he / she chooses to participate in the second phase of this research, I understand that he / she will be asked to participate in a focus group interview and to follow a self-directed blended learning programme German SAL teacher development programme. Furthermore, I understand that he / she will be requested to evaluate said programme orally and by means of an evaluation questionnaire.

SIGNATURE OF PRINCIPAL

Information found above in English and / or Afrikaans was presented to me by Gerda Wittmann. I am able to interpret and comprehend what is said or written to me in this language. The researcher allowed questions with regard to the study and I am satisfied with the responses.

I hereby give permission for my employee to be part of this study. I was provided a copy of this document.

_____ Name of principal

_____ Signature of principal

_____ Name of witness

_____ Signature of witness

Gerda Wittmann _____ Name of researcher

_____ Signature of the researcher

ADDENDUM J: PROOF OF ACCEPTANCE: ARTICLE 2



15 September 2020

Ref. 200117

Dear Ms G.-E. Wittmann and Professor J. Olivier,



Article title:

'Blended learning as an approach to foster self-directed learning in teacher professional development programmes'



The Editorial Team of *The Independent Journal of Teaching and Learning* (IJTL) thanks you for your collaboration over the last couple of months.



We would like to congratulate you as your article meets all the requirements for publication in the IJTL. You will thus be published in one of the coming editions of the journal. In due course, you will be informed of the edition in which your article will appear.



Additionally, you will be required to sign and submit the accompanying 'author biography and consent' form.

Yours faithfully,
Prof. Dolina Dowling (Editor-in-Chief)
Dr Brenda van Wyk (Managing Editor)

Contact: editor@iie.ac.za

ADvTECH HOUSE

Inanda Greens
54 Wierda Rd West
Wierda Valley 2196
P.O. Box 2369
Randburg 2125



Directors: RJ Douglas (UK), JDR Oesch, MD Aitken, FJ Coughlan
Group Company Secretary: KN Piki

The Independent Institute of Education (Pty) Ltd is registered with the Department of Higher Education and Training as a private education institution under the Higher Education Act, 1997 (reg. no. 2007/HE07/002). Company registration number: 1987/004754/07.

ADDENDUM K: PROOF OF ACCEPTANCE: ARTICLE 3



Faculty of the Humanities

Department Afrikaans & Dutch, German & French

German Section

Prof. C. van den Berg

Tel.: (+27)-51-4019120

vdbergjp@ufs.ac.za

2. November 2020

To whom it may concern

Dear Sir / Madam

Ms. G. Wittmann: Research Article in *Acta Germanica* 48, 2020.

This letter serves as confirmation that Ms. Wittmann collaborated on a research article to be published in the 48th volume of the peer-reviewed journal of the Association for German Studies in Southern Africa, *Acta Germanica*. The title of the article is: "Professional development needs of teachers of German Second Additional Language in South Africa" and was written in collaboration with Jako Olivier. As the manuscript currently is in the final stages of technical editing by publisher, Peter Lang, hard copies will only be available later in November. I attach the table of contents for *Acta Germanica* 48, as proof of the contribution. Please feel free to contact me if there are any questions.

Yours sincerely

Prof. C. van den Berg
(Head: German Section / Editor: *Acta Germanica*)



ADDENDUM L: PROOF OF SUBMISSION: ARTICLE 4

12/15/2020 Mail Message From: Africa Education Review <onbehalf@manuscriptcentral.com>

☐ ☐ ☐ ☐ Reply ☐ Reply All ☐ Forward ☐ Move ☐ Mark Unread ☐ Delete ☐ Print View ☐

Mail Properties

From: **Africa Education Review** <onbehalf@manuscriptcentral.com> Tuesday - September 15, 2020 2:04 PM

To: <gerda.wittmann@nwu.ac.za>

CC: <gerda.wittmann@nwu.ac.za>, <jako.olivier@nwu.ac.za>

Subject: **Africa Education Review - Manuscript ID RAER-2020-0266 has been submitted online**

15-Sep-2020

Dear Ms Wittmann:

Your manuscript entitled "Collaborative self-directed learning for professional development of teachers of German Second Additional Language in South Africa: Putting theory into practice" has been successfully submitted online and is presently being given full consideration for publication in Africa Education Review.

Your manuscript ID is RAER-2020-0266.

Please mention the above manuscript ID in all future correspondence or when calling the office for questions. If there are any changes in your street address or e-mail address, please log in to ScholarOne Manuscripts at <https://mc.manuscriptcentral.com/raer> and edit your user information as appropriate.

You can also view the status of your manuscript at any time by checking your Author Centre after logging in to <https://mc.manuscriptcentral.com/raer>.

Thank you for submitting your manuscript to Africa Education Review.

Sincerely,
Africa Education Review Editorial Office

ADDENDUM M: PROOF OF SUBMISSION: ARTICLE 5

INTERNATIONAL JOURNAL OF
COMPUTER-SUPPORTED COLLABORATIVE LEARNING

HOME • LOGOUT • HELP • REGISTER • UPDATE MY INFORMATION • JOURNAL OVERVIEW
MAIN MENU • CONTACT US • SUBMIT A MANUSCRIPT • INSTRUCTIONS FOR AUTHORS • PRIVACY

Role: Author Username: Gerda Wittmann

Submissions Being Processed for Author Gerda - Elisabeth Wittmann, M. A.

Page: 1 of 1 (1 total submissions)

Display 10 results per page.

Action ▲	Manuscript Number ▲▼	Title ▲▼	Initial Date Submitted ▲▼	Status Date ▲▼	Current Status ▲▼
View Submission View Reference Checking Results Correspondence	CSCL-D-20-00188	Implementing an online collaborative learning teacher professional development programme for teachers of German SAL in South Africa	07 Dec 2020	10 Dec 2020	Editor Assignment Pending

Page: 1 of 1 (1 total submissions)

Display 10 results per page.

ADDENDUM N: PROOF OF TEXT EDITING

Dr. JACKIE DE VOS

Academic copy editor / Akademiese teksredakteur

BA (Psychology & Communication studies), BAHons (Psychology) (NWU)
MEd, PhD (Educational Psychology) (NWU)
BAHons (Translation) (UNISA)
MA (Linguistics) (UNISA)
BA (Sielkunde & Kommunikasiestudies), BAHons (Sielkunde) (NWU)
MEd, PhD (Opvoedkundige Sielkunde) (NWU)
BAHons (Vertaalkunde) (UNISA)
MA (Linguistiek) (UNISA)

072 435 8024

Jackie de Vos

acadwritingconsult@icloud.com

EDITING

27 November 2020

To whom it may concern

This letter serves to confirm that the individual articles/chapters of the following thesis were edited:

“Recommendations towards a self-directed blended-learning programme for German Second Additional Language teachers”

The onus is on the client(s) to work through the proposed track changes and to accept or reject proposed changes. Clients might amend the content after the editing process. Clients should also make certain that all sources/references have been cited.

ADDENDUM O: PROOF OF QUALITY CONTROL OF REFERENCING

PostGradSupport

Elsa Esterhuizen

elsa.esterhuizen@gmail.com

084 582 6811



QUALITY CONTROL: REFERENCING PROTOCOL

To whom it may concern

I, Elsa Maria Esterhuizen, hereby declare that the quality control of the referencing style according to the **NWU APA** guidelines, as used in the thesis submitted for the degree **Doctor in Education (Curriculum Development)** at the North-West University, Potchefstroom Campus
by

G-E. Wittman (orcid.org/0000-0002-2445-2314):

Recommendations towards a self-directed blended learning programme for German Second Additional Language teachers

was conducted and completed on 4 December 2020.

E.M. Esterhuizen

(B.A., UED., HLD., M.Ed. (Educational Technology))

