

## **SUBMISSION IDENTIFIERS:**

<b>Title</b>	<b>UNIVERSITY OF KWAZULU-NATAL LANGUAGE BOARD REPORT FOR 2015/2016</b>
<b>Author and position</b>	Professor Renuka Vithal (DVC: T&L; Chair: University Language Board) Dr Langa Khumalo(Director: ULPDO)

## **APPROVAL HISTORY**

<b>Structure consulted</b>	<b>Date</b>	<b>Outcome</b>
University Language Board	28 June 2016	Supported
Senate	31 August 2016	

## **SUBMISSION CONTENT**

### **Proposal**

To note the fifth annual University Language Board (ULB) Report (2015/2016) as required by policy.

### **Motivation**

The 2015/2016 ULB Report is the fifth such report to Senate in conformity with the University Language Policy and Plan, which specifies that a bilingual annual report must be presented to the University Senate. The first, second, third and fourth Senate Reports were tabled on 9 May 2012, 21 August 2013, 20 August 2014 and 19 August 2015, respectively. This current report documents further work and progress that the ULB has made towards the implementation of the University Language Plan.

### **Financial implications**

Indicated in the report.

### **Attachments**

University of KwaZulu-Natal Language Board Report for 2015/2016.

# University of KwaZulu-Natal Language Board Report for 2015/2016

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## 1. Introduction

The University Language Board (ULB) continues to provide leadership in the implementation of the University Language Policy and Plan. The ULB monitors and evaluates progress in the implementation of the University Language Plan. It provides strategic direction to the University Language Planning and Development Office (ULPDO), whose task is to operationalise the University Language Policy and Plan. In order to promote scholarship on language development and particularly the intellectualization of indigenous African languages in Higher Education, the ULB approved the hosting of two conferences by the ULPDO. The first was an international conference of the African Association for Lexicography (AFRILEX), which was held from 6-9 July 2015. The conference brought together international scholars in applied linguistics, lexicography, corpus linguistics, language planning and language intellectualization. The second was a two-day research symposium, which brought together UKZN academics across all four Colleges to reflect on the progress that various disciplines across the 19 Schools have made towards the implementation of the University Language Policy.

### Membership of the University Language Board, 2014

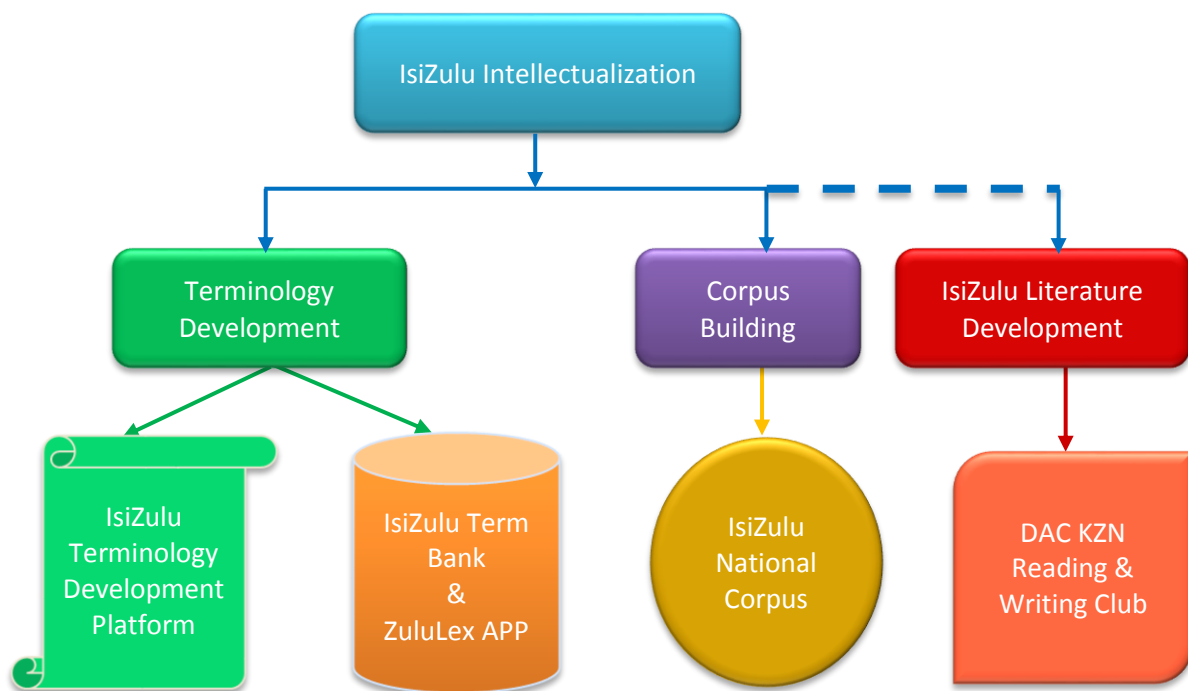
Professor R Vithal (Chair)	DVC: Teaching and Learning
Dr L Khumalo	Director: Language Planning & Development
Dr R Dhunpath	Director: Teaching & Learning
Mr L Seshoka	Executive Director: Corporate Relations
Dr S Chalufu (Alternate)	Executive Director: Student Services
Mr B Poo	Support Services Sector
Professor D North	Agriculture, Engineering and Science
Dr A Bengesai	Law and Management Studies
Mr K Zondi (Alternate)	Law and Management Studies
Ms S Panday	Health Sciences
Ms C Engelbrecht (Alternate)	Health Sciences
Ms S Mathe	Humanities
Mr M Mbatha	PanSALB
Dr Z Nkosi	Academic Expert
Dr N Sibiyi	Academic Expert
Mr K Mngadi	Language coordinator
Mr S Mthethwa	CSRC Representative

The ULB held four meetings in 2015. These were strategic platforms for Board members to come up with programmes and strategies to steer the implementation of the Language Policy and Plan across all sectors of the University. This report highlights some of the milestones the ULB achieved towards the implementation of the Language Plan.

## 2. University Language Planning and Development Office (ULPDO)

The University Language Policy requires the ULB to develop, implement, monitor and review the University Language Policy and Plan as set out in the ULB Charter. The program to intellectualize isiZulu so that it (ultimately) functions on par with English in all high function domains across the University is initiated by the ULPDO, and is reported quarterly at the ULB. The major thrust of the language program (*see* Fig 1.) as approved by the ULB is the creation of discipline specific terminology in isiZulu, the building of an isiZulu National Corpus, and the development of a contemporary body of literature in isiZulu. Other language activities include the provision of training workshops, translation and (simultaneous) interpreting services, Sign Language advocacy, the Sesotho *Bua Le Nna* Program, language research, and the development of computational tools.

Fig. 1. Language program



The period under review saw the authentication and standardization of terminology from three disciplines namely Law, Physics and Environmental Studies. Each went through the three mandatory, legislated stages of consultation, verification and authentication. A total of 1 588 terms were authenticated through this resource intensive and arduous process.

The ULPDO hosted two training workshops. The first was the dictionary style manual workshop, which was held on 19 June 2015. The workshop was facilitated by Mr. M. Mbatha. It provided the

skills necessary for the compilation of pocket-sized specialized (discipline specific) dictionaries out of the authenticated and standardized terms. The workshop was attended by project leaders involved in the development of discipline specific terminology. The ULPDO is currently finalizing the publication of the architecture dictionary with UKZN Press as a result of this effort. The dictionary will be launched on 8 November 2016.

The second workshop was the isiZulu orthography workshop, which was held on from 4-5 May 2016. The main objective was to apprise language practitioners of the current writing conventions in the language. The two facilitators, Professor O.E.H.M. Nxumalo and Mr. S. Ngobese, shared the history of isiZulu orthography and how it has evolved over the years. IsiZulu enjoys over 178 years of writing. The two workshops were a huge success.

It is important to restate one of the foremost aims of the University Language Policy (2006 revised in 2014), which is to “[...] preserve and promote respect for, and proficiency in, the languages referred to in the Constitution, and other languages, including the heritage languages, that facilitate potentially valuable cultural, scientific and economic ties [...]”. This is vitally important in order to embrace and foster social cohesion within the University community. It is against this background that the ULPDO initiated the *Bua le nna* (Let’s Talk) program in 2014. The program is implemented in conjunction with the office of the director of student services through language champions and ULPDO staff. It aims to teach conversational Sesotho to non-Sesotho speaking students at UKZN student residences.

The ULPDO officially launched the *Bua Le Nna* program on 19 May 2016. The launch reaffirmed UKZN’s commitment to promoting multilingualism. It was attended by different stakeholders, namely, senior management, academics, student leadership, and students. The presence of Professor Donal McCracken, Acting Dean and Head of the School of Arts; Professor Sihawu Ngubane, Cluster Leader of the School of African Languages; Professor Nogwaja Zulu, former Dean and Head of the School of Arts and Sesotho language expert; and Mr. Kgotla Marumola, Manager Student Housing (representing the executive director of student services) demonstrated the importance of this program within the University. The launch featured exciting performances of Sesotho poetry, Sesotho traditional dance, drama by non-Sesotho speakers demonstrating their level of competence in conversational Sesotho, and Sesotho speeches delivered by dignitaries.

The ULPDO is making progress towards the development of human language technologies in isiZulu. In order to improve end-user access to authenticated discipline specific terminology, it is finalizing the architecture of two important platforms, an isiZulu Term Bank and a mobile compatible morphological application called ZuluLex (*see* Fig 1.). These platforms will be launched on 8 November 2016. Furthermore, Langa Khumalo of the ULPDO and two computer engineers have completed the prototype of an isiZulu spellchecker, which will also be launched at the same time. Other applications developed through this collaboration include an international award winning isiZulu pluralizer.

### 3. Implementing the Language Policy and Plan

#### 3.1. Corpus Building and Terminology Development

As stated above, corpus development is one of the main activities of the ULPDO. The development of the isiZulu National Corpus (INC) is vitally important as a basis for the intellectualization of the language.

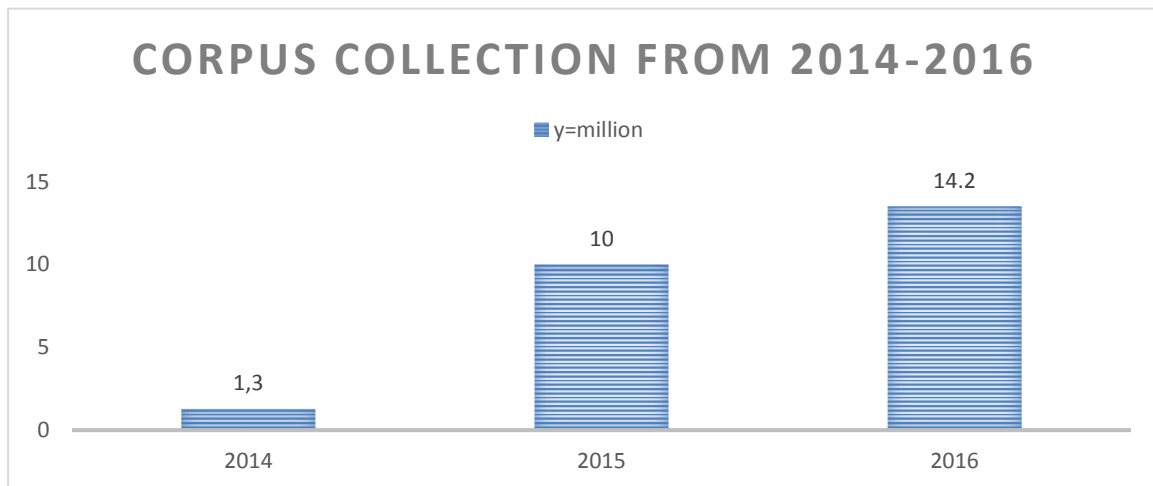
Fig. 2. A screen shot of the 14.2 million word INC

N	text file	file size	tokens (running words) in text	tokens used for word list	sum of entries	types (distinct words)	type:token ratio	type:token standard ratio	SSTR std.dev.	SSTR basis	mean word length	word length std.dev.	sentences mean (in words) std.dev.	ragraphs mean (in words) std.dev.	headings mean (in words) std.	
1	Overall	122 840	14 211 529	13 680	1 681	12.29	69.16	32.31	1 000	6.97	3.16	742.0	19.03	443.0	34 856 392.4	3 463.
2	zuluamanothi00001.txt	163 695	19 674	19 635	7 684	39.13	64.24	33.95	1 000	7.11	2.57	1 597	12.29	31.38	7 2 805.	2 784.
3	zuluamanothi00002.txt	2 377	356	293	172	58.70			1 000	4.88	3.34	16	18.31	19.80	6 48.83	79.78
4	zuluamanothi00003.txt	13 383	1 525	1 514	873	57.66	63.30		1 000	7.52	2.61	150	10.09	5.22	1 1 514.	
5	zuluamanothi00004.txt	53 823	5 892	5 652	2 749	48.64	58.58	34.25	1 000	7.19	3.74	213	26.54	149.3	150 37.68	106.9
6	zulubhayibheleli00001.txt	3 886 21	435 481	404 291	71 371	17.65	58.29	44.43	1 000	7.44	3.13	29 96	20.82	1 269.	1 404 2	
7	zulezasegagasini00001.txt	43	4	4	4	100.0			1 000	7.50	2.08	1	4.00		1 4 00.	
8	zulezasegagasini00002.txt	82 642	8 948	8 505	4 432	52.11	70.40	24.24	1 000	7.35	3.17	459	18.53	14.73	1 8 505.	
9	zulezasegagasini00003.txt	97 109	10 966	9 781	3 589	36.69	52.39	34.24	1 000	7.01	3.24	486	20.13	17.07	1 9 781.	
10	zulezasegagasini00004.txt	95 277	10 457	9 533	4 135	43.38	58.63	28.31	1 000	7.23	3.28	448	21.28	23.80	1 9 533.	
11	zulezasegagasini00005.txt	1 862	42	41	33	80.49			1 000	4.98	3.63	1	41.00		1 41 00.	
12	zulezasegagasini00006.txt	22 326	2 390	2 313	1 536	66.41	71.50	20.15	1 000	7.45	3.01	133	17.39	13.10	1 2 313.	
13	zulezasegagasini00007.txt	89 640	10 006	9 356	4 092	43.74	59.17	29.66	1 000	7.11	3.23	473	19.78	17.68	1 9 356.	
14	zulezasegagasini00008.txt	69 906	7 697	7 167	3 563	49.71	64.06	26.11	1 000	7.19	3.14	384	18.66	16.32	1 7 167.	
15	zulezasegagasini00009.txt	77 117	8 374	7 944	4 012	50.50	66.88	25.79	1 000	7.34	3.12	413	19.23	15.92	1 7 944.	
16	zulezasegagasini00010.txt	86 934	9 204	8 853	4 431	50.05	67.72	25.45	1 000	7.56	3.09	485	18.25	14.75	1 8 853.	
17	zulezasegagasini00011.txt	20 432	2 135	2 023	1 280	63.27	65.70	24.25	1 000	7.60	3.15	115	17.60	17.28	1 2 023.	
18	zulezasegagasini00012.txt	89 768	9 619	8 980	4 150	46.21	63.32	27.65	1 000	7.42	3.20	480	18.71	15.91	1 8 980.	
19	zulezasegagasini00013.txt	59 143	6 655	6 036	2 724	45.13	55.68	30.56	1 000	7.04	3.21	298	20.26	18.67	1 6 036.	
20	zulezasegagasini00014.txt	75 887	8 340	7 789	3 822	49.07	63.63	26.96	1 000	7.22	3.18	431	18.07	17.62	1 7 789.	
21	zulezasegagasini00015.txt	51 849	5 692	5 388	2 816	52.26	66.92	25.13	1 000	7.23	3.12	280	19.25	16.95	1 5 388.	
22	zulezasegagasini00016.txt	6 760	691	687	538	78.31			1 000	7.84	3.18	38	18.08	8.89	1 687 0	
23	zulezasegagasini00017.txt	31 947	3 443	3 286	2 060	62.69	70.20	22.89	1 000	7.44	3.17	190	17.29	12.63	1 3 286.	
24	zulezasegagasini00018.txt	120 387	13 086	11 803	4 504	38.16	52.74	35.03	1 000	7.24	3.24	560	21.08	20.59	1 11 80	
25	zulezasegagasini00019.txt	81 556	9 220	8 417	3 677	43.69	58.64	29.58	1 000	6.97	3.23	404	20.83	21.24	1 8 417.	
26	zulezasegagasini00020.txt	77 759	8 791	8 275	3 834	46.33	65.34	28.73	1 000	7.00	3.19	426	19.43	15.46	1 8 275.	

The INC has grown tremendously since its launch on 25 November 2014. At the time, it included an impressive 1.3 million running words. By the end of 2015, the INC achieved a new milestone of 10 million running words. The current 14.2 million mark is significant because it means the INC is growing at a fast rate, and has surpassed other African language corpora in a short space of time.

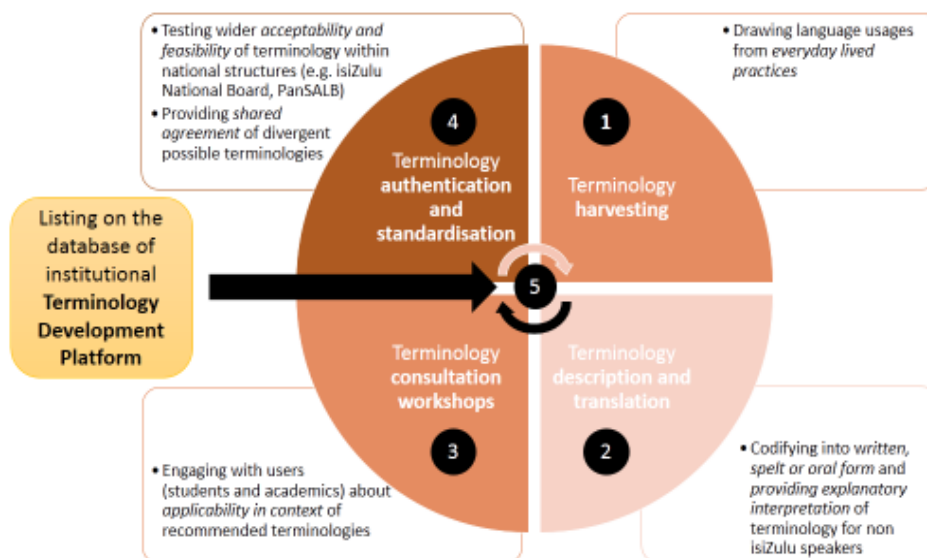
At a strategic level, the ULPDO has created crucial synergies with important stakeholders such as Shuter and Shooter Publishers and the Killie Campbell Library. Access to texts produced and archived at these two institutions, and other institutional partners has helped to accelerate the growth of the INC. As shown above, the INC currently stands at just over 14.2 million running words. Figure 3 below illustrates the pattern of growth since its launch in November 2014.

*Fig. 3. The pattern of growth of the INC*



As noted earlier, terminology development is another major activity of the ULPDO. Figure 4 below shows the entire terminology development process from terminology harvesting, through statutory processes, to end-user access.

*Fig. 4. Terminology development process*



In keeping with the statutory and legislated terminology development processes language experts, terminologists, lexicographers and language activists gather to discuss, and endorse terminology in close consultation with discipline experts. Twelve terminology workshops were successfully hosted during the period under review (2015/2016). These included consultation, verification and standardization workshops. These workshops are organized by the ULPDO and the Pan South African Language Board (PanSALB) office. A total of 1 588 terms were authenticated and are ready for use and dissemination.

Table 1. Terms that have gone through the various processes

No.	Discipline	Number of terms developed	Number of verified terms	Number of standardized terms	Number of terms remaining
1.	Environment terminology	486	486	486	0
2.	Law terminology	496+468	496	496	468
3.	Linguistic terminology	516	0	0	0
4.	Physics terminology	606	606	606	0
5.	Psychology terminology	500	500	0	0
6.	Research terminology	500	0	0	0
	<b>Total</b>	<b>3572</b>	<b>2088</b>	<b>1588</b>	<b>468</b>



#### 4. Language Conferences

The ULPDO hosted two conferences during the period under review, the 20th International African Association for Lexicography (AFRILEX) Conference, and the 1<sup>st</sup> Biannual Language Research Symposium. The AFRILEX Conference was held at the Unite Building (Howard College Campus) from 6-9 July. This is an annual gathering of experts in lexicography, corpus linguistics, computer science and terminography from the African continent and around the world. Keynote speakers included Dr Michael Rundell from Macmillan in the United Kingdom and Professor Mbulungeni Madiba, an Associate Professor and Co-ordinator of the Multilingualism Education Project at the University of Cape Town. The conference was attended by delegates from Asia (China), Europe (Germany and the United Kingdom), and Africa (Gabon, Namibia, South Africa and Zimbabwe). Three ULPDO staff members presented academic papers that were well received. The delegates applauded UKZN for driving the intellectualization of isiZulu on the basis of a very solid theoretical foundation.

*A Snapshot of what conference delegates said.*

Dear Langa

Just a note to thank you so much for last week's conference. It really was so well organized, and the atmosphere created by you and your team made the whole experience great fun, as well as being very intellectually stimulating. As for the conference dinner ... quite one of the best I can remember from the *many* Afrilexes I've attended! So, very many congratulations to you and your young, dynamic team. Hope to see you down here in Grahamstown before too long.

With best wishes from a freeeezing Grahamstown

**Jill Wolvaardt**

**Executive Director**

**Dictionary Unit for South African English**

**Rhodes University**

The inaugural biannual Language Research Symposium was held from 19-20 October 2015 at Howard College. This symposium provided a platform for academics involved in various language projects across the four Colleges to review progress on the implementation of the University's Language Policy and Plan. Professor Kwesi Kwaa Prah of the Centre for Advanced Studies of Africa Society (CASAS) delivered a keynote address on the intellectualisation of African languages.

He argued strongly that African languages are crucial to the development of African society. Professor Phalandwa Mulaudzi of the Academy of African Languages and Science delivered a keynote address on the second day of the symposium. He spoke on advancing the intellectualisation of African languages in Higher Education. A wide range of papers were presented by UKZN academics including five ULPDO staff members. Different media covered this event, including *Ukhozji FM* and *The Mercury*.

## 5. ULPDO Services

As reported in the 4<sup>th</sup> Senate Report, the ULPDO continues to offer translation, interpreting and editing services to the entire University community on request. Translations completed during the period under review include:

- *Indaba Online* articles
- College Handbooks (AES and Law & Management)
- Memorandum of Understanding (College of Health Sciences and Host Families)
- Application for Ethical Clearance (College of Humanities: School of Education)
- Pension Fund Documentation
- Graduation Notice Statement
- The Vice Chancellor's Communiqué to striking staff
- The Vice Chancellor's biographical note (University website launch)
- Language Research Survey Questionnaire

Interpreting services were also rendered at the following functions:

- 1<sup>st</sup> Biannual Language Research Symposium
- Annual Dube Lecture

## 6. Funded Projects

In 2016 the ULPDO provided funding for the university-wide language survey to the tune of R200 000. The survey's objective is to investigate levels of familiarity with the University Language Policy and Plan amongst UKZN students, and staff members (academic and professional services) in order to establish the extent of the intervention required to efficiently implement its objectives. Project Leader, Professor Delia North has indicated that preparations for the survey have gone well. She is awaiting ethical clearance.

The various projects funded by the ULB in 2013/2014 across three Colleges, namely the Colleges of Humanities, Health Sciences and Agriculture, Engineering and Science (AES) are proceeding

very well. An amount of R1 021 880 was provided to these projects. As reported in the last Senate Report (2014/2015), the ULDPO is receiving progress reports from the project leaders.

## 6.1. ULPDO Funded Projects

Table 2. 2013-2016 funded projects

Year	Surname	School/Department	Title of the project	Amount Approved
2013	Buthlezi	Humanities	Development of discipline specific terminology for professional psychologists	R 90 000.00
2013	Christiansen	Humanities	Games for isiZulu Teaching	R 70 000.00
2013	Frescura	Humanities	Illustrated dictionary of Southern African Architectural Terms	R 50 000.00
2013	Modi	AES	Various projects involving isiZulu tutorials. Introducing Supplemental instruction in isiZulu	R 730 000.00
2013	Keet	AES	COMMUTERM	R 56 880.00
2013	Mathews	Health Sciences	Mini video productions	R 25 000.00
2014	Modi	AES	Translation of College of AES handbook into isiZulu	R 80 000.00
2014	Bengesai	LMS	Translation of College of LMS handbook into isiZulu	R 80 000.00
2016	North	LMS	Commissioned Language Research Survey	R 200 000.00
<b>Total</b>				<b>R 1 381 880.00</b>

## 7. Looking ahead

The ULPDO is growing in its reach and stature. The language program at UKZN is producing tangible results. The development of an isiZulu Term Bank, and an isiZulu Mobile Application (the ZuluLex) is at an advanced stage and both tools will be launched in November 2016. The building of the isiZulu National Corpus is awe-inspiring owing to the synergies that the office has put in place with its strategic partner institutions.

## 8. Publications

**Khumalo, L.** 2015. Semi-automatic Term Extraction for an isiZulu Linguistics Terms Dictionary Using a Corpus Linguistic Method. *Lexikos* **25**: 495-506.

**Khumalo, L.** 2015. Advances in Developing Corpora in African Languages. *Kuvula ACALAN Journal* **1(2)**: 21-29.

**Khumalo, L.** 2015. Ukuqakatheka kokuthuthukisa izilimi zomdabuko: Isibonelo ngesiZulu eNyuvesi yakwaZulu-Natali, 13 - 22. In Ngubane S., Khumalo, L., Malambe G., Furvin, J. *Ukubumbanisa kwezilimi zesiNguni: Imicabango engenziwa kanye namathuba akhona. Monograph Series No. 263.* CASAS: Cape Town.

Keet, C.M. & **Khumalo, L.** 2016. Toward a knowledge-to-text controlled natural language of isiZulu. *Language Resources and Evaluation*. Springer. DOI 10.1007/s10579-016-9340-0. 1-27.

Byamugisha, J., Keet, C.M. & **Khumalo, L.** 2016. On generating plurals for isiZulu controlled natural language. *Proceedings of the 17<sup>th</sup> International Conference on Intelligent Text Processing and Computational Linguistics (CICLing '16)*. Springer LNCS Series. April 3-9, 2016. Konya, Turkey. (in print). **FIRST PRIZE: "Verifiability, Reproducibility and Working Description Award"**.

Ndaba, B., Hussein, S., Keet, C.M. & **Khumalo, L.** 2016. The effects of a Corpus on isiZulu Spellcheckers based on N-grams. In Paul Cunningham and Miriam Cunningham (Eds.) *Proceedings of the IST-Africa 2016 Conference*. May 11-13, 2016. Durban. South Africa. (in print).