REPORT ON THE EVALUATION OF THE 2014 UNIVERSITIES' RESEARCH OUTPUTS

JANUARY 2016

Evaluated in terms of the *Policy and Procedures for the Measurement of Research Output of Public Higher Education Institutions (2003)*

higher education & training

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Abbreviations

ASSAf	Academy of Science of South Africa
CESM	Classification of Educational Subject Matter
CPUT	Cape Peninsula University of Technology
CUT	Central University of Technology
DHET	Department of Higher Education and Training
DST	Department of Science and Technology
DUT	Durban University of Technology
DVC	Deputy Vice Chancellor
HEIs	Higher Education Institutions
IBSS	International Bibliography of Social Science
ISBN	International Standard Book Number
ISI	Institute of Science Information
MJSS	Mediterranean Journal of Social Sciences
MUT	Mangosuthu University of Technology
NMMU	Nelson Mandela Metropolitan University
NRF	National Research Fund
NWU	North West University
ROE	Research Outputs Evaluation
RU	Rhodes University
SET	Science, Engineering and Technology
SMU	Sefako Makgatho Health Sciences University
SU	Stellenbosch University
TUT	Tshwane University of Technology

UCT	University of Cape Town
UFH	University of Fort-Hare
UFS	University of the Free State
WITS	University of the Witwatersrand
UJ	University of Johannesburg
UKZN	University of Kwa-Zulu Natal
UL	University of Limpopo
UV	University of Venda
UNISA	University of South Africa
UZ	University of Zululand
UP	University of Pretoria
UWC	University of the Western Cape
VUT	Vaal University of Technology
WSU	Walter Sisulu University

1. Introduction

Through the Policy and Procedures for the Measurement of Research Output of Public Higher Education Institutions (Research Output Policy) (2003), the Department of Higher Education and Training (DHET) seeks to "encourage research productivity by rewarding quality research output at public higher education institutions". The policy aims to "enhance productivity by recognising the major types of research output produced by higher education institutions and further use appropriate proxies to determine the quality of such output".

According to the policy, all public higher education institutions must annually submit their subsidy funding claims for research outputs to DHET. Based on calculations of units for approved publications, the Department allocates research subsidy. The rewarding of quality research output at public higher education institutions forms the basis for sustaining current research and promoting increased productivity of research outputs and other knowledge outputs required to meet national development needs. The research output policy is a goal-oriented and performance-related mechanism that explicitly links the allocation of funds for research output thus contributing to the social and economic development of the country. All research outputs submitted to the DHET for subsidy claims must meet the criteria as stipulated in the policy. The policy uses the same proxies and indicators for quality as in any other science system around the globe, and these include "peer-review" and "scholarliness" of the published work. All institutions must have a relevant (to the mission, potential and environment of the institution) Research Policy identifying the institution's focus areas and development needs. Strategies for attaining development targets must also be developed.

This report constitutes a detailed and up to date analysis of the processes, procedures and outcomes of the research publication outputs for 2014 (assessed in 2015). Late publications for the year 2013 (n-2) were also considered where valid and legitimate reasons for late submission were provided and accepted, but submissions dating before 2012 (n-3 and beyond) were not considered, as stipulated in the Research Output Policy.

The report provides an analysis of the number of units awarded to institutions for subsidy-earning research outputs in accredited journals, books, and conference proceedings published in 2014.

2. Process and Procedures

The Policy and Procedures for the Measurement of Research Output of Public Higher Education Institutions (2003) gives all public higher education institutions the responsibility to enhance the effectiveness and efficiency of policy implementation. In order to reduce mistakes and incorrect submissions, institutions are urged to ensure that all research office personnel are well acquainted with the Policy and that an institutional panel sits to assess all publications before submitting to the Department. Only claims which meet the policy requirements should be submitted. In terms of the policy, institutions must submit their research output subsidy claims to the Department, on or before 15 May of each reporting year.

Out of 26 HEIs, 25 Universities submitted their 2014 research outputs for the purposes of subsidy claims. The Directorate: University Policy and Development Support administered the process and evaluated technical compliance of all submissions. Submissions that did not meet the requirements as set out in the Policy were returned to respective institutions before further evaluation. In previous years, the research outputs were only evaluated by a Research Outputs Evaluation (ROE) Panel appointed by the Department. This Panel comprises of Deputy Vice-Chancellors responsible for research at their respective institutions. The Panel is chaired by Prof Tshilidzi Marwala, Deputy Vice-Chancellor: Research, University of Johannesburg. Other members of the Panel are:

1. Prof Daniel Visser — DVC: Research, University of Cape Town
2. Prof Jan Crafford — DVC: Academic, University of Venda
3. Prof Peter Clayton — DVC: Research & Development, Rhodes University

4.	Prof Robin Crewe	Chairperson: ASSAf Committee of Scholarly Publications in South Africa
5.	Dr Thandi Mgwebi	Executive Director: IEPD, NRF
6.	Prof Mamokgethi Phakeng	DVC: Research and Innovation, UNISA
7.	Prof Urmilla Bob	Dean: Research, University of KwaZulu-Natal
8.	Prof Corli Witthun	Vice-Rector: Research, University of the Free State
9.	Dr Chris Nhlapo	DVC: Research, Technology Innovation & Partnerships, CPUT

As indicated in the Report of 2013 Research Outputs, there was a growing need to bring credibility and transparency, and to improve the evaluation process, therefore the Department commissioned the Academy of Science of South Africa (ASSAf) to undertake a pilot project for the review of scholarly books and conference proceedings through expert/discipline-based panels for the 2014 reporting year (publications produced in 2013). ASSAf established 8 field-specific peer review panels to evaluate books and conference proceedings using predetermined evaluation criteria in line with the Policy and Procedures for the Measurement of Research Output of Public Higher Education Institutions (2003). A similar process was followed for the evaluation of 2014 research outputs. Evaluation of the 2014 research outputs took place between the 4th and 6th of August 2015, at the OR Tambo Sun International and ASSAf submitted the Evaluation report to the Department in October 2015.

Following the verification of audited university claims for publications in accredited journals and calculation of unit allocations for each institution; the data was analysed and a report was developed by the Department for consideration and finalisation by the ROE panel.

3. Journal Publication Output Units

Publication in journals is widely accepted as the most appropriate and speedy form of communicating novel research findings. As a result, the bulk of global research outputs are in the form of Journal articles. Therefore it is not surprising that research outputs by South African HEIs follow a similar trend. In 2014, publications in journal titles continue to show a healthy growth as in previous years. In 2014, journal publication output units increased from 11 997.38 units in 2013 to 13 135.86; a 9.5% growth. This growth is modestly higher than the 8.7% growth observed between 2012 and 2013. This can be interpreted as a strong commitment on research by our universities.

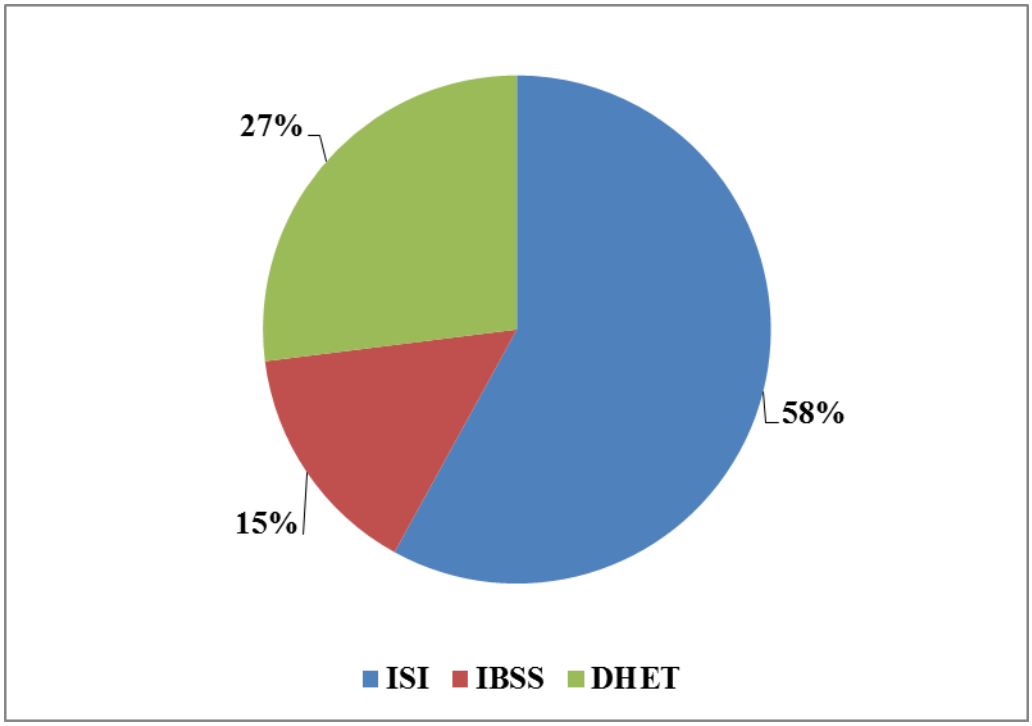
Table 1 shows the breakdown of journal publications across the different indices per institution for 2013 and 2014. Four institutions had at least 80% of their journal publications in international indices and these were UCT, WITS, RU, and DUT. Another eight institutions had 70-78% of their publications in international indices and these were UKZN, UP, SU, UJ, NMMU, UFH, CPUT and MUT. This is great for global exposure as this exposes South African research to a global audience. The rest of the intuitions, except SMU, fell between 50% and 70%. Compared to 2013 research outputs, most institutions improved their publication in international indices an indication that they took heed of last year's observation. SMU, which is one of the newly established institutions, had only published 30% of their publications in international indices. A vast improvement on this aspect is required by SMU. UNISA still has the most publication units in the local list, amounting to 440.01 units; however their publications in internationals indices grew by 11% which is commendable. Overall, UKZN accrued the most journal publications with 75% in international indices and 25% in the DHET list. Closely behind UKZN in the overall publications is UP, with 76% of their publications in international indices. Overall, all institutions showed improved productivity in journal publications compared to 2013 except NWU, WSU and MUT.

Table 1: Journal Publications Outputs by Index, 2013 and 2014

	2013 journal units					2014 journal units				
Institution	**ISI**	**IBSS**	**SA journal list**	**Total Journal outputs**	**% International**	**ISI**	**IBSS**	**SA journal list**	**Total Journal outputs**	**% International**
UKZN	929.2	169.46	391.12	**1489.78**	74%	993.27	203.76	405.44	**1602.47**	75%
UP	953.65	129.58	331.77	**1415**	77%	979.08	135.97	346.41	**1461.46**	76%
UCT	977.12	162.92	172.99	**1315.03**	87%	1032.09	164.16	176.32	**1372.57**	87%
SU	848.28	68.96	327.62	**1244.86**	74%	897.51	96.62	340.45	**1334.58**	74%
WITS	841.1	86.05	195.23	**1122.38**	83%	964.53	122.15	185.35	**1272.03**	85%
UNISA	137.9	247.65	538.15	**923.7**	46%	224.3	363.36	440.01	**1027.67**	57%
NWU	484.58	153.26	371.84	**1009.68**	64%	450.69	174.18	355.84	**980.71**	64%
UJ	365.75	90.7	199.64	**656.09**	70%	427.75	139.96	194.21	**761.92**	75%
UFS	304.48	58.83	214.11	**577.42**	63%	329.58	86.12	212.01	**627.71**	66%
UWC	170.43	48.77	140.82	**360.02**	61%	223.14	56.43	165.64	**445.21**	63%
RU	321.66	31.08	52.75	**405.49**	87%	307.8	42	55.2	**405**	86%
NMMU	131.81	39.76	81.24	**252.81**	68%	168.6	32.5	80.32	**281.42**	71%
UFH	142.58	30.75	41.7	**215.03**	82%	118.7	85.18	56.2	**260.08**	78%
UL	80.89	36.24	86.06	**203.19**	58%	61.35	80.76	91.85	**233.96**	61%
TUT	125.24	18.88	66.41	**210.53**	69%	113.63	30.57	74.08	**218.28**	66%
UV	39.084	24.33	68.616	**132.03**	48%	56.58	78.1	69.68	**204.36**	66%
DUT	49.24	30	19.74	**98.98**	80%	62.95	45.75	27.06	**135.76**	80%
CPUT	70.46	11.9	20.62	**102.98**	81%	74.85	15.09	32.82	**122.76**	73%
UZ	38.02	2.08	41.98	**82.08**	49%	39.01	14.66	49.54	**103.21**	52%
SMU	0	0	0	**0**	0%	25.36	2.5	64.87	**92.73**	30%
VUT	17.45	13.41	39.02	**69.88**	64%	32.62	15.99	31.48	**80.09**	61%
CUT	12.65	12.99	29.38	**55.02**	47%	22.52	26.5	23.81	**72.83**	67%
WSU	17.05	11.3	11.75	**40.1**	71%	9.83	4.1	11.14	**25.07**	56%
MUT	6.15	5	4.15	**15.3**	73%	6.95	3.53	3	**13.48**	78%
UMP	0	0	0	**0**	0%	0	0.5	0	**0.5**	100%
Total	**7064.774**	**1483.9**	**3446.706**	**11997.38**	**71%**	**7622.69**	**2020.44**	**3492.73**	**13135.86**	**73%**

Publications in journals listed on the approved international indices, which are Thomson Reuters ISI Web of Science Indices and the ProQuest IBSS index, remain collectively high, at 58% and 15%, respectively (73% combined) (see Figure 1). The overall proportion of publications in journals listed on the two international indices increased by 2%, from 71% in 2013.

Figure 1: Journal output by index, 2014



As mentioned in the report of the 2013 research outputs, it is still of great concern that the DHET index with less than 2% of the total journal titles enjoy 27% of the overall journal outputs publication units. Factors influencing our HEIs to publish in the DHET still need to be looked at thoroughly as they could have effects on the research and innovation within the HE sector.

3.1 Journal publication output units by Classification of Education Subject Matter (CESM) category

Table 2 shows journal publication output units from all three lists disaggregated by Classification of Educational Subject Matter (CESM) categories. The highest proportion of

journal publications was in CESM 9 (Health Care & Health Sciences) with 18.3% of all journal publication output units in 2014.

Table 2: Journal publication output units by CESM Category, 2013 and 2014

CESM category	2013		2014		% increase from 2013 to 2014
	No. of Units	% of Total	No. Of Units	% of Total	
09: Health profession and related clinical sciences	2146.38	17.9%	2394.61	18.3%	12%
13. Life Sciences	1293.46	10.8%	1329.81	10.1%	3%
20: Social Sciences	1035.1	8.6%	1202.62	9.3%	16%
14: Physical Sciences	1034.71	8.6%	1171.08	8.9%	13%
04: Business, Economics and Management Studies	884.96	7.4%	1127	8.6%	27%
07: Education	680.93	5.7%	889.67	6.8%	31%
17: Philosophy, Religion and Theology	822.39	6.9%	781.46	5.9%	-5%
12: Law	683.31	5.7%	731.62	5.6%	7%
01: Agriculture, Agricultural operations and related sciences	836.46	7.0%	710.08	5.4%	-15%
08: Engineering	670.63	5.6%	676.11	5.1%	0.8%
11: Languages, Linguistics and Literature	493.13	4.1%	558.12	4.2%	13%
15: Mathematics and Statistics	448.49	3.7%	505.09	3.8%	13%
18: Psychology	268.02	2.2%	287.9	2.1%	7%
19: Public Management and Services	185.47	1.5%	199.63	1.5%	8%
06: Computer and Information Sciences	144.9	1.2%	166.61	1.3%	15%
03: Visual and Performing Arts	161.83	1.3%	153.41	1.2%	-5%
02: Architecture and Building Environment	75.53	0.6%	96.85	0.7%	28%
05: Communication, Journalism and related studies	98.4	0.8%	90.61	0.7%	-8%
16: Military Sciences	13.87	0.1%	40.53	0.3%	192%
10: Family ecology and Consumer Sciences	19.41	0.2%	23.05	0.2%	19%
TOTAL	**11997.4**	**100%**	**13135.86**	**100.0%**	

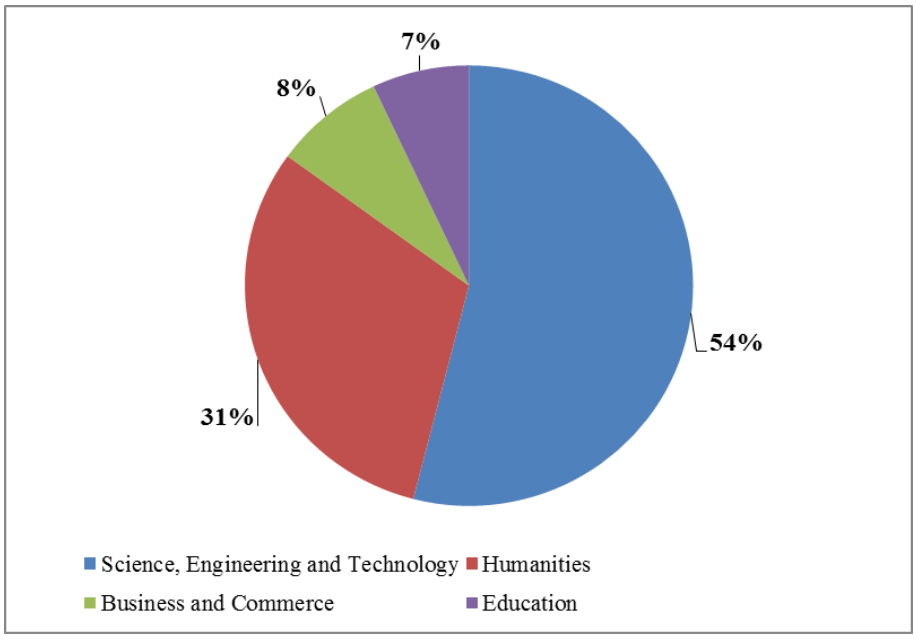
This is followed by CESM 13 (Life Sciences) with 10.1% and CESM 20 (Social Sciences) with 9.3% of all units. Journal publication units in CESM 9 increased from by 248.23 units between 2013 and 2014, a 12% growth. Significant growths (>10%) were also observed in CESM 20, 14, 04, 07, 11, 15, 06, 02 and 16.

CESM categories 5, 2, 10, and 16 accrued less than 1% each of overall research publication output units. In analysing research output by CESM category, however, many factors must be considered, including the size of the academic field with respect to: the proportion of academics working in the field compared to other fields; postgraduate student enrolment; teaching load for the various disciplines; and the tradition of the field with regard to publications. Also to be noted is that the varying proportions per CESM do not necessarily reflect the overall sector's outputs or outcomes since the policy only recognises a limited set of outputs; i.e. journal publications, book publications and conference proceedings.

3.2 Journal Publication Output Units by Broad Field of Study

The distribution of journal publications by broad fields has been consistent in the past few years, with over half (54%) of the units in the Science, Engineering and Technology (SET); followed by Humanities with 31%; Business and Commerce with 8%; and Education with 7% (see Figure 2).

Figure 2: Journal Output by Broad Field, 2014



Note: The CESM categories in each broad field are:

Science, Engineering and Technology = CESM categories 1, 6, 8, 9, 10, 13, 14, 15 and 16;

Humanities = CESM categories 2, 3, 5, 11, 12, 17, 18, 19, and 2;

Education = CESM 7; and

Business and Commerce = CESM 4.

4 Book Publication Output Units

Research publications in scholarly books for 2014 amounted to 879.68 units, up from 774.37 units in 2013, representing a 13.6% growth. Though the increase is significant, it is far lower than the 33.3% increase observed between 2012 and 2013. Book publications continue to constitute the least produced research output, accounting for only 6% of the overall 2014 output units.

Table 3: Percentage of book publication output units per institution, 2013 and 2014

Institution	2013		2014		% increase from 2013 to 2014
	Book units	% of total books	Book units	% of total books	
UCT	111.61	14.4%	133.75	15.2%	20%
WITS	109.45	14.1%	131.71	15.0%	20%
SU	105.41	13.6%	116.25	13.2%	10%
UFS	58.19	7.5%	92.58	10.5%	59%
UP	80.7	10.4%	69.09	7.9%	-14%
UNISA	38.21	4.9%	66.56	7.6%	74%
UJ	58.83	7.6%	59.52	6.8%	1%
RU	20.17	2.6%	56.8	6.5%	182%
UKZN	79.09	10.2%	53.79	6.1%	-32%
NWU	39.88	5.1%	38.9	4.4%	-2%
UWC	29.62	3.8%	26.03	3.0%	-12%
NMMU	5.12	0.7%	7.21	0.8%	41%
UV	7.59	1.0%	7.12	0.8%	-6%
DUT	11.8	1.5%	5.44	0.6%	-54%
UFH	8.64	1.1%	5.4	0.6%	-38%
TUT	2.31	0.3%	4.43	0.5%	92%
CPUT	2.54	0.3%	2.45	0.3%	-4%
CUT	0.44	0.1%	0.69	0.1%	57%
UZ	0	0.0%	0.68	0.1%	-
MUT	0.46	0.1%	0.53	0.1%	15%
UL	0	0.0%	0.53	0.1%	-
SMU	0	0.0%	0.22	0.02%	-
WSU	4.31	0.6%	0	0.0%	-
VUT	0	0.0%	0	0.0%	-
UMP	0	0.0%	0	0.0%	-
Total	**774.37**	**100%**	**879.68**	100.0%	

This lower productivity in books could be mainly due to the fact that it takes longer to produce book publications compared to the other types of outputs recognised by the Policy. The revised research output policy takes cognisance of the long process in producing books and as a result the number of units for a full book will be doubled upon implementation of the revised Policy.

Table 3 shows book publication output units and percentages accrued to each university. The University of Cape Town (UCT) accrued the highest proportion of book units (15.2%) followed by University of Witwatersrand (WITS) at 15%. The five highest producing institutions accounted for 61.8% of all book publications, a 1% reduction compared to 62.7% in 2013. UP and UKZN experienced significant declines of 14% and 32%, respectively. RU, which had experienced a 43% decrease in 2013, saw significant gains of 182% in 2014. Other noteworthy gains were observed for UFS (59%) and UNISA (74%). Of the well-established institutions, WSU and VUT did not submit any books for the 2014 publication year, while MUT, CUT, UZ and UL each had less than 1 unit of book publications.

4.1 Book Publication output units by Classification of Education Subject Matter (CESM) Category

The majority of CESM categories experienced an increase in the number of units awarded for book publications in 2014. The highest number of units (over 5% of total book publications) for book publications were accrued to each CESM category as follows: CESM 20 (Social Sciences) accounted for 35% of all approved book publications; CESM 11 (Language, Linguistics & Literature) 9.3%; CESM 17 (Philosophy, Religion & Theology) 13.5%; CESM 12 (Law) 9.5%; and CESM 7 (Education) 5.6% (Table 4). CESM 10 (Family Ecology and Consumer Sciences), CESM 1 (Agriculture, Agricultural Operations & Related Sciences), CESM 15 (Mathematics & Statistics) and (CESM 16 (Military Sciences) accrued less than 1% each. CESM 5 (Communication, Journalism & Related Studies) had a substantial increase of 353%.

In 2014, there were dramatic decreases in the number of units for CESM 11 (Languages, Linguistics and Literature), CESM 08 (Engineering) CESM 14 (Physical Sciences) and CESM 15 (Mathematics and Statistics) compared to 2013.

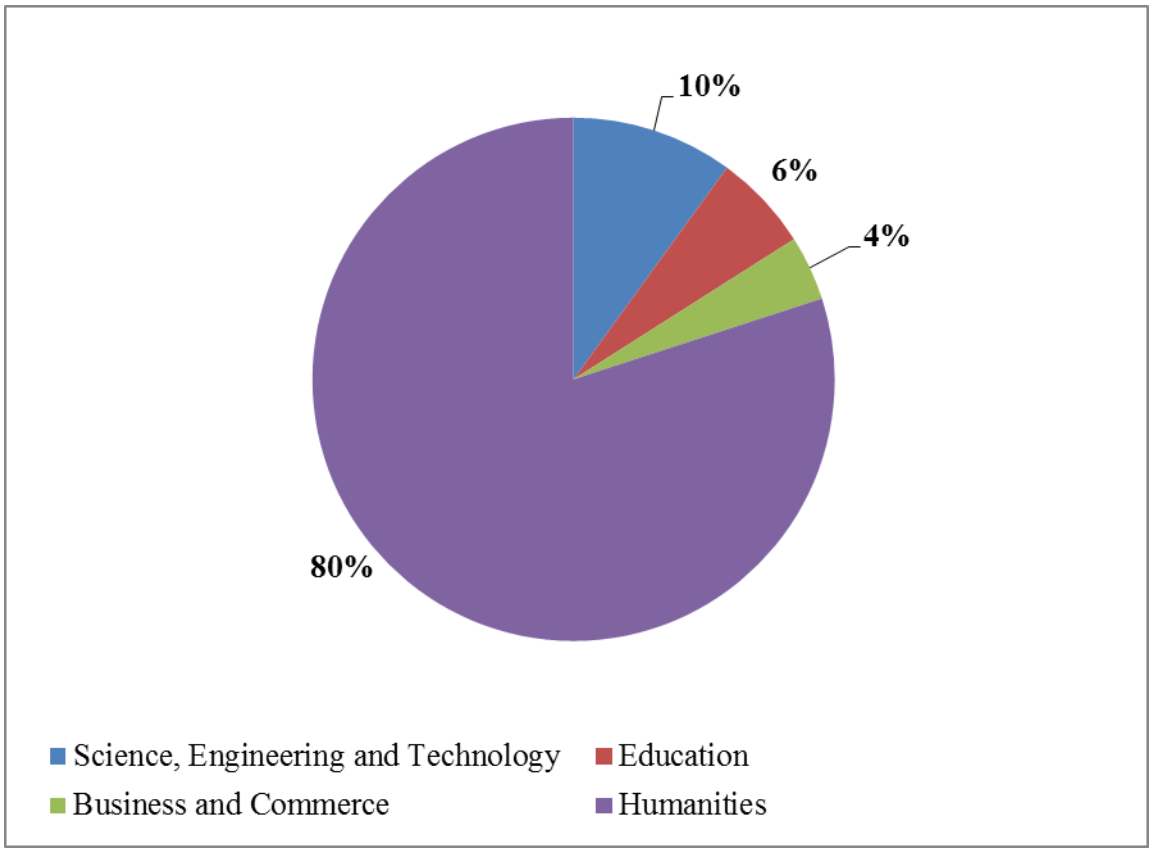
Table 4: Book Publications by CESM Categories, 2013 and 2014

CESM category and field	2013		2014		% increase from 2013 to 2014
	Total units awarded	**% total book publications**	**Total units awarded**	**% total book publications**	
20: Social Sciences	231.65	29.9%	307.6	35%	33%
17: Philosophy, Religion and Theology	95.89	12.4%	118.74	13.5%	24%
12: Law	83.86	10.8%	83.8	9.5%	-0.07%
11: Languages, Linguistics and Literature	107.22	13.8%	81.64	9.3%	-24%
07: Education	46.68	6.0%	48.98	5.6%	5%
04: Business, Economics & Management Studies	33.35	4.3%	38.87	4.4%	17%
03: Visual & Performing Arts	19.9	2.6%	29.29	3.3%	47%
18: Psychology	26.41	3.4%	25.96	2.9%	2%
13: Life Sciences	13.67	1.8%	24.79	2.8%	81%
05: Communication, Journalism & Related Studies	4.93	0.6%	22.35	2.5%	353%
02: Architecture & Built Environment	14.18	1.8%	17.43	2%	23%
09: Health Professions & Related Clinical Sciences	17.02	2.2%	16.01	1.8%	-6%
08: Engineering	23.03	3.0%	14.48	1.6%	-37%
19: Public Management and Services	4.29	0.6%	13.81	1.6%	222%
06: Computer & Information Sciences	5.96	0.8%	11.1	1.3%	86%
14: Physical Sciences	17.51	2.3%	10.27	1.2%	-41%
01: Agriculture, Agricultural Operations & Related Sciences	10.92	1.4%	6.69	0.8%	-39%
15: Mathematics & Statistics	14.82	1.9%	5.18	0.6%	-65%
10: Family Ecology & Consumer Sciences	0.64	0.1%	2.11	0.2%	230%
16: Military Sciences	2.44	0.3%	0.58	0.06%	-76%
Total	**774.37**	**100%**	**879.68**	**100%**	

Also, to note is that some CESM categories that had the most share under journal publications command a lesser share in book publications, an indication that each CESM has differing strengths in types of outputs including those not recognised by the Policy.

Book publications in 2014 were highest in the Humanities (80%), followed by the SET (10%), Education (6%), and Business and Commerce (4%); see Figure 3. Therefore this solidifies Humanities as the major contributor in book publications and this has been consistently so over the years.

Figure 3: Book publications by broad field, 2014



5 Published Conference Proceeding Output Units

Publications in conference proceedings in 2014 had a marginal increase of 5.2% compared to the 65.5% increase observed in 2013. The total number of conference publication units for 2014 was 1301.32, compared to 1236.92 units in 2013, a marginal increase of 64.4 units. Table 5 shows the number of conference publication units accrued to each university. All institutions enjoyed increases in the number of approved units for conference proceedings.

UJ, as in 2013 accrued the most units for conference publications this year and had a share of 19.6%, up by 4.8% to 2013. The university had a substantial increase in 2014, from 182.5 units in 2013 to 253.47, a 39% increase; while UP, which had the fifth highest share in 2013,

had the 2nd highest share of 11.4% (147.04 units) and a 23% increase in conference publication units in 2014; followed by UCT with the third highest share of 9% (117.294 units).

Table 5: Units in conference proceedings per institution, 2013 and 2014

Institution	2013		2014		% increase from 2013 to 2014
	Conference proceeding units	% of Conference Proceedings	Conference proceeding units	% of Conference Proceedings	
UJ	182.5	14.8%	253.47	19.6%	39%
UP	119.64	9.7%	147.04	11.4%	23%
UCT	122.48	9.9%	117.29	9.0%	-4%
NWU	119.98	9.7%	107.34	8.2%	-11.00%
SU	126.74	10.2%	103.51	8.0%	-18%
UNISA	68.13	5.5%	78.61	6.0%	15%
WITS	68.46	5.5%	77.94	6.0%	14%
NMMU	84.16	6.8%	77.39	5.9%	-8%
TUT	65.37	5.3%	58.63	4.5%	-10%
UKZN	58.34	4.7%	52.35	4.0%	-10%
CPUT	41.79	3.4%	46.5	3.6%	11%
UFS	33.02	2.7%	39.59	3.0%	20%
VUT	13.01	1.1%	29.85	2.3%	129%
RU	28.69	2.3%	29.8	2.3%	4%
UFH	11.26	0.9%	14.75	1.1%	31%
UV	9.15	0.7%	13.68	1.1%	50%
CUT	13.02	1.0%	13.65	1.0%	5%
DUT	17.37	1.4%	10.93	0.8%	-37%
UWC	16.73	1.3%	10.06	0.8%	-30%
UL	23.83	1.9%	9.21	0.7%	-61%
UZ	7.00	0.6%	6.85	0.5%	-2%
MUT	2.25	0.2%	1.63	0.1%	-28
WSU	4.00	0.3%	1	0.07%	-75
SMU	0	0.0%	0.25	0.01%	-
UMP	0	0.0%	0	0.0%	-
Total	**1236.92**	**100%**	**1301.32**	**100%**	

VUT more than doubled its units in 2014 compared to 2013, with an increase from 13.01 units in 2013 to 29.85 units in 2014. However, it must be noted that the majority of institutions (12) experienced a decline in 2014, compared to 2013 where all institutions experienced an increase. It could be that institutions have decided to put more focus on other publication types like journal publications which shows that almost all institutions have had increases in journal publications.

5.1 Conference Proceeding Output Units by Classification of Education Subject Matter (CESM) Category

The majority of units for published conference proceedings were in Engineering at 37.9% (CESM 8); Computer & Information Sciences at 16.8% (CESM 6); and Business, Economics and Management Studies with 13.3% (CESM 4). These are fast-pace research fields whose findings are mostly shared through conferences

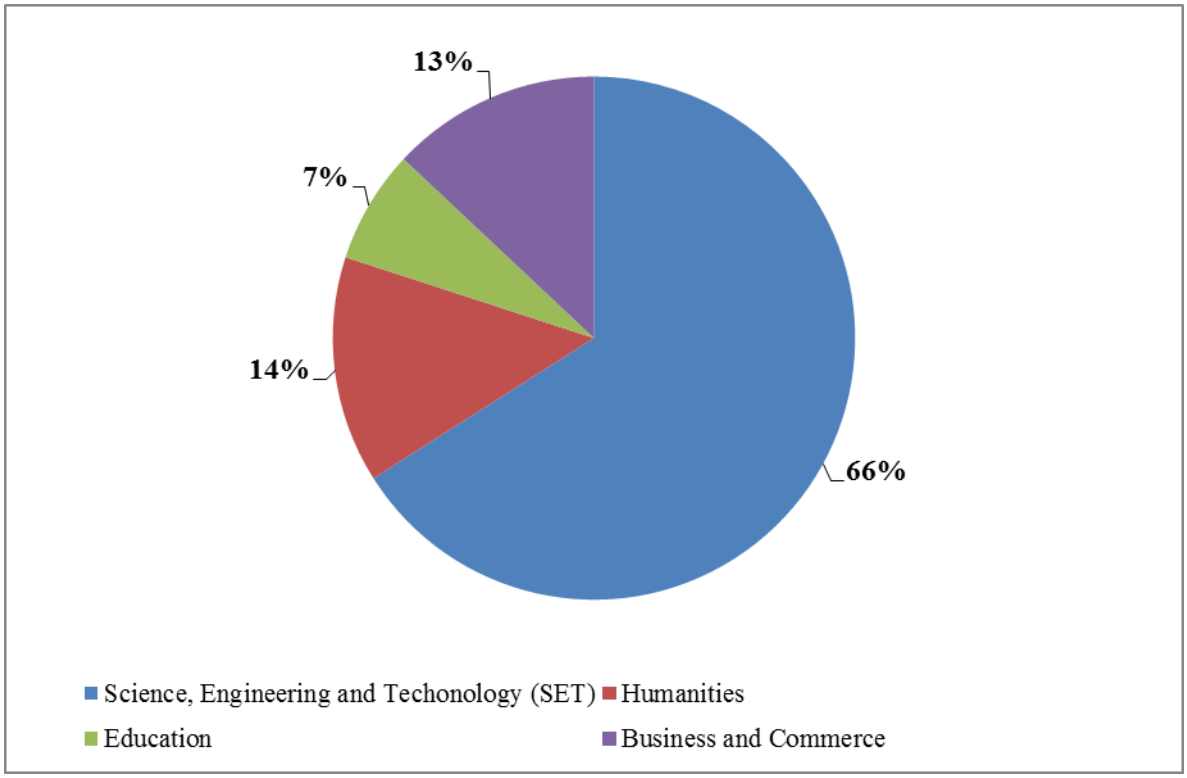
Table 6: Conference Proceeding Output Units by CESM Category, 2013 and 2014

CESM	2013		2014		% increase from 2013 to 2014
	Number of Units	% of total	Number of Units	% of total	
08: Engineering	458.95	37.2%	492.72	37.9%	7%
06: Computer and Information Sciences	226.60	18.3%	219.00	16.8%	-3%
04: Business, Economics and Management Studies	198.84	16.1%	171.85	13.3%	-14%
14: Physical Sciences	18.88	1.5%	96.16	7.4%	409%
07: Education	110.72	8.9%	89.30	6.9%	-19%
02: Architecture and Built Environment	53.15	4.3%	87.86	6.8%	65%
20: Social Sciences	17.10	1.4%	19.67	1.5%	15%
19: Public Management and Services	30.51	2.5%	18.82	1.4%	-38%
15: Mathematics and Statistics	19.61	1.6%	18.35	1.4%	-6%
03: Visual and Performing Arts	9.50	0.8%	15.82	1.2%	67%
17: Philosophy, Religion and Theology	13.00	1.0%	13.17	1.0%	1%
01: Agriculture, Agricultural Operations and Related Sciences	30.07	2.4%	11.88	0.9%	-60%
13: Life Sciences	6.45	0.5%	10.16	0.8%	58%
11: Languages, Linguistics and Literature	19.26	1.5%	9.84	0.8%	-49%
09: Health Professions and Related Clinical Sciences	5.15	0.4%	9.22	0.7%	79%
5: Communication, Journalism and Related Studies	3.66	0.3%	5.83	0.4%	59%
12: Law	8.25	0.7%	5.58	0.4%	-32%
18: Psychology	4.42	0.3%	5.42	0.4%	23%
10: Family Ecology and Consumer Sciences	1.30	0.1%	0.42	0.03%	-68%
16: Military Sciences	1.50	0.1%	0.25	0.01%	-83%
Total	**1236.92**	**100%**	**1301.32**	100.0%	

Table 6 shows the number of units accrued to each CESM category and the percentage portion of each. CESM 14 (Physical Sciences) and CESM 2 (Architecture and Built Environment) experienced vast growths in 2014, with increases of 409% and 65%, respectively. There is a strong correlation between the institutional shares and the CESM category shares, meaning that those institutions with larger shares are strong in one or more CESM categories with the most shares.

The highest proportion of conference proceedings accrued to the SET field was 66%, followed by Humanities (14%), Business and Commerce (13%); and Education at 7% (Figure 4). Humanities field, which went up by 1%, has overtaken the Business and Commerce field, which went down by 3% in 2014. The SET field is the major contributor to conference proceedings and this is largely through outputs in Engineering (CESM 8) and Computer & Information Sciences (CESM 6).

Figure 4: Conference proceedings outputs by broad field, 2014



In 2012, the Department introduced a list of accredited South African conferences. Following the advice of the ROE Panel, the Department has decided to re-look its process of accrediting conference proceedings, and has therefore decided to suspend the list of accredited conferences. In order not to disadvantage those who had attended the listed conference during

2014, these conferences were treated as "accredited" during the 2015 submissions (that is, 2014 conference proceedings). This means that all conference proceedings from 2015 research outputs onwards will be evaluated by field-specific panels until such time a permanent mechanism has been put in place.

6 Overall Research Publication Output Units

Overall, as shown above, there has been a modest increase in overall publication outputs in 2014. The total approved research outputs for 2014 amounted to 15 316.86 units. This is an increase of 1308.19 units from 2013 (9.3% growth). Journal articles increased from 11 997.38 in 2013 to 13 135.86 in 2014 (9.5% growth), while books increased from 774.37 to 879.68 (13.6% growth). Conference proceedings also showed a marginal increase from 1236.92 in 2013 to 1301.32 in 2014 (a 5.2% growth). In 2013, books and conference proceedings saw large increases at 33.3% and 65.5% respectively, while journals had a 8.7% increase. This suggests that there was more emphasis on journal publications as compared to the other types of outputs, particularly conference proceedings and that could be a reflection of focussing on quality rather than quantity. This is not to take away from the value of conference proceedings but it is generally know that they have less impact compared to journal articles, and in some cases, the data used in conference proceedings is used in research articles published in Journals titles.

A list of all the institutions with their respective research publications outputs for 2014 is presented in Table 7. Institutions have been listed according to their volume of publications output units, from highest to lowest number of units. The order of institutional publications, from lowest to highest, has changed slightly compared to 2013. UKZN still had the most publication output units followed by UP, UCT, SU and WITS. UNISA, which was below NWU in 2013, has accrued more publication output units in 2014 and largely from an increased output in journal publications. Another change in the order of institutions in terms of the volume of publications output units compared is between SMU and CUT; SMU has accrued more publications units compared to CUT this year.

Table 7: Overall Publication Output Units per Institution, 2014

Institution	Book Units		Conference Proceedings Units		Journal Units		Overall Units in 2014	% Overall Sector Units
	Actual Units	% of total outputs	Actual Units	% of total outputs	Actual Units	% of total outputs		
UKZN	53.79	3.1%	52.35	3.1%	1602.47	93.8%	**1708.61**	11.2%
UP	69.09	4.1%	147.04	8.8%	1461.46	87.1%	**1677.59**	11.0%
UCT	133.75	8.2%	117.29	7.2%	1372.57	84.5%	**1623.61**	10.6%
SU	116.25	7.5%	103.51	6.7%	1334.58	85.9%	**1554.34**	10.1%
WITS	131.71	8.9%	77.94	5.3%	1272.03	85.9%	**1481.68**	9.7%
UNISA	66.56	5.7%	78.61	6.7%	1027.67	87.6%	**1172.84**	7.7%
NWU	38.9	3.5%	107.34	9.5%	980.71	87.0%	**1126.95**	7.4%
UJ	59.52	5.5%	253.47	23.6%	761.92	70.9%	**1074.91**	7.0%
UFS	92.58	12.2%	39.59	5.2%	627.71	82.6%	**759.88**	5.0%
RU	56.8	11.6%	29.8	6.1%	405	82.4%	**491.6**	3.2%
UWC	26.03	5.4%	10.06	2.1%	445.21	92.5%	**481.3**	3.1%
NMMU	7.21	2.0%	77.39	21.1%	281.42	76.9%	**366.02**	2.4%
TUT	4.43	1.6%	58.63	20.8%	218.28	77.6%	**281.34**	1.8%
UFH	5.4	1.9%	14.75	5.3%	260.08	92.8%	**280.23**	1.8%
UL	0.53	0.2%	9.21	3.8%	233.96	96.0%	**243.7**	1.6%
UNIVEN	7.12	3.2%	13.68	6.1%	204.36	90.8%	**225.16**	1.5%
CPUT	2.45	1.4%	46.5	27.1%	122.76	71.5%	**171.71**	1.1%
DUT	5.44	3.6%	10.93	7.2%	135.76	89.2%	**152.13**	1.0%
UZ	0.68	0.6%	6.85	6.2%	103.21	93.2%	**110.74**	0.7%
VUT	0	0.0%	29.85	27.2%	80.09	72.8%	**109.94**	0.7%
SMU	0.22	0.2%	0.25	0.3%	92.73	99.5%	**93.20**	0.6%
CUT	0.69	0.8%	13.65	15.7%	72.83	83.5%	**87.17**	0.6%
WSU	0	0.0%	1.00	3.8%	25.07	96.2%	**26.07**	0.2%
MUT	0.53	3.4%	1.63	10.4%	13.48	86.2%	**15.64**	0.1%
UMP	0	0.0%	0	0.0%	0.5	100.0%	**0.5**	0.0%
TOTAL	**879.68**	**6%**	**1301.32**	**9%**	**13135.86**	**85%**	**15316.86**	100%

The pattern of a share of overall sector units remains as it has been over the years, albeit with slightly reduced percentages. For instance, the first five institutions in table 7 take up a share of 52% of overall research outputs. The next seven institutions take up 35% and the remaining institutions take up a share of 12.1%.

7 Overall Research Publication and Weighted Outputs Units

There has been an overall steady increase in research publication output units over the years since the inception of the current Policy. Figure 5 illustrates the contribution of the three publication types to this growth. Between 2010 and 2014, journal publication output units have increased by about 52.7%. During the same period (2010-2014), books increased by 119% while conference proceedings increased by 75%. Such considerable growth is a

testament to the investment made by the Department and other funding entities; these are huge returns in investments for the country.

Figure 5: Total Research Output by type of publication, 2010-2014

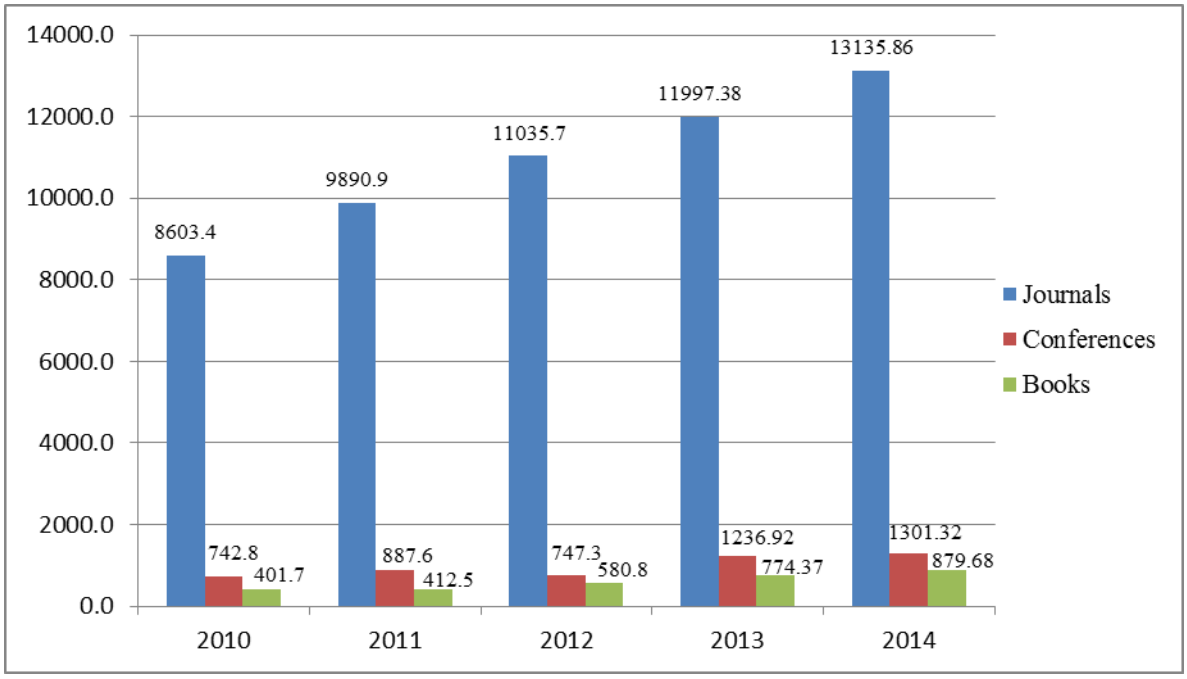
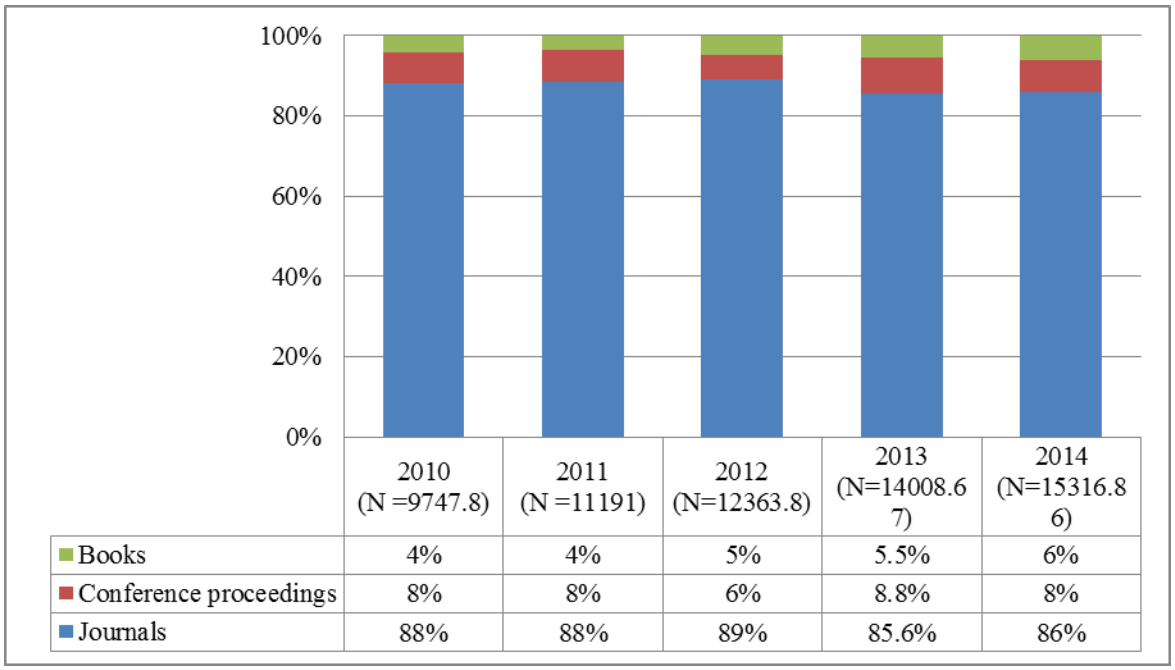


Figure 6 shows the proportional contribution of each publication type over the past five years. As in previous years, journal publications were the largest contributor to the overall output, with 86% of the overall units, followed by conference proceedings at 8% and 6% for book publications.

The proportional contribution of books in the overall publication output units has increased from 4% in 2010 to 6% in 2014, a 2% increase. However, the rejection rate for books in 2013 and 2014 was significantly lower compared to previous years. The 2003 Policy has been reviewed, and a new revised research output policy was published in March 2015. This policy will be implemented from 2016 onwards. The revised policy will increase the number of units to be allocated for book publications; the maximum amount of units that can be claimed for books will be doubled to 10 units. Hopefully, this incentive will encourage researchers to publish books and thus increase this type of output.

Figure 6: Proportion of research outputs units by type of publication, 2010 – 2014



	2010 (N =9747.8)	2011 (N =11191)	2012 (N=12363.8)	2013 (N=14008.67)	2014 (N=15316.86)
Books	4%	4%	5%	5.5%	6%
Conference proceedings	8%	8%	6%	8.8%	8%
Journals	88%	88%	89%	85.6%	86%

7.1 Overall Publication Output Units by Classification of Education Subject Matter (CESM) Category

Analysis of the Classification of Education Subject Matter (CESM) aggregated for all publication types (journals, books and proceedings), indicates the most productive research output subject areas in general and per institution. This information can assist individual institutions to focus their efforts in developing their niche or areas of potential. In analysing research outputs by CESM category, consideration should be given to the fact that research publications can be affected by different patterns of authorship; frequency of publications; the time it takes to complete research and the waiting publication period for some publications, especially journals and books. This categorisation should be regarded as an indicator rather than to be taken as an absolute, particularly if the analysis is over a number of years. The Department began this categorisation in its analysis of publications outputs in 2010.

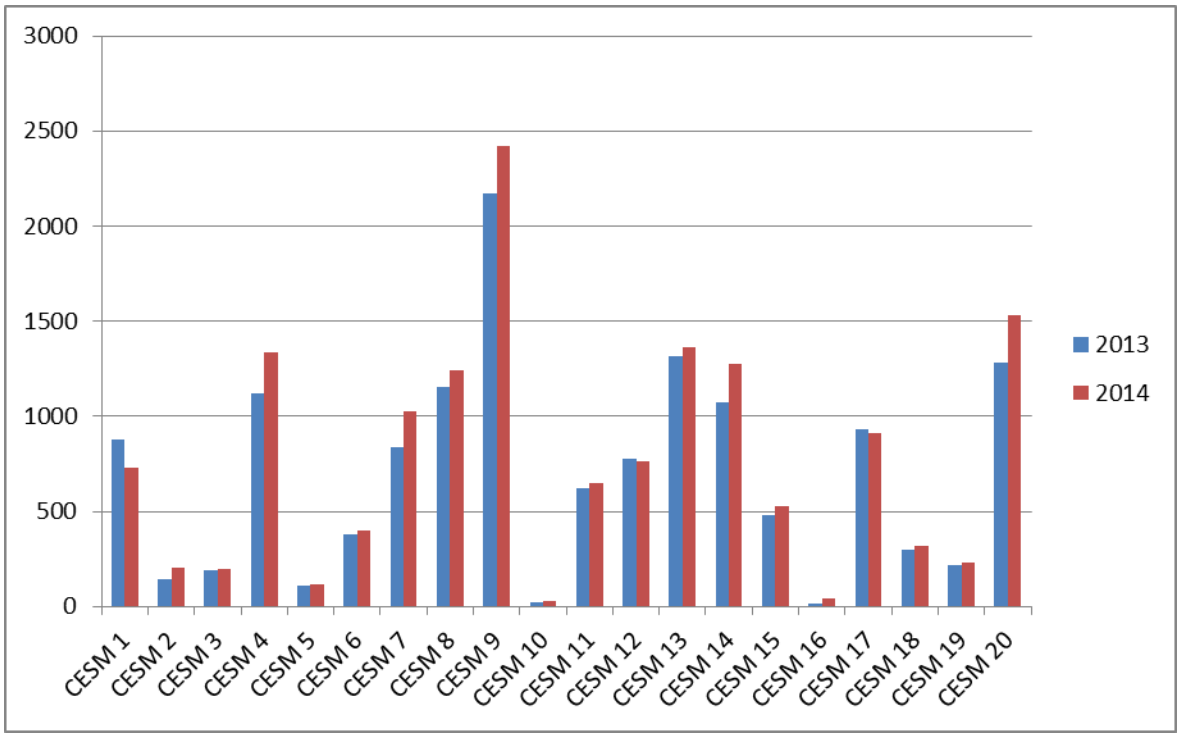
The purpose of the categorisation is not necessarily to compare CESM categories as there may be differences in the number of academics; the development and resourcing of the relevant fields by institutions and other factors. Instead, it should be used to identify potential for possible policy improvement and resource allocation at institutional level. The total publication output units by CESM categories for 2013 and 2014 are shown in Table 8.

Table 8: Total Research Output Units by CESM Categories, 2013 and 2014

CESM Category	2013		2014		% increase from 2013 to 2014
	No. of units	% of total	No. of units	% of total	
09: Health Professions and Related Clinical Sciences	**2168.54**	15.5%	2419.84	15.8	11.6%
20: Social Sciences	**1284.02**	9.2%	1529.89	9.99	19.1%
13: Life Sciences	**1313.33**	9.4%	1364.76	8.91	3.9%
04: Business, Economics and Management Sciences	**1117.14**	8.0%	1337.72	8.73	19.7%
14: Physical Sciences	**1071.1**	7.6%	1277.51	8.34	19.3%
08: Engineering	**1152.82**	8.2%	1238.82	8.09	7.5%
07: Education	**838.41**	6.0%	1027.95	6.71	22.6%
17: Philosophy, Religion and Theology	**931.29**	6.6%	913.37	5.96	-1.9%
12: Law	**775.42**	5.5%	765.49	5	-1.3%
01: Agriculture, Agricultural Operations and Related Sciences	**877.24**	6.3%	728.65	4.76	-16.9%
11: Languages, Lingustics and Literature	**619.54**	4.4%	649.6	4.24	4.9%
15: Mathematics and Statistics	**482.9**	3.4%	528.62	3.45	9.5%
06: Computer & Information Sciences	**377.47**	2.7%	396.71	2.59	5.1%
18: Psychology	**298.85**	2.1%	319.28	2.08	6.8%
19: Public Management and Sciences	**220.27**	1.6%	232.26	1.52	5.4%
02: Architecture and Built Environment	**142.65**	1.0%	202.14	1.32	41.7%
03: Visual Arts and Performing Arts	**191.24**	1.4%	198.52	1.30	3.8%
05: Communication, Journalism and Related Studies	**107**	0.8%	118.79	0.78	11.0%
16: Military Sciences	**17.81**	0.1%	41.36	0.27	132.2%
10: Family Ecology and Consumer Sciences	**21.35**	0.2%	25.58	0.17	19.8%
Total	**14008.67**	100.0%	15316.86	**100.00**	

The order, from highest to lowest, of the overall research publications units per CESM has not changed from the one observed under journal output units since 86% of the publication output units emanates from the journals. Figure 7 presents a graphical representation of the CESM trend in 2013 and 2014.

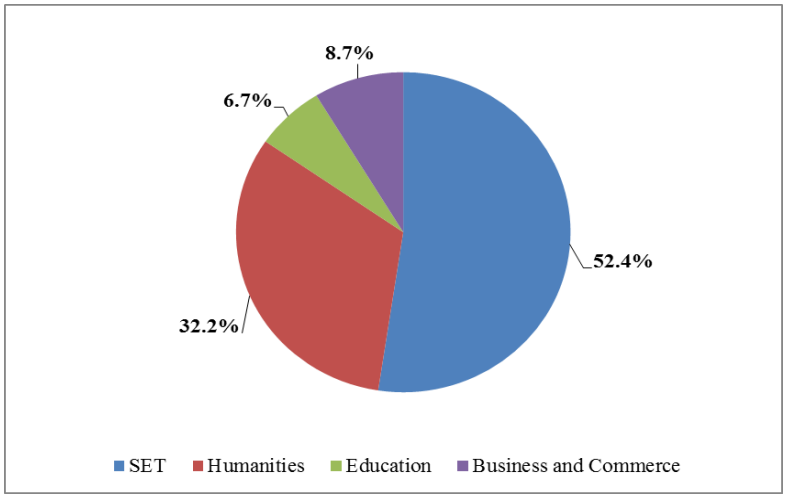
Figure 7: Total output by Classification of Education Subject Matter (CESM) Category



7.2 Overall Publication Output Units by Broad Field of Study

The proportion of overall publication outputs units is highly skewed towards the SET field as shown in Table 8 below.

Figure 8: Total publication output units by broad field[1] (2014)



[1]The CESM categories in each broad field are:
Science, Engineering and Technology = CESM 1, 6, 8, 9, 10, 13, 14, 15 and 16;
Humanities = CESM 2, 3, 5, 11, 12, 17, 18, 19, and 2;
Education = CESM 7;
Business and Commerce = CESM 4.

Analysis of the 2014 output units by broad scientific field of study shows that more than half (52.4%) of all output units are produced by researchers in the Science, Engineering and Technology (SET) fields, followed by Humanities (32.2%), Business and Commerce (8.7%), and Education 6.7% (Figure 8).

7.3 Overall Publication Output Units by Institution

The proportion of the total output units awarded to each institution in 2014, expressed as a percentage, is shown in Table 9. University of KwaZulu-Natal contributed the highest proportion of the total output units awarded, by volume (i.e. un-weighted number of publications units), with 11.2%, followed very closely by the University of Pretoria at 11%.

Table 9: Percentage of total output units produced by each institution (2010-2014)

Institution	2014	2013	2012	2011	2010
UKZN	**11.2%**	11.6%	11.5%	11.2%	11.8%
UP	**11.0%**	11.5%	11.5%	11.7%	12.2%
UCT	**10.6%**	11.1%	11.2%	11.7%	12.9%
SU	**10.1%**	10.5%	10.7%	10.3%	10.6%
WITS	**9.7%**	9.3%	9.0%	9.3%	9.6%
UNISA	**7.7%**	7.4%	7.2%	7.1%	7.5%
NWU	**7.4%**	8.3%	7.0%	6.6%	6.0%
UJ	**7.0%**	6.4%	7.1%	6.9%	6.3%
UFS	**5.0%**	4.8%	5.2%	5.1%	5.1%
RU	**3.2%**	3.2%	3.3%	3.2%	3.3%
UWC	**3.1%**	2.9%	3.0%	3.1%	2.7%
NMMU	**2.4%**	2.4%	2.5%	3.1%	2.6%
TUT	**1.8%**	2.0%	1.9%	2.2%	1.9%
UFH	**1.8%**	1.7%	1.7%	1.6%	1.5%
UL	**1.6%**	1.6%	1.8%	1.3%	1.0%
UNIVEN	**1.5%**	1.1%	1.0%	1.2%	0.8%
CPUT	**1.1%**	1.1%	1.4%	1.3%	1.6%
DUT	**1.0%**	0.9%	0.7%	0.8%	0.5%
VUT	**0.7%**	0.6%	0.6%	0.7%	0.5%
UNIZULU	**0.7%**	0.6%	0.6%	0.6%	0.7%
CUT	**0.6%**	0.5%	0.5%	0.4%	0.4%
SMU	**0.6%**	0.0%	0.0%	0.0%	0.0%
MUT	**0.1%**	0.1%	0.1%	0.2%	0.1%
WSU	0.2%	0.30%	0.50%	0.40%	0.50%
UMP	**0.0%**	0.0%	0.0%	0.0%	0.0%

The percentage share of overall output units by the first five institutions in Table 10 is 52.6%, thus accounting for more than half of the overall publication output units produced. The next seven institutions accounted for 35.8%, while the rest produced 11.6% of the total units. In 2013 and 12 the top five universities produced 54% of the overall output units. Therefore the proportion for the "top five" has marginally decreased this, an indication that other institutions are improved their research endeavours.

Table 10: Weighted Research Per Capita Output According to the Norms, 2014

Institution	Headcount of permanently employed academics (a)	Research Publications in Units (1)	Per capita research publications units	Research Masters Graduates in Units (2)	Doctorate Graduates in Weighted Units (3)	Total Weighted Research Output (1+2+3)	Weighted Output per capita (1+2+3)/a
SU	1035	1554.34	1.50	883	702	3139.34	**3.03**
UP	1176	1677.59	1.43	880	711	3268.59	**2.78**
RU	351	491.60	1.40	212	228	931.60	**2.65**
WITS	1074	1481.68	1.38	602	597	2680.68	**2.50**
UCT	1149	1623.61	1.41	623	612	2858.61	**2.49**
UKZN	1348	1708.61	1.27	666	792	3166.61	**2.35**
UFH	334	280.23	0.84	239	198	717.23	**2.15**
UWC	615	481.30	0.78	256	312	1049.30	**1.71**
NWU	1342	1126.95	0.84	507	513	2146.95	**1.60**
UJ	1104	1074.91	0.97	354	318	1746.91	**1.58**
NMMU	604	366.02	0.61	316	216	898.02	**1.49**
UNISA	1718	1172.84	0.68	587	804	2563.84	**1.49**
UFS	986	759.88	0.77	318	312	1389.88	**1.41**
UZ	285	110.74	0.39	67	75	252.74	**0.89**
UV	372	225.16	0.61	36	3	264.16	**0.71**
TUT	951	281.34	0.30	209	138	628.34	**0.66**
UL*	941	336.90	0.36	202	75	613.90	**0.65**
CUT	295	87.17	0.30	32	36	155.17	**0.53**
DUT	579	152.13	0.26	91	54	297.13	**0.51**
CPUT	774	171.71	0.22	110	51	332.71	**0.43**
VUT	378	109.94	0.29	32	3	144.94	**0.38**
WSU	591	26.07	0.04	10	24	60.07	**0.10**
MUT	190	15.64	0.08	0	0	15.64	**0.08**
UMP	41	0.50	0.01	0	0	0.50	**0.01**
OVERALL TOTALS	**18233**	**15316.86**	0.84	**7232**	**6774**	**29322.86**	**1.61**

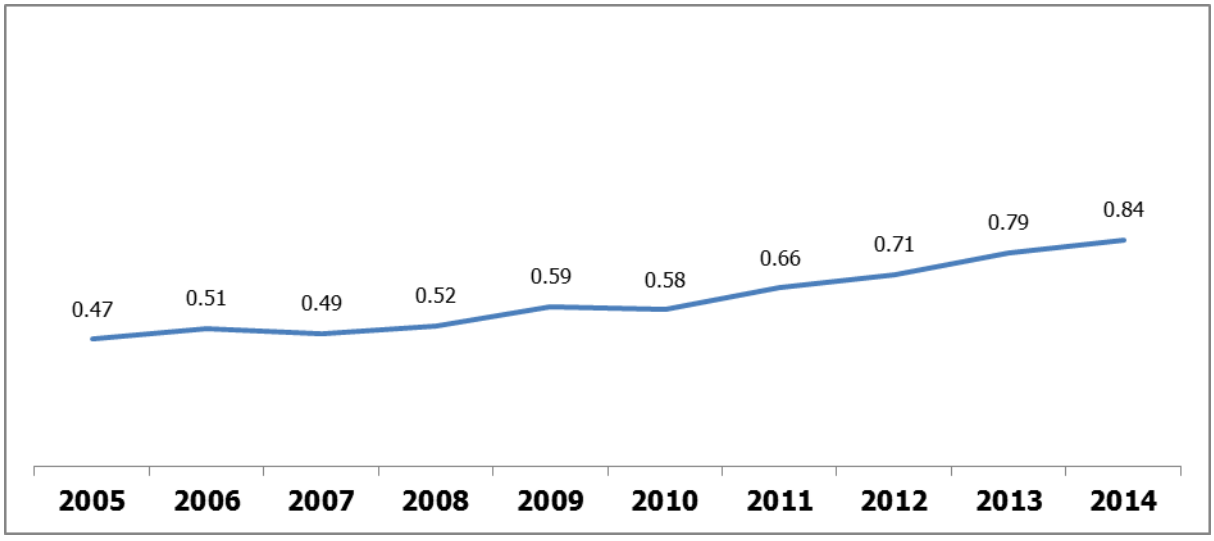
* Includes 93.20 from SMU since the HEMIS data on academics was submitted under UL

Table 10 shows both the per capita output units (i.e. publications output units per permanently employed academic per annum) as well as the weighted per capita research output units (i.e. output units per permanently employed academic per annum, including publications, Research Masters and PhD graduates). SU achieved the highest per capita

output with 1.5 units, followed by UP with 1.43 units. Again, SU achieved the highest weighted per capita output with 3.03 units, followed by UP with 2.78 units. UP had the most total weighted research output units at 3268.59, while UNISA produced the highest number of doctoral graduates, totalling 268 (thus 804 units for doctoral graduates). SU produced the most graduates at Masters' level in 2014, with a total of 883 graduates for this qualification and closely followed by UP at 880.

Figure 9 below shows the publication output units per permanent academic staff member from 2005 to 2014. The average total publication output units per permanent academic staff member (or per capita output) for all institutions for 2014 was 0.84 units, a slight increase from 0.79 units in 2013, and 0.71 units in 2012. Generally, the per capita output across institutions has been on the increase since 2005, albeit at a slow pace for some institutions. This could be due to the very few numbers of active researchers out of total academic staff. This however does reflect a slight improvement in research publication productivity rate across the system.

Figure 9: Per capita output units (2005-2014)



The per capita output units have shown a 79% increase between 2005 and 2014. This reflects an average annual growth of 7.9%. It must also be recognised that not all higher education institutions in SA are research intensive and hence the growth for the sector seems to be slow, but when comparing institutional data there are huge differences in performance among institutions.

Table 11 shows permanently employed research staff with either a Masters or PhD as highest qualification in 2013 and 2014. UCT has the highest proportion (67%) of academics with a doctorate (taken as a proportion of its permanently employed staff), followed by SU and WITS at 62%.

Table 11: Permanently employed academics by qualification, 2013 and 2014

	Permanently Employed Academics by qualifications									
	2013				**2014**				**Academics with Masters and PhD as Highest Qualifications**	
	Academics with Masters as Highest Qualifications		**Academics with PhD as Highest Qualifications**		**Academics with Masters as Highest Qualifications**		**Academics with PhD as Highest Qualifications**			
	Headcount	**% total staff**	Headcount	**% of total staff**	Headcount	**% of total staff**	Headcount	**% of total staff**	2013	**2014**
UNISA	489	30%	629	39%	533	31%	690	40%	1118	1223
UKZN	445	32%	688	50%	470	35%	670	50%	1133	1140
NWU	393	31%	640	50%	398	30%	699	52%	1033	1097
UCT	295	27%	725	66%	301	26%	772	67%	1020	1073
UP	382	29%	663	51%	334	28%	724	62%	1045	1058
WITS	327	30%	639	58%	313	29%	661	62%	966	974
UJ	413	40%	451	44%	451	41%	478	43%	864	929
SU	195	19%	616	61%	256	25%	639	62%	811	895
UFS	441	46%	400	42%	458	46%	413	42%	841	871
TUT	320	35%	194	21%	350	37%	217	23%	514	567
UWC	180	31%	301	52%	199	32%	332	54%	481	531
CPUT	340	44%	131	17%	372	48%	155	20%	471	527
UL	332	38%	139	16%	335	36%	154	16%	471	489
NMMU	194	32%	263	43%	203	34%	278	46%	457	481
DUT	277	48%	97	17%	281	49%	112	19%	374	393
RU	109	31%	198	56%	112	32%	191	54%	307	303
UV	157	47%	116	34%	167	45%	129	35%	273	296
WSU	184	32%	80	14%	200	34%	84	14%	264	284
UFH	133	41%	124	38%	136	41%	142	43%	257	278
CUT	112	38%	88	30%	121	41%	96	23%	200	217
UZ	128	43%	92	31%	111	39%	102	36%	220	213
VUT	137	38%	47	13%	151	40%	60	16%	184	211
MUT	97	50%	18	9%	87	46%	20	11%	115	107
UMP	0	0%	0	0%	2	5%	0	0%	0	2
Overall totals	**6080**	**35%**	**7339**	**41%**	**6341**	**35%**	**7818**	**43%**	**13419**	**14159**

The sector's overall number of academics with a PhD qualification increased slightly from 41% in 2013 to 43% in 2014. This certainly is a positive development. Government,

including the DHET, the Department of Science and Technology (DST), and the National Research Foundation (NRF), is eager to improve staff qualifications at universities, particularly at doctoral level, through various funding mechanisms including the Research Development Grant. It is well know that institutions with a higher number of academics with PhDs are more research active and generally show a higher rate of research productivity.

8 General Observations and Conclusions

Research productivity has been on a steady rise across all institutions, over the past few years, particularly publications in journals. The continued increase in productivity could be attributed to a number of factors including an increase in number of researchers with a PhD qualification; the ability of institutions and researchers to attract research funding from various sources locally and abroad; improved infrastructure and of course the incentive funding from the Department in the form of research output subsidy and the research development grants. Institutions are encouraged to analyse their institutional research output data, together with HEMIS data in order to learn patterns and influence targeted development.

The quality of research outputs produced the sector is still under threat from a few individuals whose focus is to accrue subsidy by all means even if it means disregarding principles of scholarly publishing. Since the rejection of subsidy claims on the Mediterranean Journal of Social Sciences (MJSS) and the Department's plea for researchers to report journals not adhering to scholarly publishing principles; we have had a number of researchers coming forth and informing the Department of certain suspect journals or publishers. The Department is investigating some of the journals that have been identified as possible suspects and we urge researchers to continue assisting the Department on this matter so as to safeguard the quality of SA's research and scholarship.

The Department reserves the right to withhold payment of research output subsidy in respect of any publication published in a journal that does not meet the criteria as outlined in the research output policy. Institutions are advised to regulate appointing individuals, who are based elsewhere as honorary employees, so that they can, in turn, claim subsidy for the publications produced by these individuals. Such practices are counterproductive to the Department's targeted approach to develop institutions that are either showing potential or

are less developed with regard to research and in developing the research potential of South African academics.

Institutions and researchers are reminded that the *Policy and Procedures for the Measurement of Research Output of Public Higher Education Institutions (2003*) will be replaced by the revised Research Output Policy, published in the government gazette in March 2015. The revised policy is effective as from 1 January 2016. This means that all journal articles, books and conference proceedings published in 2016 have to meet the criteria as stipulated in the policy and that only research outputs published from 2016 onwards will be evaluated using the revised policy. Therefore, 2015 research outputs will be evaluated using the 2003 policy. Three additional approved lists of journals have been added, namely: Scopus, SciELO SA, and Norwegian list (Level 2 journals only). As a norm, the list of Journal titles will be communicated to institutions in January each year. Researchers should ensure that they publish in journals that adhere to the criteria as defined in the Policy. If a journal on the list does not adhere to the policy, researchers should inform their institution and the Department. The Department looks forward to the submission of 2015 research outputs claims by universities.