



Covenant University  
**EXECUTIVE  
ADVANCE**

*Programme for Faculty and Senior Non-Teaching  
Staff: 2016/2017 Academic Session*

**Theme:**

**‘RECITE’  
APPROACH  
FOR THE ATTAINMENT OF  
VISION 10:2022**



**Date:**  
**AUGUST 1 - 5, 2016**

**Venue:**  
**AFRICAN LEADERSHIP  
DEVELOPMENT CENTRE**  
Covenant University, Km. 10 Idiroko Road,  
Canaan Land, Ota, Ogun State, Nigeria



**Covenant University**  
Raising a new Generation of Leaders

# *ReCITE:* A Research-Intensive Approach For The Attainment of Vision 10:2022

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**A Presentation @ the 2016/2017 Executive Advance**

# *ReCITE:* A Research-Intensive Approach For The Attainment of Vision 10:2022

By

*Atayero*

*Vice Chancellor  
Covenant University, Ota*

# The Word of Prophecy

Romans 9:28

*For*

*he will finish the work,*

*and cut it short in Righteousness:*

*because*

*a short work will the Lord make upon the earth*

# Management's Vision

To fulfill Vision 10:2022

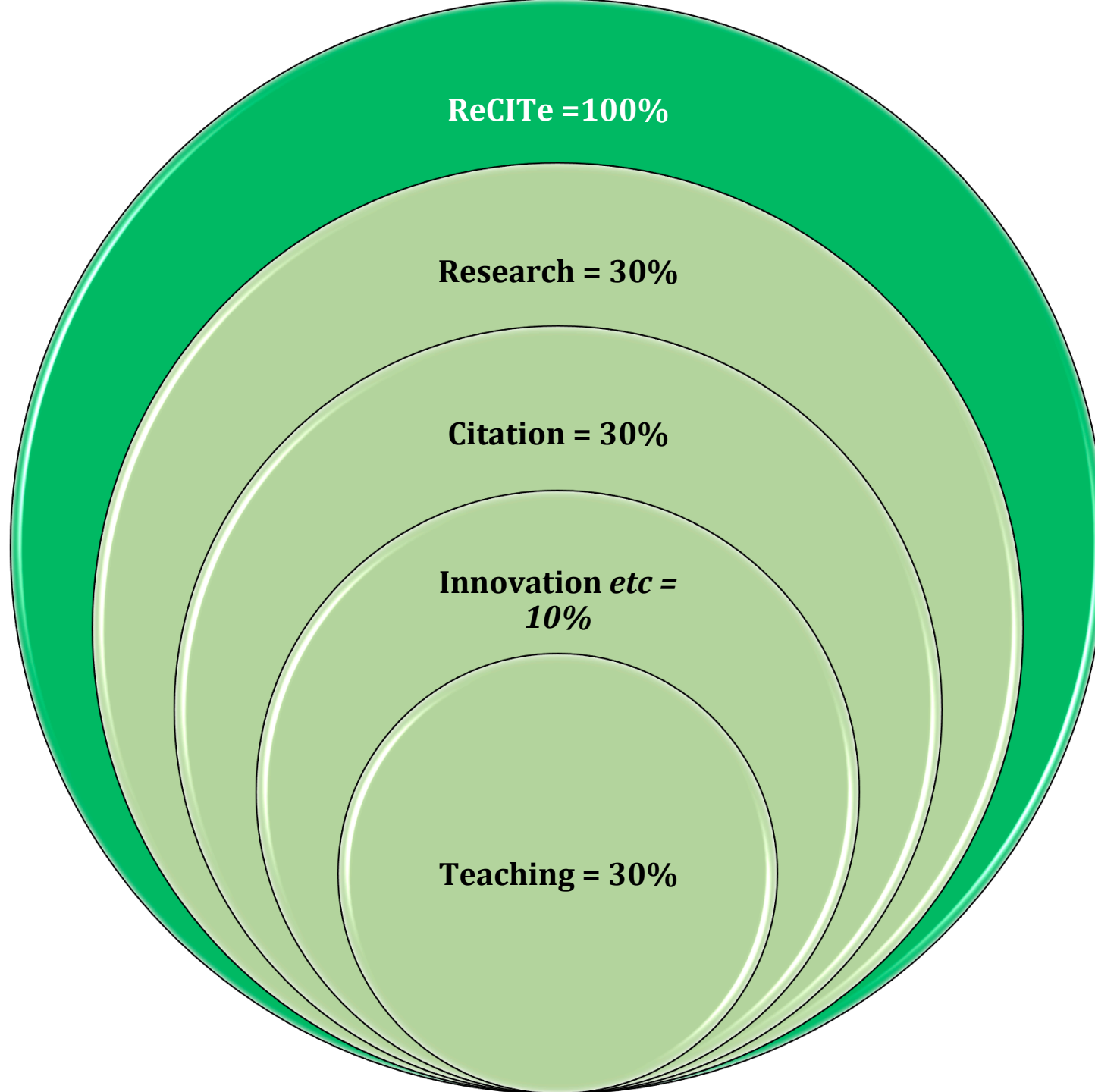
*(1-of-10-in-10)* by

*evolving*

a

*World-Class*

*Research University*



# ReCITe

*Research is our responsibility*

*Citation + Innovation →*

*Income is the reward*

*Teaching is our goal*

# ASSUMPTION

*Vision 10:2022 (1-of-10-in-10)* is considered fulfilled whenever Covenant attains a Top 10 position in any reputable global academic ranking outlet, irrespective of the ranking methodology.



# STRATEGY

- Aim for the Sun and land on the Moon,
- given that Moon resides in domain Top 10 WCU.
- This we shall accomplish through the instrumentality of '*Glocalisation*'
- i.e. benchmarking with established (indisputable) World Class Universities, while introducing innovations to address our local contextual needs.



# Covenant University in the Rankings

Table 1: Covenant University Rankings {as @ 16.07.16}

s n	University Ranking Body	Nigeria	Africa	Global	Remark
1	Webometrics (Repository)	1	13	580	
2	Webometric	2	33	2,027	
3	Research Gate	15	109	3,676	
4	USNews Best Global Universities	-	-	-	Not Ranked
5	QS WUR	-	-	-	Not Ranked
6	QS Star	-	-	-	Not Ranked
7	CWUR	-	-	-	Not Ranked
8	ARWU	-	-	-	Not Ranked
9	<b>Times Higher Education (THE) Ranking of World Universities</b>	-	-	-	<b>Close. 3 more years of consistently publishing &gt;200 papers in Scopus will get us in.</b>



# Covenant University in the Rankings

- Table 1 suggests that, the *quality* and *quantity* of research activities as well as volume and impact of research output in CU presently is *extremely low* for an institution aspiring the WCU status.
- Benchmarking with Ranking body #9 {*THE*} will suffice us:
  - *Arguably* the singular most influential and highly referenced Ranking
  - Changed from *Web of Science (WoS)* to *Elsevier* Database in 2015
  - If the management continues to support publication policy, we can enter its ranking by 2018
  - Covenant is in active partnership with the Ranking body

# Changes in *THE* World University Rankings

*ETH Zurich* – Swiss Federal Institute of Technology Zurich became the first non-Anglo-American institution to make the world rankings top 10 (9<sup>th</sup> position)

Table 2 : Progression of ETH Zurich to the 'Top 10' League In *THE* Rankings

Institution	2011	2012	2013	2014	2015	2016
Harvard University	1	2	4	2	2	6
California Institute of Technology	2	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>
Massachusetts Institute of Technology	3	7	5	5	6	5
University of Stanford	4	2	3	4	4	3
Princeton University	5	5	6	6	7	7
Oxford University	6	4	2	2	3	2
University of Cambridge	6	6	7	7	5	4
University of California, Berkeley	8	10	9	8	8	13
Imperial College London	9	8	8	10	9	8
Yale University	10	11	11	11	9	12
University of California, Los Angeles	11	13	13	12	12	16
University of Chicago	12	9	10	9	11	10
The Johns Hopkins University	13	14	16	15	15	11
Cornell University	14	20	18	19	19	18
<b>ETH Zurich – Swiss FITZ</b>	<b>15</b>	<b>15</b>	<b>12</b>	<b>14</b>	<b>13</b>	<b>9</b>

# Changes in *THE* World University Rankings

The advent of *THE*'s '*Under-50 rankings*' breaks the dominance of century old Institutions as clearly shown in Table 3

Table 3: 2016 *THE* Top 10 of 150 Under-50 World University Ranking

Rank	Institution	Country	Age in Years {as @ July, 2016}
1	École Polytechnique Fédérale de Lausanne	Switzerland	47
2	Nanyang Technological University	Singapore	25
3	Hong Kong University of Science and Technology	Hong Kong	25
4	Maastricht University	Netherlands	40
5	Pohang University of Science and Technology	South Korea	30
6	Korea Advanced Institute of Science and Technology (KAIST)	South Korea	45
7	University of Konstanz	Germany	50
8	Karlsruhe Institute of Technology	Germany	7
9	Pierre and Marie Curie University	France	45
10	Scuola Superiore Sant'Anna	Italy	29

# Changes in *THE* World University Rankings

In 150 Under-50 *THE* WUR, reputation counts for less

Table 4: Performance Indicators of *THE* World University Ranking

Overall Indicator	Graph Key	Individual Indicator	WUR (%)	Under-50 (%)	Contribution (%)
<b>Industry Income</b> Innovation/Knowledge Transfer	A	Research Income from Industry (per Academic Staff)	2.5	2.5	2.5
<b>International Outlook</b> Staff, Student, and Research	B	Ratio of International to Domestic Staff	2.5	2.5	7.5
	C	Ratio of International to Domestic Students	2.5	2.5	
	D	International collaboration	2.5	2.5	
<b>Teaching</b> Learning Environment	E	Reputational Survey (Teaching)	15	10	30
	F	<b>Doctorates awarded-to-academic staff ratio</b>	6	8	
	G	<b>Staff-to-student ratio</b>	4.5	6	
	H	Institutional income	2.25	3	
	I	<b>Doctorate-to-bachelor's ratio</b>	2.25	3	
<b>Research</b> Volume, Income and Reputation	J	Reputational Survey (Research)	18	12	30
	K	Research Income (Scaled)	6	9	
	L	Research productivity	6	9	
<b>Citations</b> Research Influence	M	Citation Impact (Normalized Average Citation per Paper)	30	30	30



# Changes in *THE* World University Rankings

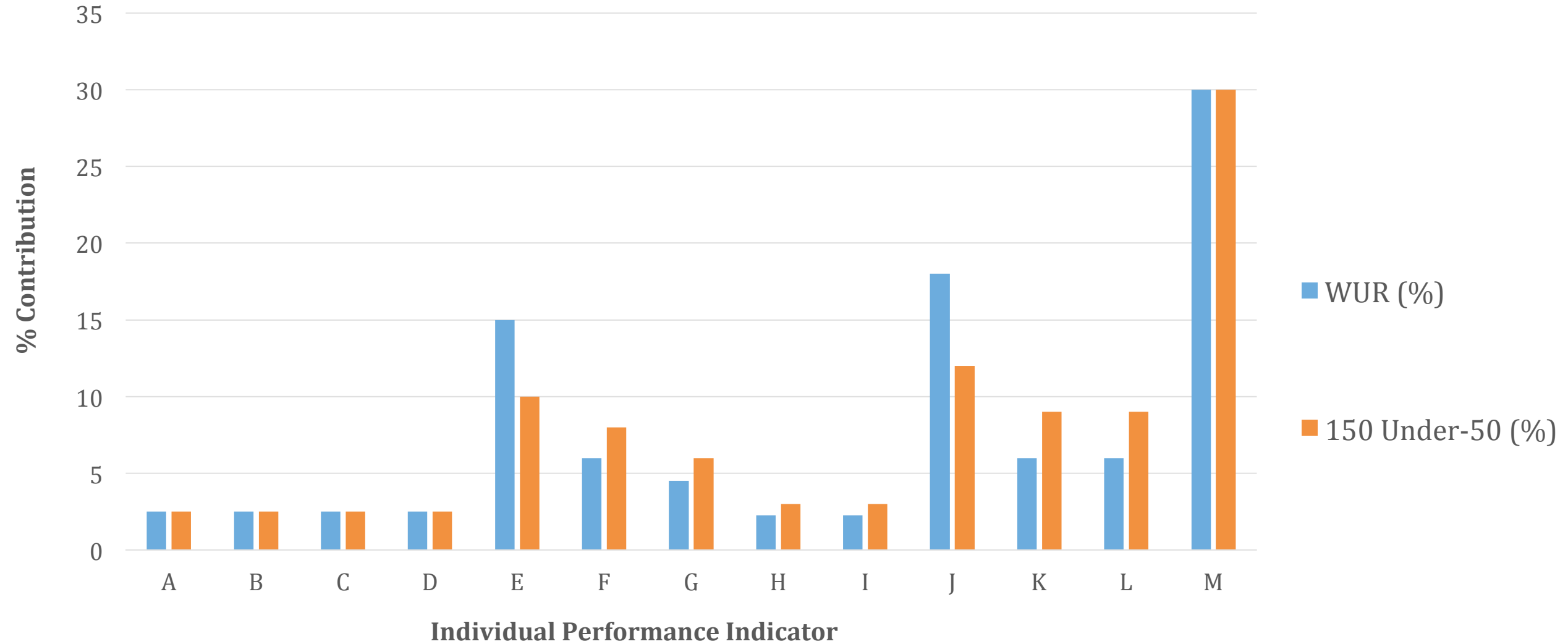


Fig. 1: Changes in *THE* Ranking Methodology in Favor of Young Universities



# Changes in *THE* World University Rankings

- *THE Under 50 Rankings* use the same 13 performance indicators as World University Rankings, but give less weight to *reputation* and more to *research productivity* and *income*
- Universities are excluded from the 150 Under-50 if they do not teach undergraduates or if their research output amounted to fewer than 1,000 articles between 2010 and 2014 (200 a year)





# Changes in *THE* World University Rankings

- Dynamic nature of *THE 150 Under 50 Ranking*
  - Designed to celebrate the achievements of young institutions that have made a big impact on the world stage in years rather than centuries, and to highlight future rising stars
  - This year, 3 members of last year's top 10 (UC, Irvine and UC, Santa Cruz, as well as the University of Warwick), were eliminated because they were all founded in 1965

# Approaches to Achieving WCU Status

1. Transition from a predominantly teaching university to a research university
2. Proper *leadership* and *vision* can drastically improve the quality of teaching and research in existing research universities.
3. A faster and more effective approach to achieving world-class status is by starting new Institutions if the following conditions are present from the start:
  - Availability of academic *talent*;
  - Availability of financial *resources*;
  - Responsible *governance*: particularly autonomy and academic freedom

# Approach for Realization of Vision 10:2022

- **Transition to a full Research University** within five (5) years
  - ETH Zurich – Swiss Federal Institute of Technology Zurich’s outstanding performance in the 2016 THE WUR was chiefly driven by strong research income and its research influence scores.

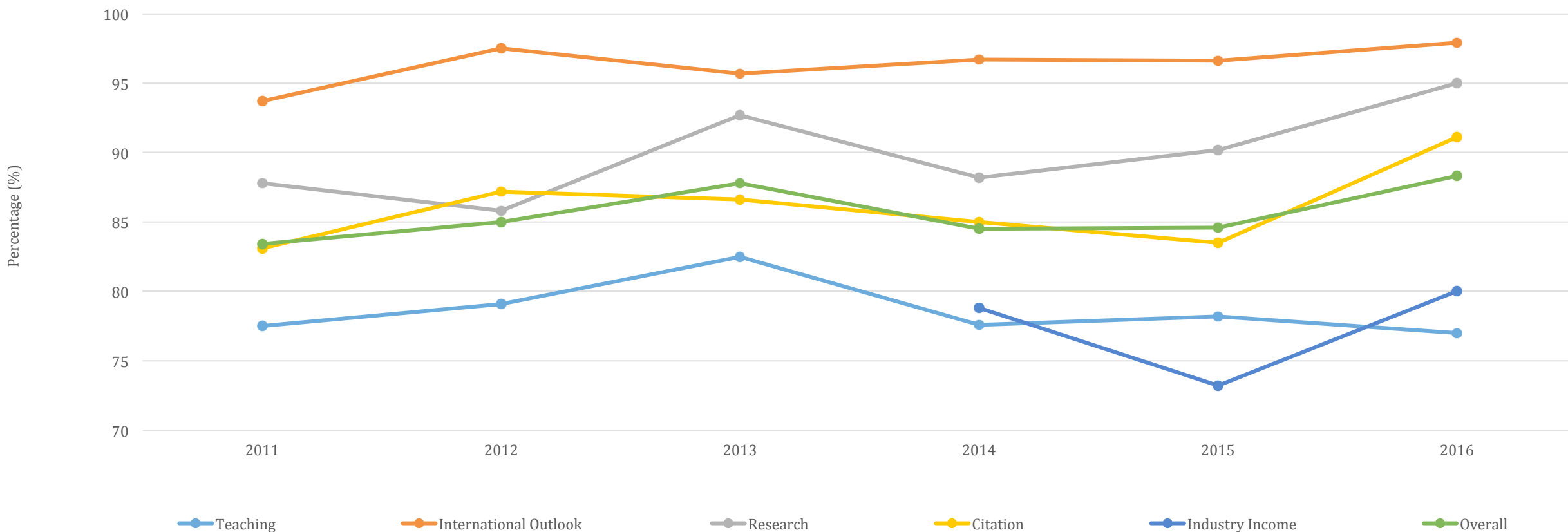
**Table 5: Correlation Analysis of Performance Breakdown of ETH Zurich over Six (6) Years**

	<i>Teaching</i>	<i>International Outlook</i>	<i>Research</i>	<i>Citation</i>	<i>Industry Income</i>	<i>Overall</i>
<b>Teaching</b>	1					
<b>International Outlook</b>	-0.1298	1				
<b>Research</b>	0.1333	0.2498	1			
<b>Citation</b>	-0.0018	0.7027	0.5932	1		
<b>Industry Income</b>	-0.9367	0.6880	0.3889	0.7688	1	
<b>Overall</b>	0.3949	0.4873	<b>0.8487</b>	0.8358	0.6183	1

# ReCITE Approach for Realization of Vision 10:2022

- **Transition to a full Research University** within five (5) years
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Fig. 2: Performance Breakdown of ETH Zurich Scores on *THE* Rankings over Six (6) Years



# ***ReCITe* Approach for Realization of Vision 10:2022**

- Strategic Lessons From ETH Zurich
  - Nurturing Staff and Students
  - Encouraging autonomy through a ***“lean” Mgt. System***
  - Providing resources to enable researchers to come up with ***“new, risky ideas”***

# ***ReCITE* Approach for Realization of Vision 10:2022**

- Lessons From *Pohang University of Science and Technology*'s rise to global excellence ***in just three decades*** are:
  - ***Only 320 students*** admitted annually
  - Continuous ***recruitment*** and ***retention*** of ***world-class*** scientists and engineers;
  - Very ***robust endowment***:
    - POSCO, one of the world's largest steel companies
  - ***Cutting-edge research*** infrastructure and environment
  - ***Advanced research*** and providing high-quality education to dedicated ***top-class talent*** with a clear vision

# ***ReCITe* Approach for Realization of Vision 10:2022**

- Sourcing World-Class Research Scholars for identified *Niche* programmes
  - ***Good track record of sourcing and winning grants***
  - Preferably of Nigerian origin
  - Elite Professors with all the necessary accolades
  - Not necessarily with immediate relocation
  - Visit *CU* once in a year for a minimum of three (3) months

# ***ReCITe Approach for Realization of Vision 10:2022***

- Setting procedure to ensure that within five (5) years, a considerable part of the university ***revenue*** comes ***from grants won by Faculty***
  - After breaking into the top 200 last year, Russia's number one – Lomonosov Moscow State University – now sits in joint 161st, largely because of ***increases in industry income*** and ***research income per member of staff***



# ***ReCITE* Approach for Realization of Vision 10:2022**

- Deliberately maintain small size with a gradual ***decrease*** in the ***UG student population***
  - Postgraduate-to-Undergraduate ratio of 2:1 in three (3) years
  - Ripple effects on Industry income and patents
  - ***Extremely selective student enrollment policy***
  - Admission of only best brains by benchmarking with current WCU standards
  - ***Re-definition of Postgraduate programme*** to conform to WCU best practices, especially in the admission process
  - Introduction of GRE/GMAT level assessment as admission requirement

# ***ReCITe* Approach for Realization of Vision 10:2022**

- Gradual realization of an overall *Student:Staff* Ratio (SSR) of 7:1 across all programmes
  - Strict adherence to established grading policy
  - Pegging of Undergraduate intake from next academic session
  - Strict adherence to all established Senate decisions on promotion (or otherwise)

# ***ReCITe* Approach for Realization of Vision 10:2022**

- ***Extremely*** selective academic recruitment and progression policy
- Scientific identification and development of Covenant's core areas of natural competencies to create a *niche* for the university

# *ReCITe* Approach for Realization of Vision 10:2022

- Increasing the visibility and accessibility of created/acquired knowledge
  - Tables 4, 6, 7 show ‘Research indicators’ effect on *THE* WUR the ranking

**Table 6: Correlation Analysis of Performance Breakdown of *THE* Top 150 in 2016**

	<i>Teaching</i>	<i>International Outlook</i>	<i>Research</i>	<i>Citation</i>	<i>Industry Income</i>	<i>Overall</i>
<b>Teaching</b>	1					
<b>International Outlook</b>	-0.0483	1				
<b>Research</b>	0.8822	0.0602	1			
<b>Citation</b>	0.2950	0.0349	0.2306	1		
<b>Industry Income</b>	0.0967	-0.0500	0.1626	-0.2152	1	
<b>Overall</b>	<b>0.9196</b>	0.1471	<b>0.9260</b>	<b>0.5207</b>	0.1015	1

# *ReCITE* Approach for Realization of Vision 10:2022

- Australia did a lot to improve its universities in the past 5 years by
  1. *increasing research funding*
  2. *attracting top researchers from all over the world*
- RMIT University, University of Canberra and University of Southern Queensland entered the list of 2016 THE Ranking for the first time

**Table 7: Correlation Analysis of Performance Breakdown of Top 150 Under-50 in 2016**

	<i>Teaching</i>	<i>International Outlook</i>	<i>Research</i>	<i>Citation</i>	<i>Industry Income</i>	<i>Overall</i>
<b>Teaching</b>	1					
<b>International Outlook</b>	-0.1350	1				
<b>Research</b>	0.5971	0.0899	1			
<b>Citation</b>	-0.0106	0.0792	-0.0813	1		
<b>Industry Income</b>	0.4342	-0.0621	0.6277	0.0739	1	
<b>Overall</b>	0.6359	0.2355	<b>0.6997</b>	0.5867	0.5501	1

# ***ReCITe* Approach for Realization of Vision 10:2022**

- Increasing research visibility and accessibility
  - ***Elastic budget*** for high impact, open access (OA) publications
  - Sponsorship of conferences with ***Scopus/WoK OA Proceedings***
  - Discouraging submission of articles to subscription-only publication outlets
  - Uploading of **all** CU-hosted conferences to university repository with *CC OA License*
  - Educating Faculty on proper outlets for dissemination of groundbreaking research findings
  - Set up a unit saddled with conference/workshop organization

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# ***ReCITe* Approach for Realization of Vision 10:2022**

- Revisiting the Appointment and Promotion criteria with a view to enhancing the reward of research excellence
  - Creation of special section for purely research Professors
  - Enhancing collaborations with *WCUs*



# ***ReCITE* Approach for Realization of Vision 10:2022**

- Transition from classic instructional pedagogy to problem-based learning (PBL) pedagogy approach
  - Maastricht University (*4<sup>th</sup> in THE 150 Under 50 rankings*) attributes its success to its **problem-based learning strategy**, modelled on the approach at ***Canada's McMaster University***
    - ✓ Students are “motivated to learn” and will “challenge” their tutors

# ***ReCITe* Approach for Realization of Vision 10:2022**

- Regular capacity building events for the management team
- Promoting *fundamental* and *curiosity-driven* exploration
- Re-invigoration of university's endowment drive
  - *e.g.* to the former Centre for Wealth Creation
- Identifying key areas on which to concentrate the university's research and resources

*ReCITE:*  
Vision 10:2022  
1-of-10-in-10  
A Prophetic Verdict

***Thank  
You!***