

## RR 59 – Appendix B:

This appendix includes the three tables mentioned in the article. They make the following comparisons using the Tradition and Open editions of CWT Leiden 2023

Table 1 – Scientific Impact – A comparison of the top three world universities for the three metric categories for the World and East Asia, excluding mainland China

Scientific Impact Traditional					Scientific Impact using OpenAlex				
University	Rank	Publications	Rank	Top 10 %	University	Rank	Publications	Rank	Top 10 %
Harvard	1	36,355	6	20.0	Harvard	1	42433	8	19.9
Shanghai	3	31,789	331	11.3	SHJT	2	31433	209	12.8
Zhejiang	2	33,090	231	12.1	Zhejiang	3	28236	121	13.9
U Toronto	5	25,295	114	13.6	U Toronto	4	27881	142	13.5
Sichuan	4	25,356	660	9.5	Sichuan	5	25150	459	10.9
Tsinghua	8	23,152	51	15.1	Tsinghua	8	23751	44	15.8
Stanford	21	17,958	5	20.4	Stanford	14	21161	7	20%
MIT	79	10,540	2	23.3	MIT	94	10548	2	23.6
UC Berkeley	96	9,668	7	19.9	UC Berkeley	112	9927	5	20.1
Princeton	280	5,308	3	22.2	Princeton	280	5754	3	22.7
CalTech	288	5,184	4	20.7	Cal Tech	282	5740	4	20.2
Rockefeller	1383	826	1	31.0	Rockefeller	1351	1351	1	28.7

### Top 5 in each Category in the Asia rankings, without mainland China and Israel

Scientific Impact Traditional					Scientific Impact using OpenALEX				
University	Rank	Publications	Rank	Top 10 %	University	Rank	Publications	Rank	Top 10 %
Ntl Seoul U	13	19287	311	7.8	Ntl Seoul U	9	19512	264	9.1
U Tokyo	18	1590	225	9.0	U Tokyo	13	17776	276	8.9
Ntl Singapore	23	13855	6	16.6	Ntl Singapore	18	16098	9	16.7
Yonsei U	27	12542	315	7.8	Yonsei	24	13228	238	9.4
Kyoto	30	11745	341	7.8	Kyoto	26	12835	393	7.6
Nanyang Tech	39	10132	4	17.5	Nanyang Tech	37	11308	7	18.1
U Hong Kong	54	8769	27	13.6	U Hong Kong	31	12135	18	15.4
H K Polytech	63	7545	8	16.3	H K Polytech	54	8591	6	18.3
HKUST	146	4166	7	16.5	HKUST	269	2520	5	18.4
King Abdullah	175	3604	1	18.7	King Abdullah	172	3946	4	18.8
Duy Tan U (VI)	460	1141	5	17.1	Duy Tan U (VN)	504	1209	3	18.8

RESULTS: While the orders may be different the top five in both categories are similar

Table 2 – Comparing the percent of open access articles in the different OA categories on a subset of ten universities in the middle of the ranking list.

TABLE 2: Comparing Open and Traditional Open Access Rankings - 2023: Different shades of OA								
Using universities in the middle of the CWTS Range for Overall Open OA Rankings 470-939								
Patterns of OA options changed with some universities, moving away from Bronze								
WORLD				Overall	GOLD	HYBRID	BRONZE	GREEN
Scientific	OPEN Overall			Percent				
Impact Rank				OA				
					Univ Gondar	Tilburg Univ	La Laguna	Bilkent Univ
91	1	Univ Groningen	NL	96.4				
<b>580</b>	<b>470</b>	Univ Castilla-la Mancha	SP	62.8	<b>307</b>	<b>722</b>	971	<b>291</b>
<b>768</b>	<b>522</b>	Univ Oregon	US	61.5	1262	<b>570</b>	<b>111</b>	230
<b>531</b>	<b>574</b>	Kansas State Univ	US	60.3	<b>644</b>	<b>301</b>	310	<b>635</b>
314	<b>626</b>	Postgrad Inst Med Educ & res	IN	59	422	1098	<b>88</b>	<b>640</b>
304	<b>678</b>	Univ Buffalo SUNY	US	57.7	1140	<b>477</b>	<b>199</b>	321
<b>733</b>	<b>730</b>	Tokyo Univ Science	JP	56.1	<b>537</b>	<b>412</b>	<b>513</b>	<b>744</b>
199	<b>782</b>	Univ Adelaide	AU	54	<b>929</b>	<b>683</b>	<b>214</b>	<b>494</b>
107	<b>832</b>	Sungkyunkwan Univ	KR	52.4	<b>216</b>	<b>918</b>	<b>794</b>	962
1033	<b>886</b>	Univ Canberra	AU	49.8	<b>875</b>	<b>784</b>	<b>531</b>	<b>502</b>
270	<b>939</b>	Univ Sains Malaysia	MY	47.6	<b>240</b>	1293	<b>841</b>	1091
<b>918</b>	1411	Natl Ins Tech Silchar	IN	14.1	1409	1244	<b>1155</b>	1244
Impact	TRADITIONAL Overall			%	GOLD	HYBRID	BRONZE	GREEN
					Univ Gondar	Tilburg Univ	La Laguna	Bilkent Univ
112	1	Groningen	NL	95.0				
<b>571</b>	456	Univ Castilla-la Mancha	BZ	62.4	<b>259</b>	<b>755</b>	<b>898</b>	382
<b>741</b>	459	Univ Oregon	US	62.3	1105	344	<b>170</b>	233
<b>540</b>	<b>558</b>	Kansas State	US	59.2	<b>650</b>	303	<b>252</b>	<b>599</b>
<b>669</b>	1034	Postgrad Inst Med Educ & res	IN	42.0	<b>881</b>	1072	<b>319</b>	<b>807</b>
293	<b>666</b>	Univ Buffalo SUNY	US	56.0	1107	<b>636</b>	<b>206</b>	321
<b>733</b>	<b>807</b>	Tokyo Univ Science	JP	51.6	<b>740</b>	417	<b>416</b>	<b>721</b>
220	<b>762</b>	Univ Adelaide	AU	53.1	<b>875</b>	<b>558</b>	<b>340</b>	<b>510</b>
93	<b>852</b>	Sungkyunkwan Univ	KR	50.2	<b>251</b>	<b>878</b>	<b>697</b>	979
1353	<b>812</b>	Univ Canberra	AU	51.4	<b>833</b>	<b>646</b>	<b>492</b>	<b>509</b>
401	967	Univ Sains Malaysia	MY	43.3	<b>258</b>	1194	1162	978
1064	<b>1411</b>	Inst Chem Technol	IN	12.2	1379	<b>1164</b>	1400	1273
GOLD: Publications in open access journals								
HYBRID: Publications in subscription journals with license to reuse								
Bronze: Publications in subscription journals without license to reuse								
Green: Publications in subscription journal stored in a repository								
Highlighted rankings show changes between the two versions								

Table 3 – Comparing the top five universities in Scientific impact articles and proportion of articles in top 10% of their field to other rankings.

The table includes CWTS top five universities for Scientific Impact using total publications. They are the same in both versions. It also includes the top five in proportion of publications in the top 10 percent of their field. There was one difference as shown below. CWTS does not have a composite score. The other rankings on this list have a composite score. They also have some measurement of scholarly output. Using CWTS publications, the results are different from other rankings except Harvard. The top 10 % show more overlap with other top 10 universities than using publications, which is CWTS Leiden's default. The versions have similar results.

**TABLE 59. 3: Comparing CWTS Leiden's World Rankings with other World Rankings**

Scientific Impact reflecting both versions			THE	QS	ARWU	NTU	Scimago	US News Global	Webometrics
	Pubs	Top 10 %	2024	2024	2023	2023	2024	2023	2024
# of universities	1411	1411	1906	1498	1000	1000	4762	2165	11989
Harvard	1	8	4	4	1	1	1	1	1
SHJT	2	209	52	51	46	19	7	89	60
Zhejiang	3	121	67	44	33	13	5	93	57
U Toronto	4	142	18	21	24	5	17	18	16
Sichuan	5	459	196	355	101-	73	27	304	187
Stanford *	14	7	2	1	2	2	6	3	2
Oxford	18	18	1	3	7	4	9	5	4
Cambridge	32	19	5	2	4	9	19	8	12
MIT	94	2	3	1	3	8	10	2	3
UC Berkeley *	112	5	9	10	5	26	26	4	6
Princeton	280	3	6	17	6	38	49	16	26
Caltech	282	4	7	15	8	97	47	9	63
Rockefeller	1351	1			39	61	318	103	

NOTE: Most recent rankings as of March 9 2024  
 \*Stanford and Berkeley switched rankings in the two versions.

URLs:

THE World University Rankings	<a href="https://www.timeshighereducation.com/world-university-rankings">https://www.timeshighereducation.com/world-university-rankings</a>
QS World University Rankings	<a href="https://www.topuniversities.com/world-university-rankings">https://www.topuniversities.com/world-university-rankings</a>
Academic Rankings of World Universitates	<a href="https://www.shanghairanking.com/rankings/arwu/2023">https://www.shanghairanking.com/rankings/arwu/2023</a>
NTU Rankings: Performance rankings of Scientific papers for World Universities	<a href="http://nturanking.csti.tw/ranking/OverallRanking/">http://nturanking.csti.tw/ranking/OverallRanking/</a>
SCIMAGO Institutions Rankings	<a href="https://www.scimagoir.com/rankings.php?sector=Higher%20educ">https://www.scimagoir.com/rankings.php?sector=Higher%20educ</a>
US News Best Global Universities	<a href="https://www.usnews.com/education/best-global-universities/rankings">https://www.usnews.com/education/best-global-universities/rankings</a>
Webometrics Ranking Web of Universities	<a href="https://www.webometrics.info/en/world">https://www.webometrics.info/en/world</a>