

**This is the SUPPLEMENTARY MATERIAL for
Focused Research on the Challenges and Productivity of Researchers in
Nigerian Academic Institutions without Funding**

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Correspondence:
Stanley I.R. Okoduwa
siroplc@gmail.com

Highlight of the Tertiary and Academic Research Institutions in Nigeria

The strategic players in research and development (R&D) in Nigeria are the research-focused institutions, tertiary education system, private research establishments, and government agencies with R&D mandates. Presently, there are 197 universities (NUC, 2021a,b,c) with varying capacities for pure and applied R&D, 140 polytechnics with modest capacities in applied research (NBTE, 2021a,b,c), 89 colleges and specialized technological institutions (NCCE, 2021), 25 monotechnics (NBTE, 2021a,b,c), and 66 research institutes (FMARD, 2021; Nigerian Guide, 2021) with R & D programs targeted at the different sectors of the economy with a few recording some measure of success in product and process innovation. A simple random sampling of these institutions was conducted in a focused research in order to examine the challenges and productivity of researchers in Nigerian academic institutions without funding. The findings obtained in the research is documented in the main article which is available at doi: 10.3389/frma.2021.727228

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STATISTICS OF TERTIARY ACADEMIC INSTITUTIONS IN NIGERIA

Table S1 | Summary of the Tertiary Academic Institutions in Nigeria

	Universities	Polytechnics	Monotechnics	Colleges of Education
Federal	45	31	21	22
State	53	48	2	47
Private	99	61	2	20
TOTAL	197	140	25	89

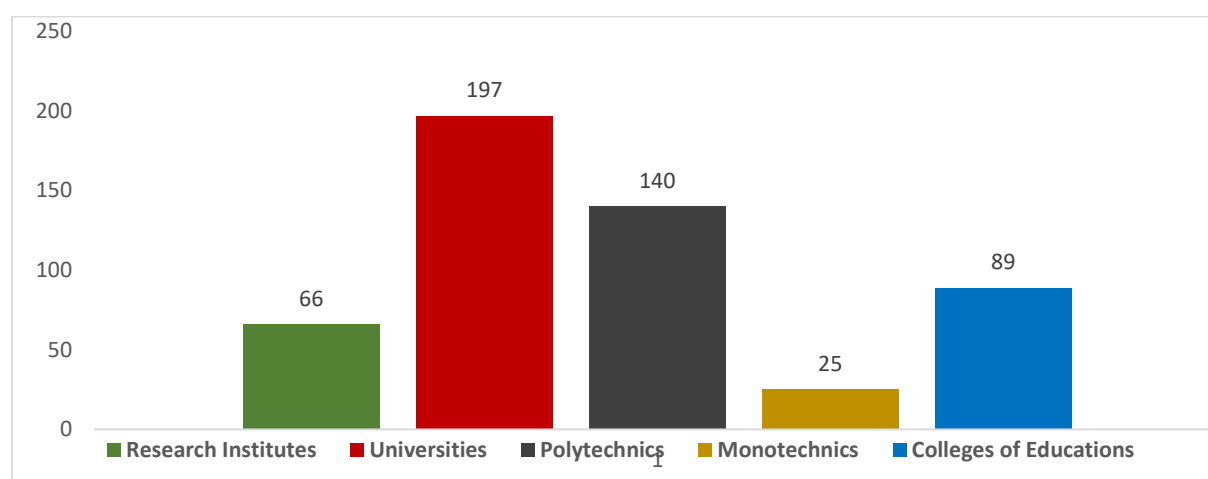


FIGURE S1 | Distribution of tertiary academic institutions in Nigeria

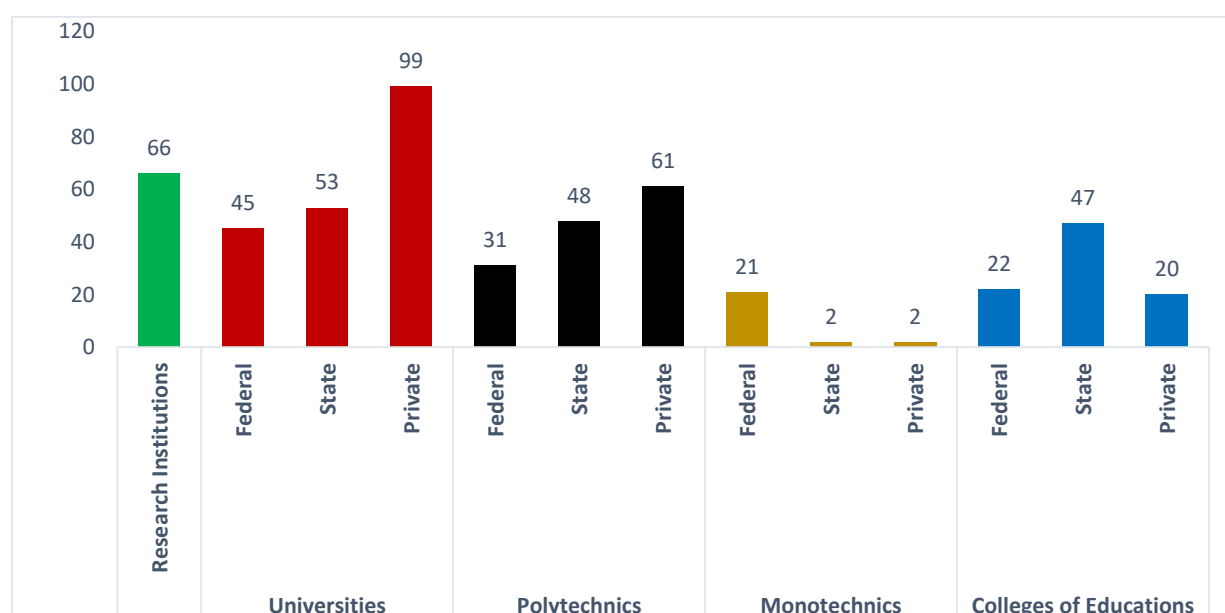


Figure S2 | Statistics of the Tertiary Academic Institutions in Nigeria

Table S2 | List of Research Institutions in Nigeria (CWN, 2021; FMARD, 2021; Nigerian Guide, 2021)

S/N	Names of Research Institutions in Nigeria
1	Agricultural Research Council of Nigeria (ARCN)
2	Agricultural Rural Management Training Institute (ARMTI), Ilorin
3	Animal Health Research Institutes (AHRI)
4	Animal Production, Fisheries and Oceanography Research Institutes (APFORI)
5	Arable Crops Research Institutes (ACRI)
6	Center for Energy Research and Development (CERD)
7	Centre for Energy Research and Training (CERT)
8	Centre for Management Development (CMD)
9	Cocoa Research Institute of Nigeria, Ibadan, (CRIN), Oyo
10	Energy Commission of Nigeria (ECN)
11	Federal College of Freshwater Fisheries Technology, (FCFFT) New Bussa
12	Federal Institute of Industrial Research (FIIRO), Oshodi, Lagos
13	Federal Ministry of Agriculture (FMA)
14	Federal Ministry of Science, Technology and Innovation (FMSTI)
15	Federal Ministry of Water Resources (FMWR)
16	Forestry Research Institute of Nigeria (FRIN), Ibadan
17	Forestry, Horticulture and Tree Crops Research Institutes (FHTCRI)
18	Institute for Advanced Medical Research and Training (IAMRT)
19	Institute for Agricultural Research (IAR)
20	Institute of Agricultural Research & Extension Services, (IAR & ES) Ahmadu Bello University, Zaria
21	Institute of Agricultural Research & Training, (IAR & T) Obafemi Awolowo University, Ibadan
22	Institute of Archaeology and Museum Studies (IAMS)
23	Institute of Chartered Chemists of Nigeria (ICCON)
24	Institute of Child Health (ICH)
25	Institute of Human Virology (IHV), Abuja
26	Institute of Operations Research of Nigeria (INFORN)
27	International Institute of Tropical Agriculture (IITA)
28	International Livestock Research Institute (ILRI)
29	Lake Chad Research Institute (LCRI)
30	National Agency for Food and Drug Administration and Control (NAFDAC)
31	National Agency for Science & Engineering Infrastructure (NASENI), Abuja
32	National Agricultural Extension Research and Liaison Services (AERLS)
33	National Animal Production Research Institute, (NAPRI) Zaria
34	National Center for Agricultural Mechanization (NCAM)
35	National Center for Energy Research and Development (NCERD)
36	National Center for Technology Management (NCTM)
37	National Centre for Genetic Resources and Biotechnology (NACGRAB)
38	National Cereals Research Institute (NCRI)
39	National Horticultural Research Institute (NIHORT)
40	National Institute for Pharmaceutical Research and Development (NIPRD)
41	National Institute of Freshwater Fisheries Research, New Bussa
42	Nigerian Institute of Leather and Science Technology (NILEST)
43	National Research Institute for Chemical Technology (NARICT)

44	National Root Crops Research Institute (NRCI)
45	National Space Research and Development Agency (NASRDA)
46	National Veterinary Research Institute (NVRI)
47	Nigeria Institute of Science Laboratory (NISLT)
48	Nigerian Academy of Science (NAS)
49	Nigerian Building and Road Research Institute (NBRRI)
50	Nigerian Educational Research Council (NERC)
51	Nigerian Institute for Oceanography and Marine Research (NIOMR)
52	Nigerian Institute for Oil Palm Research (NIFOR), Benin City Edo State
53	Nigerian Institute for Trypanosomiasis Research (NITR)
54	Nigerian Institute of Food Science and Technology (NIFST)
55	Nigerian Institute of Medical Research (NIMR)
56	Nigerian Institute of Social and Economic Research (NISER)
57	Nigerian Stored Products Research Institute (NSPRI)
58	Projects Development Institute (PRODA)
59	Raw Materials Research and Development Council (RMRDC)
60	Research Institutes Organisations in Nigeria (RION)
61	Rubber Research Institute of Nigeria (RRIN), Iyanomo, Benin City Edo State
62	Scientific Equipment Development Institute (SEDI-E)
63	Sheda Science and Technology Complex (SHESTCO)
64	Social Sciences Academy of Nigeria (SSAN)
65	Sokoto Energy Research Centre (SERC)
66	Unilorin Sugar Research Institute (USRI)

Table S3 | List of Federal Universities in Nigeria (NUC, 2021a)

S/N	Names of Federal Universities in Nigeria	Year Established
1	Abubakar Tafawa Balewa University, (ATBU) Bauchi	1988
2	Ahmadu Bello University, (ABU) Zaria	1962
3	Bayero University, Kano	1975
4	Federal University Gashua, Yobe	2013
5	Federal University of Petroleum Resources, Effurun	2007
6	Federal University of Technology, Akure	1981
7	Federal University of Technology, Minna	1982
8	Federal University of Technology, Owerri	1980
9	Federal University, Dutse, Jigawa State	2011
10	Federal University, Dutsin-Ma, Katsina	2011
11	Federal University, Kashere, Gombe State	2011
12	Federal University, Lafia, Nasarawa State	2011
13	Federal University, Lokoja, Kogi State	2011
14	Federal University, Ndifu-Alike, Ebonyi State	2011
15	Federal University, Otuoke, Bayelsa	2011
16	Federal University, Oye-Ekiti, Ekiti State	2011
17	Federal University, Wukari, Taraba State	2011
18	Federal University, Birnin Kebbi	2013
19	Federal University, Gusau Zamfara	2013
20	Michael Okpara University of Agricultural Umudike	1992

21	Modibbo Adama University of Technology, Yola	1981
22	National Open University of Nigeria, Lagos	2002
23	Nigeria Police Academy Wudil	2013
24	Nigerian Defence Academy Kaduna	1985
25	Nnamdi Azikiwe University, Awka	1992
26	Obafemi Awolowo University, Ile-Ife	1962
27	University of Abuja, Gwagwalada	1988
28	Federal University of Agriculture, Abeokuta	1988
29	University of Agriculture, Makurdi	1988
30	University of Benin	1970
31	University of Calabar	1975
32	University of Ibadan	1948
33	University of Ilorin	1975
34	University of Jos	1975
35	University of Lagos	1962
36	University of Maiduguri	1975
37	University of Nigeria, Nsukka	1960
38	University of Port-Harcourt	1975
39	University of Uyo	1991
40	Usumanu Danfodiyo University	1975
41	Nigerian Maritime University Okerenkoko, Delta State	2018
42	Air Force Institute of Technology, Kaduna	2018
43	Nigerian Army University Bui	2018
44	University of Health Technology, Otukpo Benue State	2020
45	Federal University of Agriculture, Zuru, Kebbi State	2020

Table S4 | List of State Universities in Nigeria (NUC, 2021c)

S/N	Names of State Universities in Nigeria	Year Established
1	Abia State University, Uturu	1981
2	Adamawa State University Mubi	2002
3	Adekunle Ajasin University, Akungba	1999
4	Akwa Ibom State University of Technology, Uyo	2010
5	Ambrose Alli University, Ekpoma	1980
6	Chukwuemeka Odumegwu Ojukwu University, Uli	2000
7	Bauchi State University, Gadau	2011
8	Benue State University, Makurdi	1992
9	Yobe State University, Damaturu	2006
10	Cross River State University of Science & Technology, Calabar	2004
11	Delta State University Abraka	1992
12	Ebonyi State University, Abakaliki	2000
13	Ekiti State University	1982
14	Enugu State University of Science and Technology, Enugu	1982
15	Gombe State University, Gombe	2004
16	Ibrahim Badamasi Babangida University, Lapai	2005
17	Ignatius Ajuru University of Education, Rumuolumeni	2010
18	Imo State University, Owerri	1992

19	Sule Lamido University, Kafin Hausa, Jigawa	2013
20	Kaduna State University, Kaduna	2004
21	Kano University of Science & Technology, Wudil	2000
22	Kebbi State University, Kebbi	2006
23	Kogi State University Anyigba	1999
24	Kwara State University, Ilorin	2009
25	Ladoke Akintola University of Technology, Ogbomoso	1990
26	Ondo State University of Science and Technology Okitipupa	2008
27	River State University of Science and Technology	1979
28	Olabisi Onabanjo University, Ago Iwoye	1982
29	Lagos State University, Ojo	1983
30	Niger Delta University Yenagoa	2000
31	Nasarawa State University Keffi	2002
32	Plateau State University Bokokos	2005
33	Tai Solarin University of Education Ijebu Ode	2005
34	Umar Musa Yar' Adua University Katsina	2006
35	Osun State University Osogbo	2006
36	Taraba State University, Jalingo	2008
37	Sokoto State University	2009
38	Northwest University Kano	2012
39	Oyo State Technical University Ibadan	2012
40	Ondo State University of Medical Sciences	2015
41	Edo University Iyamo	2016
42	Eastern Palm University Ogboko, Imo State	2016
43	University of Africa Toru Orua, Bayelsa State	2016
44	Bornu State University, Maiduguri	2016
45	Moshood Abiola University of Science and Technology Abeokuta	2017
46	Gombe State University of Science and Technology	2017
47	Zamfara State University	2018
48	Bayelsa Medical University	2019
49	Confluence University of Science and Technology, Osara,	2020
50	University of Delta, Agbor	2021
51	Delta University of Science and Technology, Ozoro	2021
52	Dennis Osadebe University, Asaba	2021
53	King David University of Medical Sciences, Uburu, Ebonyi State	2021

Table S5 | List of Private Universities in Nigeria (NUC, 2021b)

S/N	Names of Private Universities in Nigeria	Year Established
1	Achievers University, Owo	2007
2	Adeleke University, Ede	2011
3	Afe Babalola University, Ado-Ekiti – Ekiti State	2009
4	African University of Science & Technology, Abuja	2007
5	Ajayi Crowther University, Ibadan	2005
6	Al-Hikmah University, Ilorin	2005

7	Al-Qalam University, Katsina	2005
8	American University of Nigeria, Yola	2003
9	Augustine University	2015
10	Babcock University, Ilishan-Remo	1999
11	Baze University	2011
12	Bells University of Technology, Otta	2005
13	Benson Idahosa University, Benin City	2002
14	Bingham University, New Karu	2005
15	Bowen University, Iwo	2001
16	Caleb University, Lagos	2007
17	Caritas University, Enugu	2005
19	Chrisland University	2015
20	Covenant University Ota	2002
21	Crawford University Igbesa	2005
22	Crescent University	2005
23	Edwin Clark University, Kaigbodo	2015
24	Elizade University, Ilara-Mokin	2012
25	Evangel University, Akaeze	2012
26	Fountain Unveristy, Oshogbo	2007
27	Godfrey Okoye University, Ugwuomu-Nike – Enugu State	2009
28	Gregory University, Uturu	2012
29	Hallmark University	2015
30	Hezekiah University, Umudi	2015
31	Igbinedion University Okada	1999
32	Joseph Ayo Babalola University, Ikeji-Arakeji	2006
33	Kings University	2015
34	Kwararafa University, Wukari	2005
35	Landmark University, Omu-Aran.	2011
36	Lead City University, Ibadan	2005
37	Madonna University, Okija	1999
38	Mcpherson University, Seriki Sotayo, Ajebo	2012
39	Micheal & Cecilia University	2015
40	Mountain Top University	2015
41	Nile University of Nigeria, Abuja	2009
42	Novena University, Ogume	2005
43	Obong University, Obong Ntak	2007
44	Oduduwa University, Ipetumodu – Osun State	2009
45	Pan-Atlantic University, Lagos	2002
46	Paul University, Awka – Anambra State	2009
47	Redeemer's University, Mowe	2005
48	Renaissance University, Enugu	2005
49	Rhema University, Obeama-Asa – Rivers State	2009
50	Ritman University	2015
51	Salem University, Lokoja	2007
52	Samuel Adegboyega University, Ogwa.	2011
53	Southwestern University, Oku Owa	2012
54	Summit University	2015
55	Tansian University, Umunya	2007

56	University of Mkar, Mkar	2005
57	Veritas University	2007
58	Wellspring University, Evbuobanosa – Edo State	2009
59	Wesley University. of Science & Technology, Ondo	2007
60	Western Delta University, Oghara Delta State	2007
61	Christopher University Mowe	2015
62	Kola Daisi University Ibadan, Oyo State	2016
63	Anchor University Ayobo Lagos State	2016
64	Dominican University Ibadan Oyo State	2016
65	Legacy University, Okija Anambra State	2016
66	Arthur Jarvis University Akpoyubo Cross river State	2016
67	Cn Hill University Eiyenkorin, Kwara State	2016
68	Coal City University Enugu State	2016
68	Clifford University Owerinta Abia State	2016
69	Admiralty University, Ibusa Delta State	2017
70	Spiritan University, Nneochi Abia State	2017
71	Precious Cornerstone University, Oyo	2017
72	PAMO University of Medical Sciences, Portharcourt	2017
73	Atiba University Oyo	2017
74	Eko University of Medical and Health Sciences Ijanikin, Lagos	2017
75	Skyline University, Kano	2018
76	Greenfield University, Kaduna	2019
77	Dominion University Ibadan, Oyo State	2019
78	Trinity University Ogun State	2019
79	Westland University Iwo, Osun State	2019
80	Topfaith University, Mkpatak, Akwa Ibom State	2021
81	Thomas Adewumi University, Oko-Irese, Kwara State	2021
82	Maranatha University, Mgbidi, Imo State	2021
83	Ave Maria University, Piyanko, Nasarawa State	2021
84	Al-Istiqama University, Sumaila, Kano State	2021
85	Mudiame University, Irrua, Edo State	2021
86	Havilla University, Nde-Ikom, Cross River State	2021
87	Claretian University of Nigeria, Nekede, Imo State	2021
88	NOK University, Kachia, Kaduna State	2021
89	Karl-Kumm University, Vom, Plateau State	2021
90	James Hope University, Lagos, Lagos State	2021
91	Maryam Abacha American University of Nigeria, Kano State	2021
92	Capital City University, Kano State	2021
93	Ahman Pategi University, Kwara State	2021
94	University of Offa, Kwara State	2021
95	Mewar University, Masaka, Nasarawa State	2021
96	Edusoko University, Bida, Niger State	2021
97	Philomath University, Kuje, Abuja	2021
98	Khadija University, Majia, Jigawa State	2021
99	Anan University, Kwall, Plateau State	2021

Table S6 | List of Federal Polytechnics in Nigeria (NBTE, 2021a)

S/N	Names of Federal Polytechnics in Nigeria	Year Established
1	Akanu Ibiam Federal Polytechnic Unwana, Afikpo, Ebonyi State.	1981
2	Auchi Polytechnic, Auchi, Edo State.	1973
3	Federal Polytechnic Ado Ekiti, Ekiti State.	1977
4	Federal Polytechnic Bali, Taraba State.	2007
5	Federal Polytechnic Bauchi, Bauchi State.	1979
6	Federal Polytechnic Bida, Niger State.	1977
7	Federal Polytechnic Damaturu, Yobe State.	1993
8	Federal Polytechnic, Daura, Katsina State	2019
9	Federal Polytechnic Ede, Osun State.	1992
10	Federal Polytechnic Ekowe, Bayelsa State	2007
11	Federal Polytechnic Idah, Kogi State.	1977
12	Federal Polytechnic Ilaro, Ogun State.	1979
13	Federal Polytechnic Ile-Oluji, Ondo State	2016
14	Federal Polytechnic Kaura Namoda, Zamfara State.	1983
15	Federal Polytechnic Kaltungo, Gombe State	2019
16	Federal Polytechnic Mubi, Adamawa State.	1979
17	Federal Polytechnic Nasarawa, Nasarawa State.	1983
18	Federal Polytechnic Nekede, Owerri, Imo State.	1977
19	Federal Polytechnic Offa, Kwara State.	1992
20	Federal Polytechnic Oko, Anambra State.	1982
21	Federal Polytechnic of Oil and Gas Bonny, Rivers State	2014
22	Federal Polytechnic Ukana, Akwa Ibom State	2014
23	Hussaini Adamu Federal Polytechnic, Kazaure Jigawa State.	1991
24	Kaduna Polytechnic, Kaduna.	1956
25	National Institute of Construction Technology Uromi	2014
26	Waziri Umaru Federal Polytechnic, Birnin Kebbi.	1976
27	Yaba College of Technology, Yaba, Lagos State.	1947
28	Airforce Institute of Technology (AFIT), NAF Base Kaduna	1977
29	Petroleum Training Institute Effurun, Effurun. Delta State	1972
30	Nigerian Army Institute of Technology and Environmental Science (NAITES) Makurdi	1960
31	Nigerian College of Aviation Technology (NCAT), Sokoto Road, Zaria,	

Table S7 | List of State Polytechnics in Nigeria (NBTE, 2021c)

S/N	Names of State Polytechnics in Nigeria	Year Established
1	Abdu Gusau Polytechnic, Talata Mafara, Talata Mafara, Zamfara State.	1992
2	Abia State Polytechnic, Aba, Abia State.	1992
3	Abraham Adesanya Polytechnic, Dogbolu/Akanran Ibadan Road, Atikori, Ijebu-Igbo, Ogun State.	2004

4	Abubakar Tatari Ali Polytechnic, Bauchi, Jos Rd, Bauchi, Bauchi State.	1988
5	Adamawa State Polytechnic, Yola, Adamawa State.	1991
6	Akwa Ibom State College of Art & Science, Nung Ukim, Akwa Ibom State.	1997
7	Akwa Ibom State Polytechnic, Ikot Osurua, Ikot -Ekpene, Akwa Ibom State.	1991
8	Bayelsa State College of Arts and Science, Elebele, Yenogoa	2002
9	Benue State Polytechnic, Ugbokolo, Ugbokolo, Benue State.	1976
10	Binyaminu Usman Polytechnic, Hadejia, Jigawa State	2016
11	D.S. Adegbenro ICT Polytechnic, Itori-Ewekoro, Ifo, Ogun State.	2004
12	Delta State Polytechnic, Ogwashi-Uku, Ogwashi-Uku, Delta State	2002
13	Delta State Polytechnic, Otefe-Oghara, Otefe-Oghara, Delta State	2002
14	Delta State Polytechnic, Ozoro, Ozoro, Delta State.	2003
15	Delta State School of Marine Technology, Burutu, Warri, Delta State.	2017
16	Edo State Institute of Technology and Management, Usen, Benin City, Edo State.	2002
17	Enugu State Polytechnic, Iwollo	2017
18	Gateway Polytechnic, Isara Ode-Remo, Ogun State.	2004
19	Hassan Usman Katsina Polytechnic (HUK), Katsina	1983
20	Ibarapa Polytechnic, Eruwa, Oyo State	2013
21	Imo State Polytechnic, Umuagwo, Ohaji, , Umuagwo, Ohaji Owerri, Imo State	1978
22	Institute of Management and Technology, Enugu, Enugu State.	1965
23	Institute of Technology and Management (ITM), Ugep, Cross River State.	2012
24	Jigawa State Polytechnic, Dutse, Jigawa State.	1991/2008
25	Kano State Polytechnic, Kano, Kano State.	1976
26	Ken Sarowiwa Polytechnic, Bori, Rivers State.	1988
27	Kogi State Polytechnic, Lokoja, Kogi State.	1993
28	Kwara State Polytechnic, Ilorin, Kwara State.	1973
29	Lagos State Polytechnic, Ikorodu, Ikeja, Lagos, Lagos State.	1977
30	Mai-Idris Aloomaa Polytechnic, Geidam, Yobe State.	2002
31	Moshood Abiola Polytechnic, Abeokuta (Converted to State University in 2017), Abeokuta, Ogun State.	1979
32	Nasarawa State Polytechnic, Lafia, Nasarawa State.	2001
33	Niger State Polytechnic, Zungeru, Niger State.	1991
34	Nuhu Bamalli Polytechnic, Zaria, Kaduna State.	1989
35	Ogun State Institute of Technology, Igbesa, Ogun State.	2004
36	Ogun State Polytechnic, Ipokia	2017
37	Oke-Ogun Polytechnic, Shaki, Oyo State	2013
38	Osun State College of Technology, Esa – Oke, Osun State.	1991
39	Osun State Polytechnic, Iree, Osun State.	1992
40	Oyo State College of Agriculture and Technology, Igbo Ora	2018
41	Plateau State Polytechnic, Barkin-Ladi, Jos, Plateau State.	1978

42	Port-Harcourt Polytechnic, Port-Harcourt,Rivers State.	1991
43	Ramat Polytechnic, Maiduguri, Borno State.	1976
44	Rufus Giwa Polytechnic, Owo, Ondo State.	1979
45	Taraba State Polytechnic, Suntai	2017
46	The Polytechnic Ibadan, Ibadan, Oyo State.	1970
47	Umaru Ali Shinkafi Polytechnic, Sokoto, Sokoto State.	2000
48	Zamfara State College of Arts and Science, Gusau	2000

Table S8 | List of Private Polytechnics in Nigeria (NBTE, 2021b)

S/N	Names of Private Polytechnics in Nigeria	Year Established
1	Al-Hikma Polytechnic Karu, Mararaba Gurku, Karu,Nasarawa	2016
2	Allover Central Polytechnic, Sango Ota Ogun State	1998/2003
3	Ajayi Polytechnic Ikere Ekiti, Ekiti State	2017
4	Ashi PolytechnicAnyiin, Benue State	2018
5	Best Solution Polytechnic, Akure Akure – Ondo State	2016
6	Bolmor Polytechnic, Dugbe, Ibadan, Oyo State	2015
7	Calvary Polytechnic, Owa-OyibuDelta State	2016
8	Citi Polytechnic Dutse-Dawaki Road Dutse Alhaji FCT	2018
9	Coastal Polytechnic,Apapa Lagos	2020
10	Covenant Polytechnic Abayi, AbaAbia State.	2010
11	Crown Polytechnic, Odo, Ekiti State	2008
12	Dorben Polytechnic, Abuja	1995/2008
13	Eastern Polytechnic Rivers State	2015
14	Enville Institute of Management and Technology, Itokin, Lagos	2019
15	Fidei Polytechnic, Gboko-Aliade Road, Benue State.	2007
16	Gboko Polytechnic, Gboko, Benue State	2016
17	Global Polytechnic, Akure, Ondo State	2016
18	Grace Polytechnic, Surulere, Lagos	1962/1999
19	Graceland Polytechnic, Offa, Kwara State	2018
20	Grundtvig Polytechnic Oba Anambra State	2019
21	Harry Pass Polytechnic Tse Usen Mkar Gboko Benue State	2020
22	Heritage Polytechnic, Ikot Udota, Eket,Akwa Ibom State	2010
23	Ibadan City Polytechnic, Ibadan Oyo	2015
24	Igbajo Polytechnic, Igbajo, Osun State.	2009
25	Interlink Polytechnic, Ijebu-Jesa, Osun State	2008
26	Kalac Christal Polytechnic, Lekki, Lagos State	2014
27	Kings Polytechnic, Ubiaja, Edo State	2010
28	Landmark Polytechnic, Ayetoro/Itele Ogun State	2018
29	Lagos City Polytechnic, Ikeja,	1990/1995
30	Lens Polytechnic, Offa, Kwara State	2016
31	Lighthouse Polytechnic, Benin City, Edo State	2008
32	Marist Polytechnic, Umuchigbo, Iji-Nike, Emene Enugu State	2016
33	Mater Dei PolytechnicUgwuoba TownOji River LGAEnugu State	2018
34	Nacabs Polytechnic, AkwangaP.M.B. 001 Akwanga, Nasarawa State	2013
35	Nogak Polytechnic, Ikom,Cross Rivers State	2012

36	Novelty Polytechnic, Kishi Kishi Oyo	2019
37	Our Saviour Institute of Science, Agriculture & Technology, Enugu State.	1989/1991
38	Prime Polytechnic, Jida Bassa, Ajaokuta, Kogi	2015
39	Redeemers College of Technology & Management, Mowe, Ogun State	2018
40	Ronik Polytechnic, Ejigbo, Ikeja, Lagos, Lagos	2001/2003
41	Saf Polytechnic, Iseyin Oyo State.	2018
42	Savanah Institute of Technology, Abakaliki, Ebonyi	2017
43	Shaka Polytechnic, Benin City, Edo State.	2013
44	Speedway Polytechnic, Osoba Ojodu, Ogun State	2019
45	St. Mary Polytechnic, Kwamba-Suleja, Niger State	2015
46	Stars Polytechnic Ota Ogun	2020
47	Southern Atlantic Polytechnic, Uyo – Akwa Ibom State	2020
48	Sure Foundation Polytechnic, Ikot Akai, Ibom State	2016
49	Temple Gate Polytechnic, Abayi, Osioma, Abia State.	2009
50	The Polytechnic, Igbo-Owu, Kwara State	2015
51	The Polytechnic, Ile-Ife, Osun State.	1994/1999
52	The Polytechnic Iresi (Formerly College of Technology, Iresi) Osun State	2014
53	The Polytechnic Otada Adoka, Otukpo, Benue State	2016
54	Timeon Kairos Polytechnic Lagos	2019
55	Tower Polytechnic, Ibadan	2010
56	Trinity Polytechnic Uyo, Akwa Ibom State	2016
57	Uma Ukpai Polytechnic, Asaga Ohafia, Abia State	2017
58	Uyo City Polytechnic, Akwa Ibom State	2014
59	Valley View Polytechnic, Ohafia Abia State	2016
60	Villanova Polytechnic, Imesi-Ile (Formerly The Polytechnic, Imesi-Ile) Osun State.	2013
61	Wolex Polytechnic, Osun State	1996/1

Table S9 | List of Federal Colleges of Education in Nigeria (NBTE, 2021a; NCCE, 2021)

S/N	Names of Federal Colleges of Education in Nigeria	Location
1	Federal College of Education (Technical), Asaba	Asaba, Delta State.
2	Federal College of Education, Kano	Kano City, Kano State.
3	Federal College of Education (Special), Oyo	Oyo, Oyo State.
4	Federal College of Education, Abeokuta	Abeokuta, Ogun State
5	Federal College of Education, Eha-Amufu	Eha Amufu, Enugu State.
6	Federal College of Education (Technical), Gombe	Gombe, Gombe State.
7	Federal College of Education, Kontagora	Kontagora, Niger State.
8	Federal College of Education, Okene	Okene, Kogi State.
9	Federal College of Education (Technical), Omoku	OMoku, Rivers State.
10	Federal College of Education (Tech), Potiskum	Potiskum, Yobe State
11	Alvan Ikoku College of Education, Owerri	Owerri, Imo State.
12	Federal College of Education (Technical), Akoka	Akoka, Lagos State.
13	Federal College of Education (Technical), Bichi	Bichi, Kano State
14	Federal College of Education (Technical), Gusau	Gusau, Zamfara State.

15	Federal College of Education, Katsina	Katsina, Katsina State.
16	Federal College of Education, Obudu	Obudu, Cross River State.
17	Adeyemi College of Education, Ondo	Ondo, Ondo State.
18	Federal College of Education, Pankshin	Pankshin, Plateau State.
19	Federal College of Education, Yola	Yola, Adamawa State.
20	Federal College of Education, Zaria10.	Zaria, Kaduna State.
21	Nigerian Army School of Education (NASE), Ilorin	Ilorin, Kwara State.
22	Federal College of Education (T), Umunze	Umunze

Table S10 | List of State Colleges of Education in Nigeria (NBTE, 2021b; NCCE, 2021)

S/N	Names of State Colleges of Education in Nigeria	Location
1	College of Education, Gindiri	Gindiri, Plateau State.
2	Adamawa State College of Education, Hong	Yola, Adamawa State.
3	Tai Solarin College of Education, Ijebu-Ode	Ijebu-Ode, Ogun State.
4	College of Education, Ikere-Ekiti	Ikere-Ekiti, Ekiti State.
5	Ebonyi State College of Education, Ikwo	Ikwo, Ebonyi State.
6	College of Education, Warri	Edjeba Road, Warri, Delta State
7	FCT College of Education, Zuba	Zuba, Garki, FCT Abuja.
8	Osisatech College of Education, Enugu	Enugu, Enugu State.
9	Nasarawa State College of Education, Akwanga	Akwanga, Nassarawa State.
10	Isa Kaita College of Education, Dutsin-Ma	Dutsin-Ma, Katsina State.
11	College of Education, Ekiadolor-Benin	Ekiadolor-Benin, Edo State
12	College of Education, Gashua, Damaturu	Gashua, Yobe state.
13	Kaduna State College of Education, Gidan-Waya, Kafanchan	Kafanchan, Kaduna State.
14	Osun State College of Education, Ilesa	Ilesa, Osun State.
15	Kwara State College of Education, Ilorin	Ilorin, Kwara State.
16	Kwara State College of Education	Oro, Kwara State.
17	College of Education, katsina-Ala	Katsina-Ala, Benue State.
18	Sa'adatu Rimi College of Education, Kumbotso, Kano	Kumbotso, Kano State.
19	College of Education (Technical), Lafiagi	Lafiagi, Kwara State.
20	Nwafor Orizu College of Education, Nsugbe	Nsugbe, Anambra State.
21	Adeniran Ogunsanya College of Education, Otto/Ijanikin	Otto/Ijanikin, Lagos State.
22	Emmanuel Alayande College of Education (EACOED), Oyo	Oyo, Oyo State.
23	College of Education, Waka BIU	Waka BIU, Borno State.
24	St. Augustine College of Education (Project Time), Lagos	Yaba, Lagos State.
25	Delta State College of Education, Agbor	Agbor, Delta State
26	Akwa Ibom State College of Education, Afahansit	Afahansit, Akwa Ibom State.
27	Kogi State College of Education, Ankpa	Ankpa, Kogi state.
28	Adamu Augie College of Education, Argungu	Argungu, Kebbi State.
29	College of Education, Azare	Azare, Bauchi State

30	Umar Ibn Ibrahim El-Kanemi College of Education, Science and Technology, Bama	Bama, Borno State.
31	College of Education, Jalingo	Jalingo, Taraba State.
32	Zamfara State College of Education, Maru	Maru, Zamfara State.
33	Jigawa State College of Education, Gumel	Gumel, Jigawa State.
34	Niger State College of Education, Minna	Minna, Niger State.
35	Rivers College of Education, Rumuolumeni	Port-harcourt, Rivers State.
36	Shehu shagari College of Education, Sokoto	Sokoto, Sokoto State.
37	Jama'Atu College of Education (JACE), Kaduna	Kaduna, Kaduna State.
38	College of Education, Arochukwu, Abia	Arochukwu Abia State
39	College of Education, Ila-Orangun, Osun State	Ila-Orangun, Osun State
40	Michael Otedola Coll. of Prim. Education, Lagos	Noforija-Epe Lagos
41	Kashim Ibrahim College of Educ., Maiduguri	Borno State
42	Delta State Coll. of Physical Education, Mosogar	Mosogar, Sapele, Delta State
43	Enugu State Coll. of Education (T), Enugu	Abakaliki Road, Enugu State
44	Cross River State Coll. of Education, Akampa	Akampa, Calabar, Cross River State
45	Edo State College of Education, Igueben	Igueben, Edo State
46	Isaac Jasper Boro COE, Sagbama	Sagbama, Yenogoa, Bayelsa State
47	Kogi State College of Education, Kabba	Kabba, Kogi State

Table S11 | List of Private Colleges of Education in Nigeria (NBTE, 2021b; NCCE, 2021)

S/N	Names of Private Colleges of Education in Nigeria	Location
1	Institute of Ecumenical Education, (Thinkers Corner), Enugu	Enugu, Enugu State.
2	Delar College of Education	Agodi Gate, Ibadan, Oyo State
3	City College of Education, Mararaba, Gurku	Mararaba, Gurku, Nasarawa State
4	Ansar-Ud-Deen College of Education, Isolo	Oshodi, Isolo, Lagos State.
5	Yewa Central College of Education, Ayetoro	Ayetoro, Ogun State.
6	OSISA Tech. Coll. of Education, Enugu	Enugu, Enugu State
7	St. Augustine Coll. of Education, Lagos	Akoka, Lagos
8	African Thinkers Community of Inquiry, Enugu	Enugu, Enugu State
9	Muftau Olanihun College of Education, Ibadan	Ibadan
10	Havard Wilson College of Education, Aba	Aba, Abia State State
11	Muhyideen College of Education, Ilorin	Ilorin
12	College of Education, Offa	Offa, Kwara State
13	Bauchi Institute of Arabic & Islamic Studies, Bauchi	Bauchi
14	Corner Stone College of Education, lagos	Unilag, Lagos
15	Peaceland College of Education, Enugu	Enugu
16	The College of Education, Nsukka	Enugu
17	Unity College of Education, Auka Adoka, Benue	Otikpo
18	Diamond College of Education, Aba	Aba
19	Kinsey College of Education, Ilorin, Kwara State	Ilorin
20	ECWA College of Education, Jos (ECOEJ)	Jos

Table S12 | List of Federal Monotechnics in Nigeria (NBTE, 2021a)

S/N	Names of Federal Monotechnics in Nigeria	Location
1	Federal Cooperative College Ibadan	Oyo State.
2	Federal Cooperative College Kaduna	Kaduna State
3	Federal Cooperative College, Oji River	Enugu State.
4	Federal College of Statistics, Enugu	Enugu State
5	Federal College of Statistics, Ibadan	Oyo State
6	Federal College of Statistics, Kaduna	Kaduna State
7	Federal School of Mines, Jos	Plateau State
8	Federal School of Survey, Oyo	Oyo State
9	Federal Training Centre, Calabar	Cross River
10	Federal Training Centre, Enugu	Enugu State
11	Federal Training Centre, Kaduna	Kaduna State
12	Federal Training Centre, Maiduguri	Borno
13	Maritime Academy of Nigeria, Oron	Akwa Ibom State.
14	Metallurgical Training Institute, Onitsha	Anambra State.
15	National Water Resources Institute, Mando, Kaduna.	Kaduna State
16	Nigerian Army School of Engineering, Makurdi	Benue State.
17	Nigerian Army School of Finance, Administration, Apapa	Lagos State
18	Nigerian Army School of Signals Apapa, Lagos	Lagos State
19	Nigerian College of Aviation Technology (NCAT) Zaria	Kaduna State
20	Nigerian Naval Engineering College, Sapele,	Delta State
21	NITEL Training School, Oshodi,	Lagos State

Table S13 | List of State Monotechnics in Nigeria (NBTE, 2021c)

S/N	Names of State Monotechnics in Nigeria	Location
1	College of Administration and Business Studies, Konduga	Borno State.
2	College of Administration and Business Studies, Potiskum	Yobe State

Table S14 | List of Private Monotechnics in Nigeria (NBTE, 2021b)

S/N	List of Private Monotechnics in Nigeria	Location
1	Nigerian Institute of Journalism (NIJ)	Lagos State
2	Wavecrest College of Catering, Surulere	Lagos State

CONFLICT OF INTEREST

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