



MULTI-DISCIPLINARY
RESEARCH JOURNALS
INT'L (MDRJI)

Vol. 1 No. 1

Peer Reviewed
BOOK CHAPTER

PERSPECTIVE ON TERTIARY EDUCATION IN NIGERIA



Peer Reviewed
BOOK CHAPTER

PERSPECTIVE ON TERTIARY EDUCATION IN NIGERIA

© 2025 MULTI-DISCIPLINARY RESEARCH JOURNALS INT'L (MDRDJI).

This work is licensed under a Creative Commons Attribution (CC BY) License <https://creativecommons.org/licenses/by/4.0/>. This permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. Authors retain the right to use their work for teaching, research, and other non-commercial purposes.



Published By



**MULTI-DISCIPLINARY RESEARCH
JOURNALS INT'L (MDRDJI)**

Available at

<https://mdrdji.org>

EDITOR-IN-CHIEF

Dr. Mariagoretti Ijeoma Obiakor

Department of Educational Management and Policy, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria.

EDITORS

Prof. Francis Akubilo

University of Nigeria Nsukka

Rev. Fr. Dr. Stephen Abuchi Ezenwagu

Nnamdi Azikiwe University, Nigeria.

Rev. Sr. Dr. Anthonia Nwabugo A. Ani

Nnamdi Azikiwe University, Nigeria.

Dr. Edwin Ude

Los Angeles Unified School District Usa

Mrs Chinenye Eucheria Okonkwo

Nnamdi Azikiwe University, Nigeria.

Rev. Sr. Chidumebi Ngozi Oguejiofor

Nnamdi Azikiwe University, Nigeria.

Dr. Chidi Nwandiko

Los Angeles County Of Education

Dr. Ngozi Anthonia Agu

Nnamdi Azikiwe University, Nigeria.

Dr. Ebere Adimorah

University of Nigeria Nsukka

Prof. Florence Orabueze

University of Nigeria Nsukka

Assoc. Prof. John Agah

University of Nigeria Nsukka

Dr. Olachukwu Gloria Eziuzo

Nnamdi Azikiwe University, Nigeria.

Dr. Edna Ogwu

University of Nigeria Nsukka

Dr. Chukwudi Akubuilu

Lynwood Unified School District

Mrs Chiamaka Ogbuanya

Nnamdi Azikiwe University, Nigeria

EDITORIAL BOARD MEMBERS

Dr. Patrick Nwite Nwajioha

Ebonyi State University, Nigeria

Dr. Nwaribeaku Rosita Ogbo

Nnamdi Azikiwe University, Awka

Dr. Oluchi Okugo

University of Nigeria Nsukka

Dr. Nweke Caroline Onyinyechi

Peaceland College of Education

Dr. Chinedu Luke Egbo

St. Gregory University Uturu, Nigeria

Dr. Oby Modester Ogbuka

African Thinkers Community of Inquiry College of Education

Dr. Doris Chidi Malu

Peaceland College of Education

Dr. Patrick Ugwu

Peaceland College of Education

Dr. Chika Nonye Eziamaka

Nnamdi Azikiwe University, Nigeria

Dr. Mbonu Victoria Chimezie.

Nnamdi Azikiwe University, Nigeria

Dr Emmanuel Chika Obizue

Educational Research and Management Consultant, Financial Analyst and Digital Facilitator.

President, Institute of Education, Management and Professional Studies and International Organization For Professional and Proficiency Studies, Owerri Imo State, Nigeria West Africa.

Dr Mirian N. Obizue.

Institute of Arts Management and Professional Studies. (Iamps).

No. 43 Okigwe Road Opposite Nigerian Correctional Center. Owerri Imo State.

EDITORIAL BOARD MEMBERS

CONSULTANTS

Prof. Chiedozie Loyce Onyali

Nnamdi Azikiwe University, Nigeria

Prof. Ndubueze Wenceslaus Ofojebe

Nnamdi Azikiwe University, Nigeria

Prof. Ndidi Patience Egboka

Nnamdi Azikiwe University, Nigeria

Associate Prof. Isaac N. Nwankwo

Nnamdi Azikiwe University, Nigeria

Prof. Vivian Nwogbo

Nnamdi Azikiwe University, Nigeria

Prof. Emenike Febian Obi

Nnamdi Azikiwe University, Nigeria

Prof. B. C. Achilike

Ebonyi State University, Nigeria

Prof. Ugodulunwa Christiana Amaechi

Alex Ekwueme University, Nigeria

Prof. Chinedu Ifedi Okeke

University of The Free State Republic Of South Africa

Prof. Patience Egboka

Nnamdi Azikiwe University, Nigeria



© 2025

Acknowledgments

The authors gratefully acknowledge the support of our academic institutions and colleagues whose insights and contributions informed the development of this chapter, Perspective on Tertiary Education in Nigeria. We also extend our appreciation to the editors of this volume for their guidance and for providing a platform to share our collective work.



CONTRIBUTING AUTHORS

Ogunode Niyi Jacob, PhD

Department of Educational Management, Faculty of Education, University of Abuja

niyijacoogunodejacob@gmail.com

[07030108329](tel:07030108329)

Eze, Ifeoma Nonyelum

Department of Educational Management, Faculty of Education, University of Abuja, Nigeria, Nigeria.

ifeomanonyelumeze@gmail.com

Dr. Ayodele Ebunolu Nwisagbo

Department of Educational Management, Faculty of Education, Rivers State University, Port Harcourt, Nigeria.

ebunolu.nwisagbo@rsu.edu.ng

ORCID: <https://orcid.org/0009-0006-4395-8739>

Conrad Ugochukwu Ukozor., Ph.D.

Department of Educational Management, University of Abuja, Nigeria

conradorare@gmail.com

Olowonefa Jethro Abiodun, Ph.D

Educational Management, Faculty of Education, University of Abuja, Nigeria. ayodeleolowo1965@mail.com

Victor Olugbenga Ayoko

Department of Educational Foundations, Faculty of Education, National Open University of Nigeria.

victorayoko@gmail.com

Nuhu Ummul Qulsum, PhD

Department of General Studies, Faculty of Education, Abdulkadir Kure University, Minna, Niger State, Nigeria.

Dr.Imoukhuede O G

Proprietor & CEO (Ambassador Global Academy, kwali Abuja).

Adebayo Adeniyi Daniels

Department of Environmental Science, Federal Polytechnic, Ugep, Cross River State, Nigeria.

adebayodaniels@fedpolyugep.edu.ng

Dr. Afolabi Iyabode Omolola

nicelolly68@gmail.com

Department of Educational Management, Faculty of Education, University of Abuja, Nigeria

Esther Amina Akuh, PhD

Department of Educational Foundations, Federal University Lokoja, Nigeria. estheraminaakuhq2@gmail.com

Orcid ID:0009-0002-3381-8688

TABLE OF CONTENTS

Chapter One

TERTIARY EDUCATION: MEANING, IMPORTANCE AND FUNCTIONS 1

Ogunode Niyi Jacob, PhD

Chapter Two

PUBLIC UNIVERSITY SYSTEM IN NIGERIA: PROBLEMS AND PROSPECTS 16

Eze, Ifeoma Nonyelum

Chapter Three

HUMAN RESOURCES MANAGEMENT IN TERTIARY EDUCATION IN NIGERIA 32

Ayodele Ebunolu Nwisagbo

Chapter Four

MIXED METHODS RESEARCH APPLICATION IN TERTIARY INSTITUTIONS 45

Conrad Ugochukwu Ukozor, Ph.D.

Chapter Five

ARTIFICIAL INTELLIGENCES DEPLOYMENT IN TERTIARY EDUCATION 57

Olowonefa Jethro Abiodun, Ph.D

Chapter Six

INFORMATION COMMUNICATION DEPLOYMENT IN TERTIARY EDUCATION 69

Victor Olugbenga Ayoko

Chapter Seven

CORE CURRICULUM AND MINIMUM ACADEMIC STANDARDS (CCMAS)

IMPLEMENTATION IN NIGERIAN UNIVERSITIES: PROBLEMS AND PROSPECTS 82

Nuhu Ummul Qulsum, PhD & Dr.Imoukhuede O G

Chapter Eight

IMPACT OF CLIMATE CHANGE ON TERTIARY EDUCATION IN NIGERIA 91

Adebayo Adeniyi Daniels

Chapter Nine

DEVELOPMENT OF CIRCULAR ECONOMY PROGRAMME IN NIGERIAN

UNIVERSITIES: ROLES OF NATIONAL UNIVERSITIES COMMISSION 104

Dr. Afolabi Iyabode Omolola

Chapter Ten

AUTONOMY IN TERTIARY EDUCATION IN NIGERIA: MEANING, TYPES,

PROBLEMS AND SOLUTIONS 116

Esther Amina Akuh, PhD

CHAPTER ONE

**TERTIARY EDUCATION: MEANING,
IMPORTANCE AND FUNCTIONS**

By

Ogunode Niyi Jacob, PhDniyijacoogunodejacob@gmail.com

07030108329

Department of Educational Management, Faculty of Education, University of Abuja

Abstract

Tertiary education, also known as higher education, is the apex of formal education systems and plays a critical role in fostering individual growth, national development, and global competitiveness. This paper examines the meaning, importance, objectives, and cardinal goals of tertiary education, emphasizing its multidimensional contributions to society. It outlines the transformative power of tertiary education in solving complex problems, advancing research and innovation, providing specialized manpower for socio-economic growth, and promoting equity and social mobility. Furthermore, the study highlights the three cardinal goals—teaching, research, and community service—as the pillars upon which tertiary education sustains knowledge production, application, and dissemination. The discussion concludes with the general functions of tertiary education as drivers of human capital development, technological advancement, civic responsibility, and cultural enrichment. By providing an in-depth conceptual clarification and linking theory with practice, this chapter underscores the strategic importance of tertiary education in shaping sustainable futures for individuals, nations, and the global community.

Keywords: Tertiary Education, Higher Education, Research, Teaching, Community Service, National Development

Introduction

According to UNESCO's International Standard Classification of Education (ISCED), tertiary education comprises levels 5 to 8, spanning short-cycle tertiary programs, bachelor's, master's,

and doctoral degrees. This broad framework reflects the expansion and diversification of higher education beyond traditional universities, acknowledging both academic and vocational pathways as critical in preparing individuals for professional life, personal development, and lifelong learning.

Tertiary education serves several functions: such as providing advanced knowledge and skills in a specific field, preparing individuals for the workforce, and fostering personal and intellectual growth. Additionally, tertiary education also plays a role in generating new knowledge through research and promoting social and cultural development. It also serves as a means for social mobility and promoting global understanding through international education opportunities. Furthermore, tertiary education contributes to economic development by producing a skilled workforce and aiding innovation and entrepreneurship.

Thus, this chapter is discussed under the following subheadings.

1. Clarification of concepts
2. Tertiary education
3. Objectives of tertiary education
4. Cardinal goals of Tertiary Education
 - Teaching
 - Research
 - Community Service
5. General functions of Tertiary Education

Clarification of concepts

Tertiary education

Tertiary education is regarded as the pinnacle of formal learning, serving as a driver of socio-economic progress and technological transformation. Ofojebe and Chukwuma (2015) describe it as the cornerstone of national development, as the skills and knowledge acquired serve as engines of productivity, innovation, wealth creation, and social well-being.

The National Policy on Education (FGN, 2014) described Tertiary Education as the education given after secondary education in Universities, Colleges of Education, Polytechnics, Monotechnics including those institutions offering correspondence courses. Tertiary institutions is an organized social institution made up with stakeholders like the students, lecturers (academic staff), non-academic staff and researcher whose responsibilities are lecturing, organization of instructional resources, assessment of students, marking of students' scripts and projects supervision (Ogunode, & Adamu, 2021).

Tertiary education, also called post-secondary education, is any level of education pursued beyond high school, including undergraduate and graduate credentials. These credentials encompass certificates, diplomas or academic degrees. Tertiary education refers to specialized education in a specific field, taken on after finishing high school. Tertiary education is non-compulsory and provided in a specialist institution, usually a college, polytechnic or university. This form of education may be delivered virtually or at a distance (Top-hat, 2023). Tertiary education is an organized educational system that is consciously designed for manpower production, in-service training and national development. Tertiary education is an education that advances teaching, research and community services for national development. Tertiary education is an education industry that is meant for the production of manpower and national development via implementation of teaching, research and provision of community services (Ogunode, 2025).

Tertiary education in Nigeria is synonymous with higher education and is responsible for producing the human capital required for societal and national development (Okai et al., 2019). As the highest tier of education, tertiary education plays a pivotal role in driving national development and transformation by equipping individuals with the necessary skills, knowledge, and information essential for productivity, wealth creation, prosperity, good health, competitiveness, and scientific and technological advancement (Ofojebe & Chukwuma, 2015). The term "tertiary" refers to the third rank or order, and in the context of Nigeria, tertiary education denotes the third level of education, commonly referred to as higher education (Okai & Botimi-Slaboh, 2019).

According to Edinoh and Wali-Essien (2023), tertiary education is a social agent of progress and development in the society and aids technological advancement. It is designed to help in the development of nations by providing the high as well as the middle level manpower needed for the social, economic and political advancement through the programme of teaching, learning, research and community services. This function places tertiary education at the apex in the ranking of educational institutions and it is designed to accommodate knowledge acquisition and production. Tertiary education offers a broad range of academic disciplines and professional programs, including bachelor's degrees, master's degrees, doctoral degrees, and professional certifications. It focuses on in-depth exploration of subject areas, critical thinking, research skills, and the development of specialized expertise (Proctoredu 2023).

From above, tertiary education is any formal education pursued after completing secondary (high) school. It includes all post-secondary programme, whether academic or vocational, that build on secondary education and provide specialized knowledge and skills at a high level of complexity. In practice, tertiary education encompasses: Universities and colleges offering bachelor's, master's, and doctoral degrees; Vocational education and training institutes providing advanced technical or professional qualifications and other specialized post-secondary school institutions such as polytechnics or technical schools.

Importance of Tertiary Education

Problem solving

Tertiary education is highly important in solving problems in various fields such as science, technology, and the economy. With its emphasis on critical thinking and analysis, tertiary education equips individuals with the necessary skills to identify and address complex issues. It also provides a platform for innovation and creativity, allowing individuals to come up with unique solutions to existing problems. Additionally, tertiary education helps individuals to develop a global perspective and understand the interconnectedness of various issues, enabling them to find holistic solutions. Furthermore, it enables individuals to gain expertise in a specific field, allowing them to become experts and leaders in their respective areas, thus further contributing to problem-solving efforts. Overall, tertiary education plays a crucial role in equipping individuals with the knowledge, skills, and mindset necessary to identify, understand, and solve problems in a variety of contexts.

Manpower Development

Tertiary education is crucial in shaping and producing a skilled workforce in today's society. As technology advances and industries become more specialized, the demand for a highly educated and trained workforce is increasing. Tertiary education, also known as higher education, refers to the pursuit of advanced knowledge and skills through colleges, universities, and technical schools. According to statistics, individuals with tertiary education are more likely to be employed and earn higher income compared to those with only secondary education. This is because tertiary education equips individuals with the necessary skills and knowledge to excel in their chosen fields. It also provides opportunities for hands-on experience and internships, allowing students to apply their theoretical knowledge in real-world scenarios.

Tertiary education plays a crucial role in driving economic growth and development. Through research and innovation, tertiary institutions contribute to the creation of new technologies, products, and services, which in turn, stimulate economic growth. Graduates from tertiary institutions are also more likely to become entrepreneurs and create job opportunities for others. Tertiary education promotes social mobility and equality. It provides opportunities for individuals from diverse backgrounds to access higher education and improve their social and economic status. This not only benefits the individual but also contributes to a more inclusive and progressive society. In addition, tertiary education fosters critical thinking, problem-solving, and communication skills, which are essential in the modern workforce. As the job market becomes increasingly competitive, employers are seeking individuals with these skills, making tertiary education a valuable asset for career advancement.

Tertiary education also equips individuals with practical skills and competencies that are essential for their future careers and success in the job market. Moreover, it enables individuals to acquire

a deeper understanding and appreciation of various academic disciplines, contributing to the advancement of knowledge and innovation. Additionally, tertiary education promotes social mobility, providing individuals from different socioeconomic backgrounds with equal opportunities to pursue higher education. This not only benefits individuals but also contributes to the overall development and progress of a nation.

Research Development

Tertiary education plays a crucial role in the development of research. Through tertiary education, individuals are equipped with the knowledge and skills necessary to conduct high-quality research. This includes critical thinking, data analysis, and research methodologies. Additionally, tertiary education provides access to resources such as research labs, libraries, and experienced faculty members who can guide and mentor students in their research endeavors. Moreover, tertiary education institutions often collaborate with industries and organizations to provide students with opportunities to conduct real-world research projects, further enhancing their knowledge and skills. Tertiary education is also a platform for networking and collaboration, allowing researchers to connect with experts in their fields and collaborate on research projects.

One of the main reasons tertiary education is important for a research development is because it provides individuals with in-depth knowledge and skills in their chosen field. This is essential for researchers who need to have a comprehensive understanding of their subject matter in order to conduct thorough and accurate research. Tertiary education also helps individuals develop critical thinking and analytical skills, which are crucial in the research process. Tertiary education allows individuals to access resources and opportunities that are not available at lower levels of education. This includes access to advanced research facilities, specialized equipment, and experienced mentors who can guide and support individuals in their research endeavors.

Another important aspect of tertiary education for researchers is the opportunity to network and collaborate with peers and experts in their field. This allows individuals to exchange ideas, gain insights, and work together on research projects, ultimately advancing their knowledge and skills. Tertiary education plays a crucial role in shaping individuals and societies by providing advanced knowledge and skills in specialized fields and research development. It offers opportunities for personal growth, critical thinking, and exposure to diverse perspectives, leading to a well-rounded education and research development.

Goals of tertiary education

The goals of Tertiary Education according to FRN (2004) stated as follows:

- a) Contribute to national development through high level relevant manpower training
- b) Develop and inculcate proper values for the survival of the individuals and society.

- c) Develop the intellectual capability of individuals to understand and appreciate their local and external environments.
- d) Acquire both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society.
- e) Promote and encourage scholarship and community service
- f) Forge and cement national unity and
- g) Promote national and international understanding and interaction. The objectives of tertiary education includes; to provide higher education opportunities via effective teaching, researching and provision community services; to develop produce students with specialized knowledge and skills for solving personal problem and national problem; to prepare student for national workforce and to contribute to societal and community development; to provide academic program of various disciplines; to provide quality instruction in field of studies and to conduct researches to generate new knowledge for national development and to solve complex problems(Ogunode, 2025).

Cardinal goals of Tertiary Education

A- Teaching

Teaching is a fundamental aspect of tertiary education that plays a crucial role in shaping students' knowledge and skills. It serves as a first goal of tertiary education, complementing the second goal of producing skilled professionals in a particular field. Through effective teaching, students are equipped with the necessary theoretical and practical knowledge, critical thinking skills, and problem-solving abilities to excel in their chosen careers. The importance of teaching as a first goal of tertiary education cannot be overstated. It not only prepares students for their future professions but also instills in them a sense of responsibility towards society. As tertiary education continues to evolve and adapt to the changing demands of the workforce, teaching must remain a central focus to ensure that students are well-prepared for the challenges ahead.

Teaching as a first goal of tertiary education goes beyond the classroom. It also involves providing students with opportunities for practical learning and experiential education. By incorporating real-world experiences into the curriculum, tertiary institutions can help students develop a deeper understanding of their chosen field and its application in the real world. Teaching in tertiary education also fosters a culture of continuous learning and personal growth. By encouraging students to think critically, challenge ideas, and seek out new knowledge, tertiary education prepares them for a lifetime of learning. This not only benefits the individual but also contributes to the advancement of society as a whole. The unique feature of teaching as first cardinal programme in tertiary education include;

1. Distinctive nature of tertiary-level teaching.
 - **Depth and uncertainty:** students must learn to handle ill-structured problems, contested evidence, and rapidly changing knowledge frontiers.
 - **Epistemic shift:** the teacher’s role moves from “explaining what is known” to “coaching how to *produce* and *critique* knowledge”.
 - **Professional/vocational integration:** teaching is tightly coupled to real-world application laboratories, studios, internships, simulations, entrepreneurial projects.
 - **Research–teaching nexus:** students learn *through* inquiry (undergraduate research, capstone projects, problem-based learning) rather than merely *about* inquiry.
2. Core intended outcomes of good tertiary teaching
3. Conceptual mastery at the threshold of expert performance.
4. **Cognitive apprenticeship:** critical thinking, metacognition, evidence-weighting, argumentation.
5. **Praxis:** the ability to transfer knowledge to novel contexts—diagnose, design, build, heal, teach others.
6. **Autonomy and lifelong learning habits:** self-regulation, information literacy, willingness to unlearn and relearn.
7. **Ethical and civic reasoning:** professional judgment that includes social and planetary consequences.
8. Signature pedagogies and enabling conditions.
 - Small-seminar dialogue, flipped classrooms, team-based labs, maker-spaces, clinical rotations.
 - Formative feedback loops: low-stakes quizzes, peer review, reflective journals, portfolio defense.
 - Learning analytics to personalize pathways and detect early disengagement.
 - Faculty development centres and teaching-track career paths that reward pedagogical scholarship on par with disciplinary research.

9. Quality metrics when teaching is the *primary* accountability.

- **Value-added measures:** pre/post diagnostic tests, capstone artefacts, employer ratings of graduate competence.

- **Engagement indicators:** National Survey of Student Engagement (NSSE), UK Engagement Survey (UKES), Australasian Survey of Student Engagement (AUSSE).

- **Labour-market outcomes** interpreted narrowly as *teaching effectiveness*: Did graduates *apply* what they were taught? (Not merely “Did they get jobs?”)

- **Equity gaps** closed: Are under-represented groups achieving mastery at the same rate?

10. Common Challenges

- Research prestige vs. instructional workload: promotion criteria still skew toward grant income and publications.

- Massification vs. intimacy: rising enrolments threaten the small-group coaching that advanced learning requires.

- Standardization vs. disciplinary diversity: generic “teaching excellence” rubrics may not fit studio art, clinical medicine, or engineering design.

- Digital delivery vs. embodied practice: MOOCs scale knowledge transmission but struggle with tacit skill transfer and ethical enculturation.

11. Emerging Issues in tertiary education

- AI-assisted personalized tutoring and real-time feedback.

- Competency-based transcripts that record *what graduates can do* rather than *courses passed*.

- Micro-teaching credentials for faculty (e.g., ACUE, HEA fellowships) recognized in tenure and promotion.

- Global classrooms: joint courses across continents, cross-cultural team projects, synchronous multilingual seminars.

B- Research

Research is a co-equal goal of tertiary education, ensuring that institutions not only transmit but also produce knowledge. It sustains curricula, attracts talent, drives innovation and supports evidence-based policy.

It is the systematic creation, critique and dissemination of new knowledge and creative works. It is not an optional add-on; it is the engine that keeps what is taught at the tertiary level **alive**,

current, and contestable. Research as a goal means that tertiary institutions are **not just transmitters but producers** of knowledge. When properly balanced with the teaching mission, research keeps curricula future-proof, attracts talent and resources, and equips graduates with the mindset and skills to keep learning long after graduation. Below is a concise anatomy of this goal, the forms it takes, and the ways it is now integrated into the overall purpose of post-secondary institutions.

1. Core definition in the tertiary context

- **Original inquiry:** posing questions whose answers are not yet codified in textbooks or professional manuals.
- **Peer validation:** results must survive scrutiny through peer-review, replication, open data, and, in the arts, exhibition or performance.
- **Integration with advanced teaching:** students learn *how* knowledge is generated—through labs, studios, fieldwork, archival discovery, design sprints—rather than merely consuming its products.

2. Modes of research in tertiary institutions.

- a. **Pure/basic** (discovery-driven) – expanding fundamental understanding (e.g., particle physics, pure mathematics, philosophy).
- b. **Strategic/use-inspired** – directed at long-term societal challenges (e.g., climate modelling, vaccine platforms)
- c. **Applied/contract** – commissioned by industry or government for near-term solutions (e.g., software optimization, policy trials).
- d. **Creative practice as research** – new musical compositions, architectural designs, digital media works that advance the discipline itself.
- e. **Scholarship of Teaching & Learning (SoTL)** – research *into* how tertiary teaching works, feeding directly back into the first goal.

3. Expected contributions.

- **Knowledge frontier:** publications, datasets, patents, artistic works, open-source code.
- **Human capital:** postgraduate researchers, post-docs, and undergraduates trained in cutting-edge methods.
- **Economic & social value:** spin-offs, start-ups, policy advice, improved professional standards, cultural enrichment.
- **Critical lens:** provides the evidence base to challenge prevailing assumptions in business, medicine, law, engineering, etc.

4. Institutional structures that embed research as a goal.

- PhD and research-master programmes that require original contributions.
- Research-active faculty expected to secure external grants and publish.
- Graduate schools, doctoral training centres, and interdisciplinary institutes.
- Technology-transfer offices, incubators, and “fourth mission” funding streams.

5. Quality and impact metrics.

Academic: citations, h-index, journal impact factor, peer esteem awards.

- **Societal:** patent citations, clinical-trial uptake, policy citations, artistic influence, cultural-heritage preservation.
- **Open science:** data-sharing, preregistration, reproducibility badges.
- **Equity & integrity:** gender balance in research teams, responsible conduct training, reduction of research waste.

6. Tensions with the teaching goal.

- **Time division:** heavy research loads can erode contact hours and mentoring quality.
- **Resource concentration:** elite research universities attract disproportionate funding, widening gaps with teaching-focused institutions.
- **Incentive misalignment:** promotion systems may reward publication volume over pedagogical innovation.
- **Student access:** undergraduates at research-intensive campuses may be taught by temporary instructors rather than star researchers.

7. Emerging trends that re-tighten the research–teaching nexus.

- **Course-based undergraduate research experiences (CUREs)** where whole classes conduct publishable inquiry.
- **Living labs** on campus—carbon-neutral buildings, smart-city pilots—used simultaneously for research and student projects.
- **Open-notebook science** allowing students to watch faculty research in real time.
- **Micro-credential pathways** that embed mini-research projects recognized on transcripts.

C- Community Service

Provision of community services as a goal of tertiary education means that universities, polytechnics and colleges accept an explicit “third mission” (alongside teaching and research): to deploy their knowledge, talent and infrastructure for the direct, sustained benefit of the populations that surround them. This is not occasional charity or outreach; it is a strategic, accountable obligation to improve local and regional well-being.

1. Core rationale.

- **Reciprocity:** communities fund institutions through taxes, land, utilities and political support; institutions return measurable value.
- **Living laboratory:** real social, economic and environmental problems give students and faculty authentic contexts for teaching and research.

- **Place-based development:** tertiary institutions are among the few organizations with the staying power and knowledge density to anchor long-term regional renewal.
- **Democratic legitimacy:** public trust rises when universities are visibly “of” the community, not merely “in” it.

2. Forms of community service provision.

a. Pro-bono professional services.

- Law clinics offering free legal aid.
- Dental, nursing and medical schools running neighbourhood clinics.
- Engineering students designing low-cost assistive technologies for local disability groups.

b. Technical assistance & capacity building.

- Agricultural extension officers translating research into seed varieties and irrigation advice for smallholder farmers.
- Business schools mentoring start-ups in downtown incubators.
- Data-science centres helping municipalities optimize bus routes or reduce energy use.

c. Cultural, artistic and recreational services.

- Public concerts, museums, galleries, planetarium nights.
- Sports facilities opened to local schools after hours.
- Language and citizenship courses for migrants and refugees.

d. K-12 and lifelong learning pipelines.

- Saturday STEM academies for under-represented high-school students.
- Micro-credentials delivered in public libraries or online for upskilling mid-career workers.

e. Crisis response & resilience.

- Rapid deployment of engineering and medical teams after natural disasters.
- Public-health communication during pandemics (e.g., COVID-19 dashboards, vaccine pop-ups).

3. Institutional mechanisms that make the goal operational.

- **Dedicated offices** for community engagement, service-learning, continuing education or extension.
- **Workload credit** for faculty who supervise community-based projects.
Metrics in promotion dossiers: documented community impact, media citations, policy adoption.
- **Co-governance structures:** community advisory boards, joint steering committees for neighbourhood renewal.
- **Funding streams:** “third-stream” grants, social-impact bonds, municipal contracts, philanthropy earmarked for local benefit.

4. Benefits to the tertiary institution itself.

- **Curricular enrichment:** authentic problems raise student motivation and learning outcomes.
- **Research opportunities:** community data and testbeds generate publishable scholarship.
- **Student retention & employability:** service-learning and internships sharpen professional identity.
- **Reputation & enrolment:** local goodwill translates into applicant pools and political support.

5. Quality and impact indicators.

- **Reach:** number of unique community members served annually.
- **Depth:** sustained multi-year partnerships vs. one-off events.
- **Equity:** proportion of services reaching marginalised groups.
- **Economic value:** local income generated, jobs created, cost savings to public systems.
- **Knowledge transfer:** uptake of university recommendations by municipal councils, NGOs, small firms.

6. Persistent challenges.

- **Resource strain:** community demands can exceed staff capacity and distract from research.
- **Power imbalances:** communities may be treated as “data mines” rather than co-creators.
- **Evaluation rigour:** impacts are long-term, diffuse and hard to attribute to university action alone.
- **Funding volatility:** third-mission budgets are often the first to be cut in austerity periods.

7. Emerging directions.

- **Place-based impact charters:** universities signing 10-year compacts with city governments.
- **Social-enterprise spin-offs** owned jointly by university and community stakeholders.
- **Digital community commons:** open-access data portals and AI tools co-designed with local NGOs.
- **Climate-action living labs:** campuses achieving net-zero while offering neighbourhood retrofitting services.

C- General functions of Tertiary Education

1. Human-capital & labour-market goals.

- Advanced specialist knowledge and technical mastery (depth).
- Generic, transferable skills (critical thinking, digital literacy, teamwork, communication).
- Up-skilling and re-skilling for changing occupations; lifelong learning pathways.
- Entrepreneurship and innovation capacity that feeds productivity growth.

2. Research, innovation & societal problem-solving.

- Fundamental and applied research that expands the frontiers of knowledge.
- Technology transfer, spin-offs, patents, creative outputs and evidence-based policy advice.
- Grand-challenge responses (climate, health, inequality) through interdisciplinary centres and public-private partnerships.

3. Equity, inclusion & social mobility

- Equalizing opportunities across gender, socio-economic status, ethnicity, disability and region.
- First-in-family and non-traditional learners (mature, refugee, indigenous).
- Affirmative-action schemes, need-based aid, flexible delivery (part-time, on-line) and recognition of prior learning.

4. Civic, democratic & values formation

- Informed, tolerant citizens capable of critical media consumption and civil debate.
- Exposure to human-rights, sustainability and global-justice perspectives.
- Service-learning, volunteering and community-based research that tie academic work to public good.

5. Personal development & well-being.

- Cognitive development and self-directed learning habits.
- Identity formation, ethical reasoning and mental-health support. Cultural enrichment through the arts, humanities and international experiences (study abroad, joint degrees).

6. Institutional differentiation & system-level resilience.

- Diversity of mission: world-class research universities, teaching-intensive universities,
- polytechnics, professional schools, micro-credential providers.
- Quality-assurance frameworks that protect standards while allowing experimentation.
- International competitiveness (rankings, research income) balanced with local relevance.

Summary

In summary, this chapter discussed

1. Meaning

Tertiary education is all formal learning undertaken after secondary schooling. It spans universities, polytechnics, professional institutes and other post-secondary providers, delivering programmes from short-cycle certificates to doctoral degrees, both academic and vocational.

2. Importance

- Fuels advanced human capital and economic competitiveness.
- Generates new knowledge, technologies and cultural works.
- Reduces inequality and drives social mobility.
- Supplies evidence and expertise for public policy and civic life.

3. Cardinal Goals

- a. Teaching – Transform learners into independent, critical thinkers and skilled professionals able to keep learning throughout life.
- b. Research – Create, validate and disseminate original knowledge and creative works that push disciplinary frontiers and address societal challenges.
- c. Provision of Community Services – Deploy institutional expertise, facilities and talent for the sustained social, cultural and economic benefit of local, regional and global communities.

References

Federal Government of Nigeria (2014). *National Policy on education* (4th Edition). Lagos: NERDC Press.

Federal Government of Nigeria. (2014). *National policy on education* (6th ed.). Lagos: NERDC Press.

- Ofojebe, W. N., & Chukwuma, E. T. C. (2015). Managing the Nigerian tertiary education for national transformation through effective continuous staff training and development. *International Journal of Education and Practice*, 3(3),143–155. <https://doi.org/10.18488/journal.61/2015.3.3/61.3.143.155>
- Ogunode, N, J (2025). Benefit of Digital Literacy for Academic staff and Students of Tertiary Institutions in Nigeria. *American Journal of Alternative Education*, 2,(2),43-53
- Ogunode, N. J. & Adamu, D. G. (2021). Shortage Of Academic Staff in the Higher Institution of Learning in Nigeria. *Central Asian Journal of Social Sciences and History*, 2(3), 109-123.
- Okai, N. O, & Botimi –Slaboh A,. S. (2019). Managing tertiary education in a depressed economy. *Journal of Social & Policy Research*, 6(2), 187-196
- Proctoredu (2023) Tertiary Education - Definition & Meaning. <https://proctoredu.com/glossary/tertiary-education>
- Top hat (2021). What is tertiary education? <https://tophat.com/glossary/t/tertiary-education/>
- World Bank. (2020). *What is tertiary education?* <https://www.worldbank.org/en/topic/tertiaryeducation>