

National Open University of Nigeria

Policy Title	NOUN Learning Analytics Policy
Policy No:	NQSA/POL/TEL/031
Owner:	National Open University of Nigeria (NOUN)
Approved By:	The University Senate
Manager/Driver:	DLSS, DICT, DMIS and others
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1.0 Introduction

The National Open University of Nigeria (NOUN) is the largest single-mode open and distance learning institution in the West Africa sub-region with over 600,000 student enrolments since its inception in 2002. Currently, NOUN has over 100,000 registered students in 108 study centres across the country. As part of its strategic objectives, the institution strives to provide learners with a high-quality learning experience that equips them with a competitive advantage and the skills to contribute to national development (NOUN Strategic Plan 2013-2017). By the size of a diverse student population dispersed over an expansive geographic space, the deployment of technology and digitalisation of the institution's systems and operations is imperative.

Equally imperative is the need to equip learners with the skills and competencies required of the 21st-century workforce in the context of technological advances and more jobs becoming digitised. NOUN embarked on a digital transformation journey from its establishment and has amassed considerable amounts of digital data information in the process, which has significant value for institutional research and to inform policy decisions that will enhance teaching and learning outcomes.

To drive the transformation, NOUN recently developed a digital transformation strategy aimed at positioning the university to utilise digital technologies in the areas of teaching and learning, research and innovation, and administrative operations (2022). As the institution becomes increasingly digitised, it seeks to understand its student's needs better and make meaning of its digital data to improve learners' learning experience, enhance institutional cost effectiveness, and address concerns about student retention using Learning Analytics. The process of integrating learning analytics into its systems is being championed by the university's leadership. It involves sensitization of the university community about Learning Analytics, and an engagement with key stakeholders to reflect the broad nature of Learning Analytics' stakeholder involvement in the development of a framework that will guide the implementation of Learning Analytics at NOUN.

Learning Analytics, since its emergence in 2011, has matured as a research focus and institutional practice providing evidence of how the collection, analysis, and use of student data and the contexts in which learning occurs can positively impact student

retention and success, responsive pedagogy and assessment strategies, more appropriate student support and more cost-effective resource allocation and operational planning. Currently, most, if not all the theoretical understandings and evidence of the impact of Learning Analytics are from the Global North with very little evidence of the implementation of learning analytics on the African continent, and in the broader context of the Global South. Learning Analytics is about students' learning providing actionable intelligence to learners, faculty, and student support staff to transcend barriers to learning.

As such, the implementation of Learning Analytics at NOUN is aligned with and will contribute to the vision of NOUN in ensuring NOUN to be "the foremost university providing highly accessible and enhanced quality education anchored by social justice, equity, equality and national cohesion through a comprehensive reach that transcends all barriers." Learning Analytics furthermore will allow NOUN to fulfil its mission to provide "functional, cost-effective, flexible learning which adds life-long value to quality education for all who seek knowledge" (Federal Ministry of Education, 2002, NOUN Blueprint and Implementation Plan).

2.0 Purpose

The purpose of this policy is to provide a comprehensive framework for the implementation of Learning Analytics at the National Open University of Nigeria (NOUN). This policy aims to guide and govern the use of student data and analytics to enhance the quality of teaching and learning, improve student retention and success, and contribute to the overall digital transformation of the institution.

3.0 Scope

This policy applies to all academic and administrative units within NOUN involved in the design, implementation, and use of Learning Analytics. It encompasses the entire student lifecycle, from admission to graduation, and includes the responsible handling of student data in alignment with ethical and legal standards.

4.0 Definitions

Learning Analytics: The systematic collection, analysis, and interpretation of student data to inform decision-making, improve learning outcomes, and enhance institutional effectiveness.

Digital Transformation: The integration of digital technologies into all aspects of university operations and processes to fundamentally change how teaching, learning, research, and administration are conducted.

5.0 Principles

The following value-informed principles will inform and guide the design, implementation, and evaluation of learning analytics at NOUN:

Principle 1: Effective, Equitable, and Quality Learning

Learning Analytics at NOUN fulfils our moral and legal obligation to ensure effective, equitable, and quality learning experiences for all students.

Principle 2: Ethical Standards and Student Privacy

Learning Analytics at NOUN adheres to the highest ethical standards, ensuring and protecting student privacy with students' best interests at heart.

Principle 3: Trustworthy Custodianship

We acknowledge that student data does not belong to us; however, we commit to being trustworthy custodians, ensuring transparency in data collection, purposes, and access conditions.

Principle 4: Holistic Understanding of Students

Learning Analytics at NOUN recognises that students and their learning experiences are multifaceted; it aims to contribute to a more holistic understanding of student learning beyond quantitative data.

Principle 5: Contribution to Retention and Success

Learning Analytics aims to significantly contribute to retention and student success, ensuring cost-effective, quality, and equitable teaching and learning, along with more effective, personalised student support.

Principle 6: Research and Evidence-led

The design and implementation of Learning Analytics at NOUN will be research and evidence-led, emphasising empirical and critical inquiry.

Principle 7: Consultative Approach

The design and implementation of Learning Analytics at NOUN will be consultative, valuing input and diversity of contributions from institutional stakeholders, especially students.

6.0 Policy Statements

6.1 Data in Service of Teaching, Learning, and Student Support

As NOUN becomes increasingly digitised and datafied, Learning Analytics will provide actionable insights into students' learning and the context in which it occurs. This includes predicting students' probability of failure, prescribing preventative actions, and allowing for personalized pedagogy, assessment, and support.

6.2 Robust Digital Infrastructure, Adequate Capacity, and Critical Skills

The implementation of Learning Analytics will contribute to the digital transformation of NOUN, requiring a review and upgrade of institutional digital infrastructure, capacity, and skills. A democratised access to teaching and learning data will be supported by informed professional development strategies for all staff.

6.3 Research and Evidence-led Course Design and Implementation

Integral to the design and implementation of Learning Analytics is a commitment to empirical and critical inquiry, providing strategic impetus to foreground the scholarship of teaching and learning at NOUN.

6.4 Enhancing the Quality of Teaching, Learning, and Student Support

Access to student data will enable faculty, facilitators, and student support staff to identify barriers to students' learning and address them in a timely and personalized manner. Learning Analytics will contribute to the overall improvement of teaching, learning, and the quality of NOUN graduates.

7.0 Policy Implementation

7.1 Institutional Buy-In

The design and implementation of Learning Analytics depend on the leadership, support, resource allocation, and sanction by NOUN staff and student disciplinary boards, Senate, and Management, both administrative and academic, as well as students.

7.2 Legal Compliance

The collection, analysis, and use of student data in Learning Analytics at NOUN should align with national legislation and international data protection regulations such as the GDPR.

7.3 Commitment to Ethical Practice

The design and implementation of Learning Analytics at NOUN require a commitment to ethical practice, ensuring staff have a clear understanding of the ethical collection, analysis, and use of student data.

7.4 Enabling Policy Environment

The design and implementation of Learning Analytics at NOUN will critically engage with existing policies and projects to identify and address implications of digitalisation and datafication and may lead to the development of new policies to provide guidance.

7.5 Robust Digital Infrastructure, Capacity, and Skills

The success of Learning Analytics implementation relies on a robust digital infrastructure, hardware, instruments, and data analytical capacity and skills. A critical audit and analysis of the current digital infrastructure, capacities, and skills of stakeholders involved in Learning Analytics will be conducted.

8.0 Stakeholders

8.1 Primary Internal Stakeholders

Faculties, Departments, and Academic Directorates: Responsible for admission criteria, learning content design, and overall instructional quality.

Study Centre Directors: Coordinate support services at study centres, including administrative and instructional facilitation.

DICT (Directorate of Information and Communication Technology): Maintains IT infrastructure and supports digital transformation.

DMIS (Directorate of Management Information Systems): Manages students' data, including admission, registration, and payment records.

DLSS (Directorate of Learning Support Services): Coordinates activities of study centre directors and student counsellors.

Students: Central to the Learning Analytics process, providing data and benefiting from improved learning experiences.

Directorate of Academic Registry: Validates prior learning experiences and ensures the integrity of the graduation process.

DEA (Directorate of Examinations and Assessment): Manages tutor-marked assignments and end-of-semester examinations.

Legal Unit: Ensures all university activities comply with legal parameters.

Directorate of Human Resources: Addresses institutional capacity development needs.

DLCMS (Learning Content Management Directorate): Responsible for posting instructional videos online and maintaining the online discussion forum.

Course Materials Development Unit: Processes courseware and print-based texts, ensuring accessibility.

Quality Assurance Directorate: Responsible for overall quality assurance and monitoring the Learning Analytics project.

Directorate of Linkages and Advancement: Manages alumni relations, providing critical information from alumni stakeholders.

8.2 Secondary Internal Stakeholders

Bursary Division: Processes students' payments and maintains online wallets.

Physical Planning & Development Directorate: Maintains physical facilities in the university and study centres.

Security and Transportation Unit: Provides physical protection and logistical support.

8.3 Students

Involved through various data types, including directed, contractual, and volunteered data. A holistic view of students' data to provide an optimal experience over their life course.

Involvement in the design process for ethical considerations.

8.4 Guidelines for Data Collection, Archiving, Access, and Use in Learning Analytics

Effective and ethical implementation of Learning Analytics at the National Open University of Nigeria (NOUN) requires careful consideration and adherence to guidelines for data collection, archiving, access, and use. These guidelines are designed to ensure the responsible handling of student data, safeguarding privacy,

and promoting the overall success of the Learning Analytics initiative. They comprise a standard, and the indicators for assessing NOUN shall be:

8.4.1 Data Collection:

Ensure that data collection serves specific, defined purposes aligned with the goals of enhancing teaching, learning, and student support.

- Clearly articulate the objectives of data collection initiatives.
- Only collect data that directly contributes to the improvement of student experiences and outcomes.

8.4.2 Informed Consent:

Respect the privacy and autonomy of students by obtaining their informed consent for data collection.

- Clearly communicate the purpose of data collection to students.
- Obtain explicit consent before collecting sensitive or personally identifiable information.
- Provide mechanisms for students to opt-out or withdraw consent.

8.4.3 Transparency:

Ensure transparency in the data collection process.

- Clearly communicate to learners what data is being collected and why.
- Publish a comprehensive data collection policy accessible to all stakeholders.

8.4.4 Minimisation:

Collect only the minimum amount of data necessary to achieve the defined objectives.

- Regularly review and update data collection practices to minimize unnecessary data.
- Implement anonymisation techniques where appropriate.

8.4.5 Data Archiving:

Secure storage and safeguard collected data through secure storage practices.

- Utilise secure, encrypted storage systems for archiving data.
- Regularly backup archived data to prevent loss.

8.4.6 Retention Policies:

Establish clear policies for the retention and disposal of archived data.

- Define specific retention periods based on the purpose of data collection.
- Regularly review and purge outdated or no longer necessary data.

8.4.7 Data Access and Access Control:

Ensure that access to student data is granted only to individuals with a legitimate need. Restrict access to archived data to authorised personnel only.

- Define clear criteria for granting access to student data.
- Conduct periodic access reviews to verify continued necessity.
- Implement role-based access controls to ensure that staff only access data relevant to their responsibilities.
- Monitor and audit access to archived data regularly.

8.4.8 User Authentication:

Implement robust user authentication mechanisms to prevent unauthorized access.

- Use strong authentication methods, such as multi-factor authentication.
- Regularly update and review authentication protocols.

8.4.9 Training and Awareness:

Ensure that individuals with access to student data are trained on ethical and responsible use.

- Provide regular training on data privacy and security.
- Foster a culture of awareness regarding the sensitivity of student data.

8.4.10 Data Use:

Educational Purposes:

Utilise student data for educational purposes to enhance teaching, learning, and support services only.

- Align the use of data with the defined objectives of improving student outcomes.
- Implement data-driven strategies to personalize pedagogy, assessment, and support.

8.4.11 Privacy Protection:

Ensure that the use of student data respects and protects their privacy.

- Data shall not be used for purposes unrelated to improving education and student experiences.
- Anonymisation techniques shall be implemented when aggregating data for analysis.

8.4.12 Continuous Improvement:

Regularly assess the impact and effectiveness of data use for continuous improvement.

- Conduct periodic evaluations to measure the success of data-driven interventions.
- Adjust data use strategies based on evidence and feedback.

8.4.13 Stakeholder Involvement:

Involve stakeholders, including students, in the monitoring and review process.

- Establish feedback mechanisms for stakeholders to report concerns or suggestions.
- Conduct regular surveys or consultations to gather input on data practices.

8.4.14 Continuous Monitoring and Review:

Establish mechanisms for ethical oversight of data collection, archiving, access, and use.

- Form an ethics review committee to evaluate and approve data-related initiatives.
- Regularly review and update ethical guidelines based on emerging best practices.

8.4.15 Compliance Monitoring:

Continuously monitor compliance with legal and ethical standards.

- Regularly audit data-related processes to ensure adherence to policies.
- Implement corrective actions in case of non-compliance.

Adherence to these guidelines will promote a culture of responsible data handling, ethical use, and continuous improvement in the context of Learning Analytics at NOUN. Regular reviews and updates to these guidelines should be conducted to ensure alignment with evolving ethical standards and legal requirements.

9.0 Monitoring and Evaluation

The design and implementation of Learning Analytics at NOUN will be monitored and evaluated based on the following criteria:

- 9.1 Alignment with published evidence on Learning Analytics design and implementation.
- 9.2 Adherence to stated principles and values outlined in this policy.
- 9.3 Measurement against the value contribution stated in this policy
- 9.4 Compliance with generally accepted principles and criteria for monitoring and evaluating implementation processes.

10.0 Sanctions on Violating this Policy

Sanctions for non-compliance with the guidelines and procedures outlined in this policy shall be handled in line with stipulated disciplinary actions for staff and students accordingly.

11.0 Policy Alignment

Policies that should be reviewed or developed to support Learning Analytics at NOUN include:

NOUN ODEL Policy

NOUN Strategic Brief

NOUN Academic Brief

NOUN Regional Strategy

ICT Policy and eLearning/Online and Blended Learning Policy

Data Governance Policy

Data Privacy and Integrity Policy

Ethics Policy (for Collection and Use for Research)

NOUN Research Policy

NOUN Quality Assurance Policy

[Ensure that these policies are identified, reviewed, and updated to align with the guidelines for data collection, archiving, access, and use in the context of Learning Analytics at NOUN].

Team of Developers

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