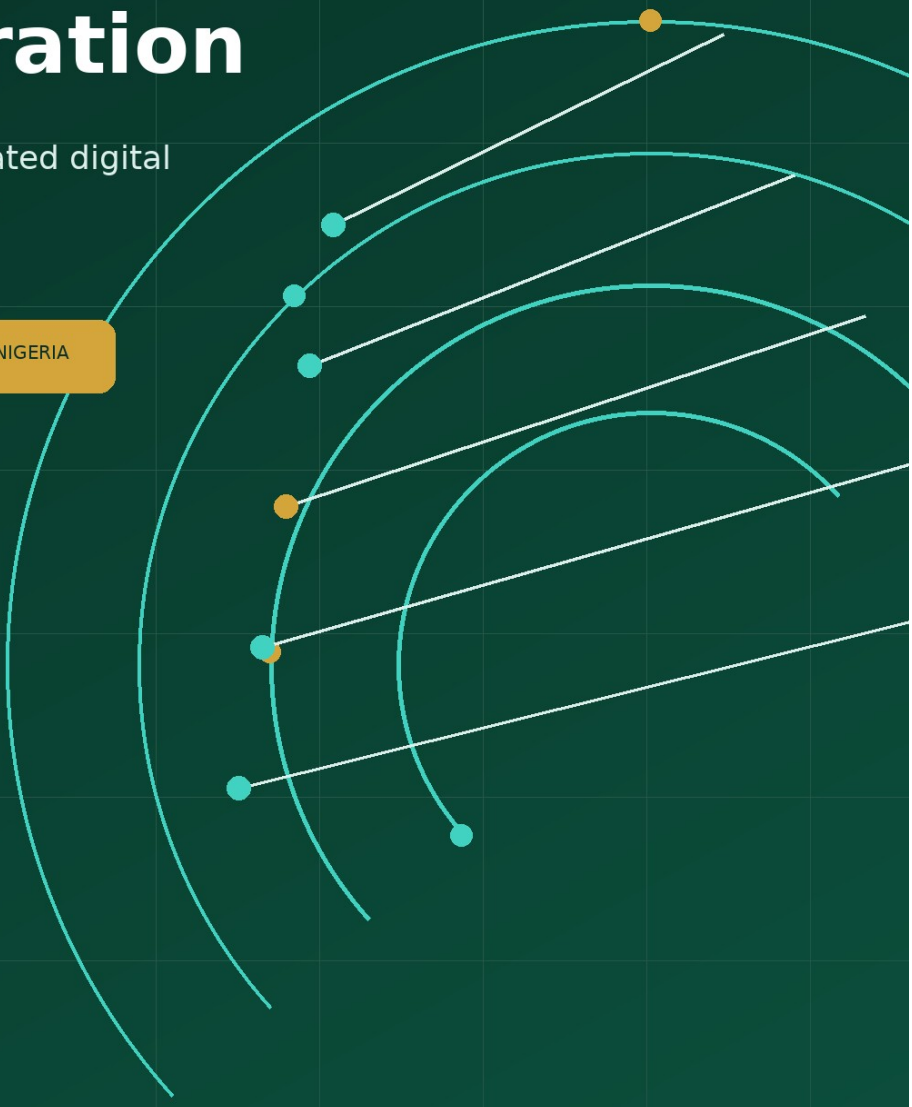
ODU'A INVESTMENT FOUNDATION

POLICY BRIEF | AUGUST 2026

Digital wings for a generation

A national strategy for integrated digital education in Nigerian schools

POLICY BRIEF TO THE FEDERAL GOVERNMENT OF NIGERIA



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POLICY BRIEF AT A GLANCE

Key messages

Nigeria does not have a digital education problem that can be solved by buying more computers. It has a conversion problem, in that equipment already installed in public schools does not become skill without the teaching capacity, the timetable access and the institutional permission to use it. Three years of evidence from the DEFINED Project across the six South-West states establish four findings that bear directly on national policy.

01

Demand far exceeds supply.

More than 3,300 learners came forward across the pilot centres for roughly 1,300 places, and one Ibadan school received over 500 applications for 106 seats. Enrolment figures measure what the system can supply, not what young people want.

02

The instructor is the binding constraint, not the hardware.

In 2024, one hundred and eighteen applications produced only six instructors in post, and two fully approved centres with equipment, curriculum and enrolled students delivered no teaching at all for want of one qualified person.

03

Serving teachers scale faster than external recruitment.

More than nine in ten teachers in the pioneer cohort already rated themselves at intermediate level or above before training. Sixty-five per cent rated themselves advanced afterwards.

04

Predictable approval calendars multiply delivery.

State ministries have supported the programme throughout, and the pilot showed how much the value of that support depends on timing, since school calendars open only narrow delivery windows and a holiday bootcamp cannot be recovered once the window has closed.

The recommendations that follow ask the Federal Government to embed digital practice across every subject rather than confining it to one, to fund the conversion factors rather than the inventory, to build the instructor cadre before the procurement, and to scale through the teachers already on the payroll.

WHY ACTION IS NEEDED NOW

1. The policy problem

The global economy has moved decisively from an industrial to an information base, and the capacity to access and use digital tools now determines inclusion in or exclusion from economic opportunity. Artificial intelligence, robotics and smart automation are projected to add substantially to global output within the decade, and the World Economic Forum's assessment is that six in ten workers worldwide require digital upskilling while only half have access to any training. Sub-Saharan African organisations are projected to record the highest rates of growth over the period. The opportunity is genuine and the window is finite.

Nigeria enters this window with the largest young population on the continent and an education system under acute strain. Foundational learning outcomes remain weak, information and communications technology is on the secondary curriculum but many public schools have no teacher able to teach it in practice, and the syllabus in common use dwells on the vocabulary of computing rather than its practice. The result is a generation that is digitally exposed but not digitally capable, and a workforce in which very few young people hold intermediate skills such as coding, and fewer still have any working familiarity with artificial intelligence, blockchain or the technologies now reshaping global production.

The Federal Government has responded with genuine ambition. The Nigeria Education Sector Renewal Initiative, the Education Transformation Roadmap, the 3 Million Technical Talent programme, the Nigeria Learning Passport and the Teachers Registration Council's digital transformation mandate together constitute a serious national commitment. This brief does not propose a new programme to sit alongside them. It proposes a delivery architecture, tested at regional scale, that can carry those commitments into the classroom.

> The central argument is that digital technology amplifies existing human and institutional capacity rather than substituting for it. Where a school has a competent instructor, a laboratory that opens and a head teacher who owns the programme, modest equipment produces students who build working applications. Where those conditions are absent, the same equipment sits in a locked room. Policy that funds the equipment while neglecting the conditions therefore widens the gap it intends to close, because the schools already better resourced convert the same input into far more learning.

EVIDENCE FROM SIX SOUTH-WEST STATES

2. What the evidence shows

The DEFINED Project, which stands for Digital Education for Innovation and Economic Development, was established by the Odu'a Investment Foundation in 2023 and operates two linked programmes inside the public school system across Oyo, Ogun, Osun, Ekiti, Ondo and Lagos States. Byte Busters coding clubs place structured coding, computational thinking and applied artificial intelligence provision inside public secondary schools, many of them in small towns and semi-rural local governments. The Digital Literacy Training for Teachers programme trains serving teachers as digital practitioners and then as trainers of other teachers.

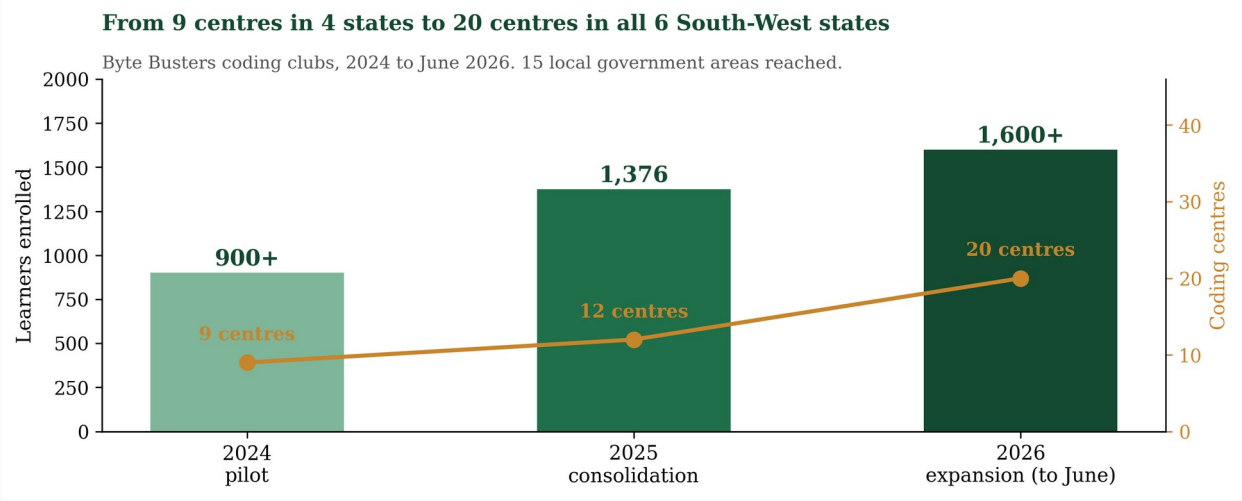


Figure 1. Growth of the Byte Busters coding clubs, 2024 to June 2026

The project grew from nine centres in four states in 2024 to twenty active centres across all six states and fifteen local government areas by mid-2026, with enrolment rising from just over nine hundred learners to more than sixteen hundred. Female students accounted for fifty-one per cent of pilot enrolment. In October 2025 the project convened its inaugural Byte Busters Showcase in Ibadan, at which student teams from all six states presented work in generative artificial intelligence, web development and Scratch programming to ministry officials, school principals, industry partners and national media. The School of Science, Ile-Ife presented an AI Labeller capable of real-time object detection. Government College, Ibadan took first place.

> These are public school students, most of whom had never operated a computer before enrolling. One learner joined in June 2024 unable to use a keyboard, was debugging code with his team within three months, and now presents an AI-powered career guidance application. Two others, complete novices at the start, built a Yoruba-language adaptation of a national television quiz format.

DEMAND IS NOT THE CONSTRAINT

Evidence of unmet demand

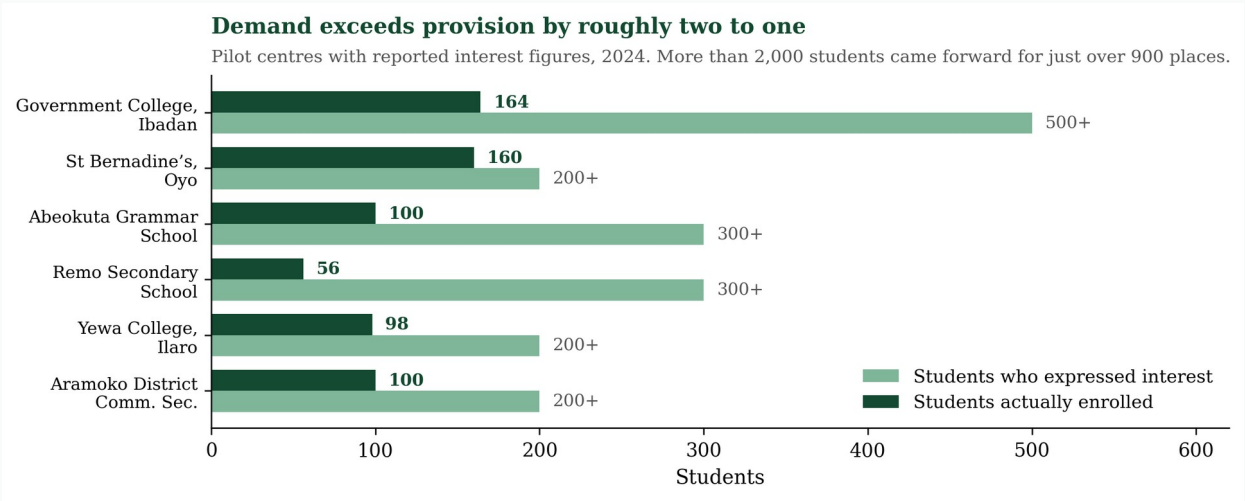


Figure 2. Student demand against available places at the pilot centres, 2024

The demand picture is the most important single finding for national policy. Across the pilot centres more than two thousand students expressed interest for just over nine hundred places, and the ratio at Government College, Ibadan was more than three to one. In the first quarter of 2026, over seven hundred students came forward across five newly opened schools and more than three hundred were shortlisted. The constraint is seats and instructors, not appetite.

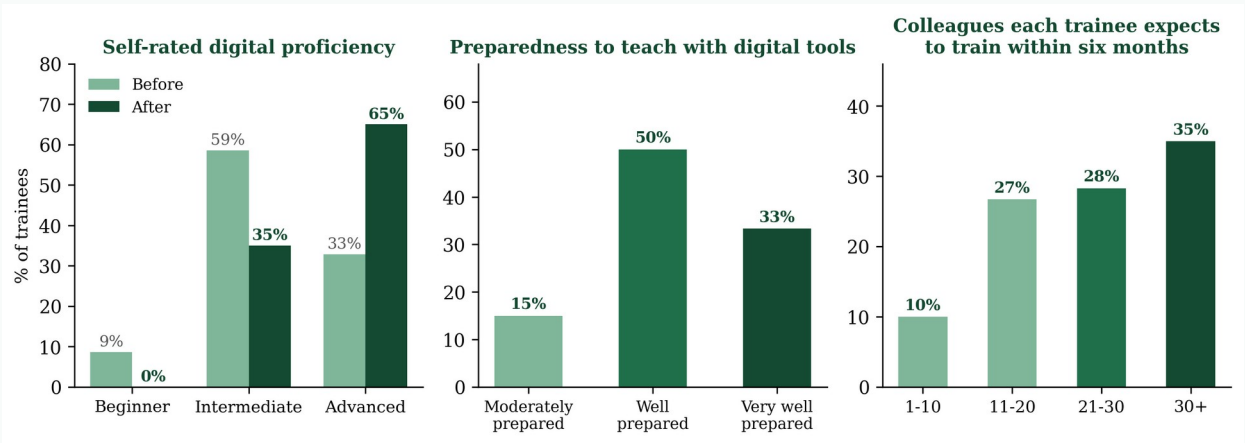


Figure 3. Digital Literacy Training for Teachers, pioneer cohort outcomes, 2026

CONVERT FAMILIARITY INTO PRACTICE

Teachers as the route to scale

The teacher programme addresses that constraint directly. A pioneer cohort of seventy-two teachers was nominated across the six states and screened on eligibility, commitment and capacity to cascade learning. Sixty-seven completed, drawn from fifty-four local government areas, a completion rate of approximately eighty-five per cent. The baseline data overturns a common assumption in programme design, in that the cohort was experienced rather than early-career, with more than half having taught for eleven years or longer, and was not composed of digital novices, since more than nine in ten placed themselves at intermediate level or above. What they lacked was the pedagogical conversion of that familiarity into classroom practice. After training, sixty-five per cent rated themselves advanced, eighty-three per cent reported themselves well or very well prepared to integrate digital tools into their teaching, and ninety per cent said the programme met or exceeded expectations. Almost two thirds expect to train more than twenty colleagues within six months.

> One baseline finding has a direct bearing on the design of virtual training at national scale. Seventy-seven per cent of the teachers identified internet connectivity as the principal risk to their participation, and roughly one in six had no personal computer. A delivery model chosen for its reach imposes its heaviest cost on the participants least able to bear it.

TWO ENGINES, ONE SCALING LOGIC

3. The delivery architecture

The two programmes address different layers of the same problem. The teacher programme supplies breadth, in that a trained teacher carries digital practice into every lesson taught to every pupil in the class. The coding clubs supply depth, in that pupils who elect to go further acquire skills no general classroom can develop. Both now run on a single scaling logic, set out in Figure 4. Established centres become hubs, each mentoring three nearby spoke schools staffed by serving ICT teachers rather than newly recruited external instructors. Existing instructors become Cluster Leads with quality assurance responsibility. Old Students Associations contribute approximately forty per cent of operating cost against sixty per cent from the Foundation. On the teacher side, certified Master Trainers deliver four to five weeks of in-person community-based training using a standard workbook, with continuing involvement of the central team, a certification pathway and a management application that makes every cascade layer visible to the centre.

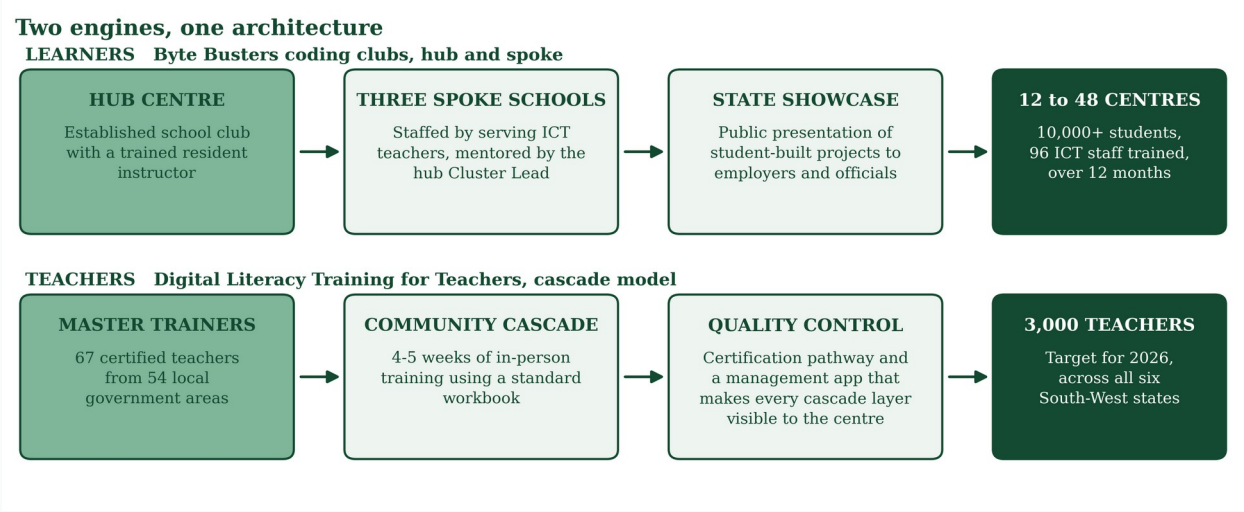


Figure 4. The DEFINED delivery architecture

> This architecture responds to four failures observed during the pilot. Recruitment into remote posts is slow and unreliable, so training the workforce already in post converts a recruitment problem into a training problem. Quality dissipates with distance from the centre, so mentoring relationships are preserved rather than materials merely replicated. Single-donor funding is fragile, so local co-funding creates a constituency with a stake in continuity. And cascade training attenuates when planned one level at a time, so downstream support is designed in from the start.

A PRACTICAL NATIONAL AGENDA

4. Recommendations

Recommendation 1. Embed digital practice across the curriculum, and resource coding clubs as the route to depth

Nigeria already carries information and communications technology on the curriculum as a standalone subject, and in principle that subject covers the ground. The gap is not a missing subject. It is the absence of digital practice in the teaching of every other one. The priority is therefore to embed digital tools and computational habits of mind across mathematics, the sciences, languages and the humanities, so that pupils meet them as an ordinary feature of learning rather than as a specialist option encountered for one period a week. This is a teacher development task before it is a curriculum drafting task, which is precisely what the Digital Literacy Training for Teachers programme addresses and what Recommendation 3 takes to national scale.

Coding clubs serve a different and complementary purpose, and should be resourced as such rather than simply converted into timetabled provision. They are the extension route for pupils who choose to go further out of interest, and their voluntary character is a strength, since the motivation that brings a pupil to a club on a Wednesday afternoon is what sustains the persistence that building a working application demands. The pilot evidence is that this depth track produces outcomes a timetabled subject rarely reaches, in that public school pupils with no prior exposure presented an object detection application and a career guidance application within a year of joining. Policy should therefore fund two distinct layers deliberately, namely breadth for every pupil through subject teachers, and depth for the interested minority through clubs, rather than collapsing either into the other.

Recommendation 2. Fund the instructor before the hardware

Establish a recognised Coding Instructor grade within the teaching service, with a defined progression pathway and salary scale. Professional identity governs recruitment in thin technical labour markets, and the project found that advertising the same post as Coding Instructor rather than Project Assistant markedly improved the technical quality of applicants at no additional cost.

Recommendation 3. Scale through the teachers already on the payroll

Adopt a certified national cascade modelled on the Digital Literacy Training for Teachers programme, delivered through the Teachers Registration Council and the colleges of education, and pitched at converting existing digital familiarity into classroom practice rather than at introductory instruction. Require a baseline assessment before design in every state, since the starting point varies considerably.

FROM DELIVERY TO INSTITUTIONALISATION

Recommendations continued

Recommendation 4. Adopt hub and spoke delivery with matched local funding

Designate one equipped school in each local government area as a hub supporting three spoke schools, and invite a local contribution of up to forty per cent from Old Students Associations, parent bodies, faith institutions, diaspora networks or local government. Local contribution is not principally a financing device, in that it creates a community of stakeholders with a direct interest in keeping the facility open and club sessions running.

Recommendation 5. Agree a predictable approval calendar and extend facility access

State ministries across the six South-West states have partnered with the programme consistently, and Ogun State was recognised at the 2025 showcase for the quality of that collaboration. The lesson from the pilot is that school calendars open only narrow delivery windows, so an agreed annual approval calendar for accredited digital education partners, published alongside the school year, would allow existing ministerial support to convert into a greater number of delivered contact hours. A parallel standing arrangement for school computer facilities to remain available outside examination periods and during holidays would raise utilisation of assets the system has already paid for.

Recommendation 6. Institute a national showcase and a shared data spine

Establish an annual national schools digital showcase progressing from local government to state and then national level, and adopt a common reporting set across participating programmes covering instructor tenure, facility access hours, approval turnaround, project completion and learner destinations. A showcase converts private skill into public recognition, which is what turns a competent student into a student with prospects, and a shared data spine allows the Ministry to see which conditions produce results and to direct resources accordingly.

A SCALABLE USE OF EXISTING ASSETS

5. What this would cost and what it would return

The DEFINED expansion now under way scales from twelve to forty-eight centres over twelve months at a target of more than ten thousand students and ninety-six trained ICT support staff, with sixty per cent of operating cost borne by the Foundation and forty per cent locally. The unit economics are modest because the model uses existing school facilities, existing teachers and freely available software, namely Scratch, standard web technologies and generally available artificial intelligence tools.

> Applied nationally across seven hundred and seventy-four local government areas, a single hub with three spokes in each would place digital education within reach of every local government in the federation. The teacher cascade reaches further and faster still, since three thousand trained teachers is the target for the South-West alone in 2026, and the same architecture is portable to every state.

The return is not principally fiscal. It is the conversion of a demographic weight that is presently a source of national anxiety into a technically capable generation. Nigeria is unusually well placed to lead this on behalf of the continent, since latecomers to a technological wave are not obliged to repeat the intermediate stages, and the digital economy rewards speed, skill and scale rather than seniority.

THE CHOICE BEFORE NIGERIA

6. Conclusion

Seventy years ago the old Western Region committed to free universal education when many judged it impossible, and that decision remains the benchmark for visionary public investment in Nigerian human capital. Digital education is the same moral logic applied to different tools. If free education unlocked literacy for one generation, integrated digital education will unlock leverage for the next, namely the capacity to create, to compete and to contribute at scale.

> The evidence in this brief comes from ordinary public schools in Ibadan, Abeokuta, Ilaro, Aramoko, Ijan-Ekiti, Ile-Ife and Lagos, working under ordinary constraints. Where the conditions were right, students who had never touched a keyboard were presenting applications they had built themselves within a year. Where the conditions were absent, the equipment sat in rooms that stayed shut. The difference was never the technology. It was the teacher, the open door and the permission to begin.

The Odu’a Investment Foundation offers its curriculum, its training materials, its monitoring platform and its three years of implementation data to the Federal Ministry of Education without charge, and stands ready to support a national pilot in any state that wishes to proceed.

CREDITS

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PEOPLE BEHIND THE POLICY BRIEF

About the authors and the project

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Ambassador Dr Olatokunbo Awolowo-Dosunmu chairs the Odu'a Investment Foundation, the corporate social investment vehicle of Odu'a Investment Company Limited, which is owned by the governments of the six South-West states. A former Ambassador of the Federal Republic of Nigeria, she has led the Foundation's commitment to education, health and youth empowerment.

The DEFINED Project has operated since 2023 under the auspices of the Odu'a Investment Foundation. Correspondence to defined@odif.ng and www.odif.ng.