SIWES: How Successful is the Marriage of Town & Gown?
A Commentary.

STANLEY NARIBO NGOA
Faculty of Social Sciences, National Open University of Nigeria, Abuja Nigeria.

Abstract
Most Nigerian university graduates, especially, those in the natural sciences do not have the required competencies in the handling of equipment and machinery. This is not so because students have not been taught the theory of their chosen discipline but more so as a result of non-availability of such equipment and machineries in a majority of the country’s institutions of higher learning. The Student Industrial Work Experience Scheme (SIWES) as an instrument of intervention to stemming the tide of this technical incompetence among university graduates in the country is government’s response. Siwes therefore, at inception was a marriage of Town & Gown designed to bridge the knowledge gap between classroom theorizing and the actual industry or practical work situations and over time the scheme enjoyed tremendous patronage as an identifiable method of a government structured collective action directed at a public problem. How successful this marriage of Town and Gown has been is at the heart of this commentary and two forcefully differing macro-economic views provide the stimulus for scrutinizing Siwes as a government instrument of intervention. Thus this is an attempt at policy review of the Siwes scheme; a sort of inquiry as to how successful the marriage had been and its recorded successes if any or better still, to ascertain if the scheme is simply, another successful failure in public policy. The paper applies the set based theory of comparative analysis on the one hand and on the other, the critical discourse analysis approach as a methodology arguing that, if government’s intervention is justified, as in capital outlay being commensurate to desired expectations, then let the Keynesians have it. Otherwise, the Friedman theory that policies are better judged by the results they produce rather than their intentions hold concluding that, there is the need to acknowledge Phelps’ need for change and think the scheme anew or stop this grand wastage called SIWES.

CONTACT
Stanley Naribo Ngoa dr.snn.enigma@gmail.com Faculty of Social Sciences, National Open University of Nigeria, Abuja Nigeria.

© 2022 The Author(s). Published by Enviro Research Publishers. This is an Open Access article licensed under a Creative Commons license: Attribution 4.0 International (CC-BY). Doi: 10.12944/CRJSSH.5.1.04
Introduction
It is a widely known and acknowledged fact that, most Nigerian university graduates, especially, those in the natural sciences do not have the required competencies in the handling of equipment and machinery. This is not so because students have not been taught the theory of their chosen discipline but more so as a result of non-availability of such equipment and machineries in a majority of the country’s institutions of higher learning. It is also an established fact that, recent studies in State theory and public policy amongst others reveal a series of transformations, ways and means by which governments intervene to solve public problems such as the one under consideration - i.e. the technical competency deficit in our university graduates.

In Nigeria, one instrument of government intervention in stemming the tide of this technical incompetence among university graduates is, the Student Industrial Work Experience Scheme (SIWES).

"SIWES: A Marriage of Town & Gown" was the title of my 2014 public lecture on the topic of the students’ industrial training scheme in Nigeria. The marriage of Town & Gown here, therefore, refers to bridging of the knowledge gap between classroom theorizing and the actual industry or practical work situations.

At inception in 1974, SIWES’ parent organization, the Industrial Training Fund’s (ITF) mandate included the generation of a pool of trained indigenous manpower through the promotion of skills acquisition for the needs of the country’s economy. Thus SIWES was designed to bridge the skills gap between employers’ expectations and the matching output from graduates of Nigeria’s tertiary institutions. Indeed over time, the scheme has enjoyed (and continue to enjoy) tremendous patronage as an identifiable method of a government structured collective action directed at a public problem.

However, two forcefully differing macro-economic views provide the stimulus for further scrutiny of SIWES as a government instrument of intervention. Thus this paper is an attempt at policy review of the SIWES scheme’s marriage of Town & Gown a sort of inquiry as to how successful the marriage had been and its recorded successes if any or better still, to ascertain if the scheme is simply, another successful failure in public policy.

The methodologies for achieving the above include application of the set based theory of comparative analysis on the one hand and the critical discourse analysis approach on the other.

A Theoretical Foundation for Analysis & Discourse:
Followers of John Maynard Keynes, a leading light of 19th Century economic thought and the founding father of macro-economics insist that the advancement of a country is synonymous with that country’s level of technological – and by extension – economic development. But that in itself, according to Keynesians, is dependent on the availability of a competent work force; a work-force that is adequate, appropriate and with technical skills for the creation of Goods and the provision of Services required and necessary for the development, growth and advancement of the economy.¹

The above is a dictate of production economics or put simply, supply-side economics which encourages government spending as an interventionist (structural & investment) policy in times of economic recession.² However, within the context of this commentary, this Keynesian theory is viewed in the light of government spending as investment in compensation to achieving the above described technically skilled work-force for the development, growth and advancement of the economy, especially, in an "ever-developing" country like Nigeria.

The counterpoint to the above Keynesian argumentation comes from Milton Friedman’s quantity theory of money—QTM,³ bolstered by Frank Hyneman Knight’s Chicago School of Economics. According to the agents of Monetarism and their Free Market Principles, the supply of money is always stable but the actions of monetary authorities are often responsible for the change in supply of money. In other words, there exists a degree of independence between the demand and supply of money yet, “the general price level of goods and services is proportional to the money supply in an economy”⁴ (we’ll leave this for another day’s symposia discussion; as, the “next level” political

¹

²

³

⁴
economy of the Buhari administration in Nigeria seems to have proven otherwise).

As with the earlier Keynesian proposition -i.e.- government spending as an interventionist fiscal policy, Milton Friedman’s quantity theory of money – QTM, monetarism and its associated free market principles are equally viewed, within the context of this commentary as antithetical of government spending as investment. Because, Friedman, the 1976 Economics Nobel Laureate who Roger Garrison in Mark Skousen’s *dissent on Keynes* and critical appraisal of Keynesian economics arguably passed for a Keynesian⁵, advance forcefully that fiscal policies that encourage government spending may necessarily not be good for the economy. If this be the case, does government spending on a policy such as the Students Industrial Training Schemes or SIWES for short in Nigeria constitute a waste on public spending that would have been better utilized?

Again, one plausible deduction from the Friedman theory suggests that, policies are better judged by the results they produce rather than their intensions. All of the above propositions forms the bases for the Hegelian⁶ dialectical⁷ approach here as well as brings us to the issue of the Nigerian government intervention in the Student Industrial Work Experience Scheme (SIWES) and how successful that policy of the marriage of Town & Gown has been since inception.

**SIWES: A Comparative Analysis**
The SIWES scheme is neither a Nigerian creation nor is it peculiar to the country, rather, the concept is universal with taxonomically shared features and a few examples here will suffice.

In South Africa, the post-apartheid ruling African National Congress (ANC) through its Black Economic Empowerment (BEE)⁸ programme aimed at redressing inequalities created by pre-independence apartheid South African government policies is one successful example. The BEE policy, amongst other benefits, was instituted to encourage and broaden black majority participation in South Africa’s economy as well as facilitate training for unemployed youths within the age range of 18 – 28. The policy equally offers “free Bursary/Scholarship” to young people faced with the challenges of access to tertiary education.

But the government does this by funded programmes in numerous BEE companies and organizations including the likes of Bhekizizwe, Training Force, Skills College and Imsimbi Training. Besides “free Bursary/Scholarship”, Bhekizizwe’s offerings include training in the very much needed, employer recognized areas of health & social care services, Warehousing, basic business management skills, customer services and construction works.

Training Force, Skills College and Imsimbi Training are equally BEE registered practical training and quality assured skills development solutions providers. Interestingly, these BEE providers of solutions for a productive workforce are all in alliance with quality assurance departments of colleges and other centers of production and such, duly recognized by the South African Qualifications Authority (SAQA), the National Qualifications Framework (NQF) and the Skills Education Training Authority (SETA).⁹

The United States of America (USA), the most developed and technological heartbeat of the twenty first century and the United Kingdom (UK) have palpable success to show for its students and generally Industrial Training (IT) programmes. India is so well established with the scheme that it is now at the level of specialization in areas like Biotechnology and Information Sciences; and Australia stands on a pedestal of clear communication of objectives and expectations from vocational education and training hubs. As for Japan and China, the countries are way beyond the students’ industrial training and work experience scheme. China for example in late 2019 had announced a major reform to her vocational education sector - the “Vocational Education Quality Improvement Action Plan (2020-2023)”.¹⁰

According to a public announcement on the Australian Government Department of Education, Skills and Employment official website, China this year (2022) ‘aims to transform select universities into “practical” institutions – Universities of Applied Sciences - where students can acquire a bachelor degree plus a number of occupational skills certificates, a mechanism known as the “1+X” model. The “1+X” model allows vocational institutions and universities to offer an educational qualification plus a number of skills certificates.”¹⁰
The announcement further adds that, ultimately, the “1+X” model plan seeks to raise the status of vocational education as well as attempt to eradicate the common mindset that vocational education is a “second choice” to an academic degree.

![The China Vocational Education Pathway](image)

Source: Australian Government, Department of Education, Skills and Employment

Perhaps, one notable example from the United Kingdom and the students industrial training scheme and generally skills acquisition is that of the National Council for the Training of Journalists (NCTJ) - the industry’s charity that provides world-class education and premier training scheme for practicing and future journalists in the UK and although the NCTJ had been in existence for quite some time, a one hundred thousand (100,000) British Pound Sterling Newspaper Licensing Agency donation in 2005 and further contributions from industry practitioners like the BBC, internship schemes of the Financial Times of London and Reuters etc. led to the establishment of the Journalism Diversity Fund. The Journalism Diversity Fund is managed by the NCTJ and similar to the South African BEE companies and organizations. The NCTJ is the accrediting authority for Diploma in Journalism programmes at British colleges, universities and other independent journalism skills providers and as such, the council’s Diploma in Journalism qualification, is the recruiting editor’s delight.¹¹

From the foregoing, the students industrial training and generally skills acquisition schemes are designed to produce appropriate technical skills for the creation of economic value a “cooperative education” or a “work-integrated-learning” scheme whereby, the combination of educational input and training input leads to productive individuals and generally productive citizenry. Put differently, the ability and capability of the scheme in generating productive citizenry equates the creation of goods and services and ultimately, economic value and wealth.

SIWES: A Critical Discourse
Taking a cue from all of the above examples therefore my 2014 title of SIWES as the marriage of town and gown, a bridge between theory and practice that is necessary for the creation of national wealth was apt. Apt, in the sense that I viewed the scheme ideally as is the case in other climes as a skills acquisition program designed to provide exiting students of tertiary institutions the benefits of a hands-on work experience that affords learners or interns the opportunity of directly interacting with technically experienced and competent professionals. Also, perhaps apt in the sense that the idea is not only to prepare such graduating students for the uncertain world of unemployment in the turbulent employment market but equally, to inspire as well as register the requisite confidence in them as possible future entrepreneurs.
The history of SIWES in Nigeria is well documented, but a cursory look at the scheme’s evolutionary process confirms that from inception, SIWES had run as a manual scheme. Introduced by the Industrial Training Fund (ITF) in 1973 in response to a 1971 Decree No. 47 under the Yakubu Gowon led military government, the scheme has evolved through its exposure to the various government agencies to which it was tenanted. From its formative days at the ITF, the National Universities Commission (NUC), the National Board of Technical Education (NBTE), the National Commission for Colleges of Education (NCCE) and back to the ITF, the scheme had been reformed, re-organized and seemingly over the years had enjoyed a rich government patronage.

As a result, a number of industrial outfits, oil exploration and marketing companies, liquefied natural gas companies, the banks, hospitals and allied medical services and other skills solution service providers keyed in with the SIWES scheme.

Shell Plc. (formerly Royal Dutch Shell Company), the oil exploration giant is one of the organizations that opens its industrial doors to a limited and perhaps selected few for its students internship program. Here, the lucky few are well remunerated, treated like any other employee of the company with equal access to amenities like the staff canteen and made to account for every minute of the day at work. The organization’s January 2022 Student Industrial Training and Internship Programme confirm that.

“This Industrial Training Program is designed for students to”

- Put theories and concepts into practice
- Build work related skills required for the business environment through constructive feedback and supervision
- Improve their general business/industry understanding
- Gain additional skills in areas such as communication, team building, problem solving and analytical reasoning
- Build valuable networks and contacts for professional development
- Gain insights into career options to support choice of specialized field area

Nigeria’s National Petroleum Corporation (NNPC) and the sister Liquefied Natural Gas (the Bonny LNG) Company for example, runs an industrial training program similar to that of Shell. Information available at the LNG official website confirm that, students studying for diploma and degree certificates in Nigerian universities - both public and private -, National Diploma (ND) students from polytechnics who have completed their first year, and post-ND polytechnic graduates seeking openings for the one-year industrial training are eligible to apply. However, only successful candidates are considered and selected for placement after an assessment test noting that, opportunities are based on (the company’s) “business needs”.

A retired general manager of the oil and gas conglomerate corroborates that, intake of interns “is not free or open for all but, there is some form of qualifying examination or test where if ten candidates qualify and the required is five, then we resort to allocation as in federal character”. Here too, interns are treated as full-time staffers but the period of internship “must be one year” and not the “usual six months” or even less; sometimes, as insignificant as six weeks for the acquisition of skills.

Financial institutions like the banks are not in any way remarkably different in terms of pecuniary gratification for interns and freedom of entry into the students’ industrial training scheme. One bank executive sums it up this way: “they are mostly young women, presentable and capable to source for funds, deposits. But actually, it depends on who is giving her the introduction/recommendation letter. I mean, who is her sponsor”.

From the above picture of so many eligible candidates in want or demand for so few a space to accommodate the myriad of qualified interns, three likely scenarios emerge

(i) Most of the exiting students and generally the hundreds of thousands of eligible candidates all have eyes for the choice oil companies and banks for the period of their internship to make some money while also learning but the inadequacy in the number of such choice employers and the now known selective approach to recruitment turns the exercise
into a rather fierce competition and the frenzy of “who gets in depends on who you know”.

(ii) In addition to institutional referrals, qualified candidates for the SIWES scheme now pour into town in search of high ranking government functionaries and other such or similar public officials for the additional “recommendation letter” which, in the end are often as useless as the piece of paper on which they are written; excepting the few from within the power-loop.

(iii) Frustration sets in and some of the candidates simply resort to arrangements with some private one-man owned enterprise to account for the period away from school on “industrial attachment”; that is, in fulfillment of the expected detailed and duly signed Logbook required for graduation purposes. Truth is that, in reality, a majority of this category of arranged “industrial attachment” candidates engage in one form or the other of service provision to “keep body and soul together”. The females usually will find themselves around eateries and beauty salons and the males also find for themselves engagement in areas like the now popular tricycle transportation business.

Worthy of note here is the fact that, none of the above mentioned engagements really have that much significant bearing (if any at all) on the candidate’s chosen field of study at school. There is also another category of lucky and privileged candidates whose parents arrange for them to “kill time” in their (the parents) primary places of employment as well as the secondary place of moonlighting. Yet, there still exists a population of SIWES candidates who simply see the period for the scheme as extra party-time.15

One interesting development arising from the dysfunction and operational malformation of SIWES in Nigeria is the trigger effect noticed in innovation and entrepreneurship. That is, people in the right entrepreneurial spirit and those in the business of creating value through the desirable presentation of products and services are cashing-in on the leadership failure of SIWES. That failure, a painful loss for SIWES’ stakeholders has become the gainful niche to some private sector operators who now offer professional clientele services to parents, guardians and their wards eligible for the Student Industrial Work Experience Scheme (SIWES) and other general industrial training programmes.

In a review of the student industrial work experience scheme in three purposefully selected countries - USA, Turkey and Germany – in comparison with Nigeria,16 the reviewers identified factors like generally low quality educational standard, unfavorable environmental factors, insufficient industries for the accommodation of interns and the paucity of facilities in the existing few for effective hands-on training and of course, the rather short period, in some instances as short as six weeks allocated to SIWES activities as being responsible for the dysfunction of the scheme in Nigeria, but placed squarely the reasons for the schemes malformation at the door steps of officialdom especially poor leadership of the scheme in general.

The authors in their conclusion noted that a major difference in the functionality of the scheme in Nigeria compared to the other three countries is nothing more than leadership; adding that, whereas leadership in the “USA, Turkey and Germany seem to be committed in empowering their youth for sustainable development, Nigerian leaders are not innovative in approach and actions” and, although arguably limited in scope and data, Onoselese & Ejodamen in exploring the influence of students industrial work experience scheme on students acquisition of entrepreneurial skills, specifically in the south-south state of Edo painted a somewhat encouraging picture; even so, their recommendations amongst others also include the extension of the period allocated to the scheme to one year so as to enable participants experience and acquire the relevant skills.17

The sum total here remains the fact that, the SIWES marriage of town & gown may after all not have worked out as intended as findings in some studies confirm that technical incompetence (mostly in the natural sciences) in graduates of Nigerian universities indicate that SIWES has not been significantly effective in the impartation of practical knowledge as intended.
“Internship for Fresher& Students” screamed one advertising headline and continued – “This Industrial Training program is designed for students to

• Put theories and concepts into practice
• Build work related skills required for the business environment through constructive feedback and supervision
• Improve their general business/industry understanding
• Gain additional skills in areas such as communication, team building, problem solving and analytical reasoning
• Build valuable networks and contacts for professional development
• Gain insights into career options to support choice of specialized field area”.

The above advertisement is from a private Information Technology (IT), project management, engineering designs and consulting firm whose industrial training program for students carries the same objective criteria as that of Shell Plc, except that whereas Shell pays interns, here (VAST Integrated Solutions Ltd), interns pay the service provider for services rendered.

In an interview, Managing Director of the company, Emmanuel Nwabueze confirmed that most of his interns come for trainings in IT or simply use the “period for other enriching programmes such as Process Instrumentation and Control, Engineering Design, Programming in Computer Science, Project Management, Data Analytics/Document Control, Web Design Development and trainings in Oil and Gas”. According to Mr. Nwabueze, his company is paid for services rendered by the clientele.

The concept is akin to or can be likened to the South African experience with Bhekizizwe, Training Force, Skills College and Imsimbi Training excepting that whereas the government there, through its BEE programme see to the smooth running and implementation of the scheme, in our example above the layout is the exclusive responsibility of interns and their parents.

SIWES Nigeria on its part seem to be making attempts at plowing through its numerous obstacles and setbacks with the simplified and improved objectives introduced on what looks like a dedicated website for the scheme. According to the “Objectives & Scope of SIWES in Nigeria”, the scheme is designed to

• Provides the avenue for students in institutions of higher learning to gain industrial skills and experiences in their course of study.
• Prepare the students for the industrial work situation they’re likely to meet after graduation.
• Expose students to work method and techniques in handling equipment and machinery that may not be available in their institutions.
• Make the transition from school to the world of work easier and enhance students contact for later job placement.
• Enlist and strengthens employers involvement in the entire educational process and prepare students for employment after graduation.

However, after nearly fifty years in existence, modification and simplification, the objective criteria for establishment of the scheme is yet to justify the huge capital outlay the scheme or project had gulped down over the years and that again brings us back to the beginning - has the marriage of town and gown been successful with the desired result and effect? And if so, can government intervention or spending on the policy be justified? The economists would have it said that: “all things being equal” yet, nothing seem to be equal as there could be at play other variables such as, perhaps, the application of wrong policy instrument or deliberate sabotage to purloin.

Besides the earlier Keynesian supply-side economics argument which encourages government spending as an interventionist (structural & investment) policy and Friedman’s quantity theory of money and its associated free market principles in opposition, Maria Vergas and Daniela Restrepo, the two Colombian scholars who took a “trans disciplinary” look at the instruments of Public Policy argue that, different definitions of instruments of public intervention coexist, often, without speaking to one another.
According to the authors, whereas the more general definitions of policy instruments highlight the State-society relationship, some others underline the fact that instruments of public intervention do not exist as a given reality but as social and analytical constructions; and, there are also those that emphasize the power of the government actor - i.e. - “the set of techniques through which government authorities exercise their power in the attempt to secure support and to effectuate or prevent social change”. Citing Stiglitz and Rosengard (2016), Vergas and Restrepo argue that although government intervention instruments are meant to serve as corrective mechanisms for imperfections within the context of mixed economies, government use of intervention tools is justified not only for economic reasons but also for social and political reasons and therefore necessary that, in the application of intervention policy instrument, “the state and the markets act together, reinforcing each other”. In other words, when varying definitions of instruments of public intervention collide, the likely spin-off is a “successful failure” in public policy.

Matt Andrews of the Harvard University’s Center for International Development (see: the center’s December 2021,33 pages Working Paper)22 confirm that, a “successful failure’ is achieved when a policy delivers enough low-level, short-term product to promise success, but ultimately (and repeatedly) fails to contribute to sustained high-level, long-term impact (addressing the problems citizens care about). Such ‘successful failure’ is endemic to public policy work, and a more pernicious result than outright failure it allows policy design and implementation actors to associate with incomplete near-run success but insulate themselves from future failure (which they blame on factors and actors beyond their control) and simultaneously enjoy repeated demand for work (because problems are never really solved)”. Indeed Phelps himself argues that, “Economic and Economists refusal to acknowledge the need for change” could also be responsible for successful failure in public policy and perhaps, instruments of intervention too. In the words of Phelps, the “Three Revolutions Economics Needs” to get it right is to change from the “continuing neglect of imperfect knowledge, the neglect of imperfect information and the utter omission from economic theory of economic dynamism”.26 In other words, the economic environment could by its self, produce efficient results and correct their own imperfections. Thus Vargas & Restrepo (2019) citing Coase (2002) insist that “even doing nothing is an instrument of intervention by the State”.27 Even so, Bortis posits that, classical-Keynesian political economy is the Economic Theory of the future, not neoclassical economics.28

Concluding Remarks
If after proper assessment of the issues raised herein it is duly considered that government spending, call it social intervention, is justified, as in
capital outlay being commensurate to desired socio-economic effect, then let the Keynesians have it. Otherwise, the deduction from the Friedman theory holds; and that is, policies are better judged by the results they produce rather than their intentions; and better still, let's do Phelps - break-away from the neo-classical paradigm of perfect information and knowledge and, embrace “imperfect information, with its associated market frictions and imperfect knowledge with its consequent complications into macroeconomics”.

Thus there is the need to acknowledge Phelps’ need for change and think anew. Thinker with the scheme, reorder, rearrange, restructure (that word again) and rethink SIWES in the direction of the South African BEE and the equivalent of BEE service providers as well as the NCTJ approach for the scheme in Nigeria and stop this grand wastage called SIWES.

Acknowledgement
The author would like to thank the National Open University of Nigeria for granting the sabbatical leave during which period this work amongst others was done.

Funding
There was neither a grant nor any funding source; strictly, my singular effort.

Conflict of Interest
No conflict of interest whatsoever.

Reference

13) Influence of Students' Industrial Work Experience Scheme on Professional Development of Library and Information Science Students in South-West, Nigeria. http://digitalcommons.unl.edu/libphilprac/1330

14) Student Industrial Work Experience Scheme (SIWES) https://www.nigerianlg.com/Careers/Pages/SIWES-Training.aspx
Accessed: 07.03.22

15) The author’s experience with and exposure to SIWES candidates over time; first as Head of Department (HoD), Director of Academic Planning (DAP) and Director of Learner Support Services (DLSS) respectively.


19) Interview (01.03.22) with Mr. (Eng.) Emmanuel Nwabueze - MD VAST Integrated Solutions Ltd


Accessed: 31.05.22


