# TRANSPORT AND LOGISTICS MANAGEMENT EDUCATION IN NIGERIA: AN ENLIGHTENMENT AND EDUCATION APPROACH

## Ajiboye, A. O. (MCILT)

Department of Transport Management Technology, School of Entrepreneurship and Management Technology, Federal University of Technology, Minna, Nigeria

E-mail: <a href="mailto:rinkoyemii@yahoo.com">rinkoyemii@yahoo.com</a> or ola<a href="mailto:rinkoyemii@yahoo.com">rinkoyemii@yahoo.com</a> ola<a href="mailto:rinkoyemii@yahoo.com">rinkoyemii@yahoo.com</a> ola<a href="mailto:rinkoyemii@yahoo.com">rinkoyemii@yahoo.com</a> ola<a href="mailto:rinkoyemii@yahoo.com">rinkoyemii@yahoo.com</a> ola<a href="mailto:rinkoyemii@yahoo.com">rinkoyemii@yahoo.com</a> ola<a href="mailto:rinkoyemii@yahoo.com">rinkoyemii@yahoo.com</a> ola<a href="mailto:rinkoyemii@yahoo.com">rinkoyemii@yahoo.

#### **Abstract**

This paper focused attention in educating and enlightening the policy makers and the general public especially students, teachers, parents and guidance counsellors to have an understanding of the role of transport and logistics in the socio-economic development of the nation, the career information and opportunities as well as the prospects while the educational requirements in building a career in transport and logistics management were also discussed.

#### Introduction

Transport and Logistics are very important in the overall development of any country and they are very crucial in production process which is not complete until the products are in the hands of the final consumers. Generally the importance of transport and logistics in the overall development of any country cannot be over emphasized since it is a key factor in all aspects of development. There is hardly any aspects of a nation's development in transport and logistics are not an essential ingredient since there is always the need to collect, assemble, transfer and distribute goods, services and people from one area to another. Their roles are very crucial and a phase in production process which is not complete until the the commodity are in the hands of the final consumer according to Adefolalu (1977), Ajiboye and Afolayan (2009) and Ajiboye and Ayantoyinbo (2009).

Transport and logistics industry in every society be it underdeveloped, developing and developed are both concerned with the safe and efficient movement of people and products from one geographical location to another. Millions of passengers travel by road, rail, air and water throughout the world in general and in Nigeria in particular every year while every product that is imported and exported passes through the logistics supply chain.

Researchers, such as Adefolalu (1977), Ajiboye, (1994, 1995, 2008), Ajiboye and Fapohunda (2008), Ajiboye and Afolayan (2009), have identified the availabilities of transport and logistics facilities as a crucial investment factor that stimulate economic growth through increased accessibility, its efficiency and effectiveness all of which affect the basic function of production, distribution, marketing and consumption in many ways and also influence the cost of commodity consumed and the purchasing power of the consumers. When the transport and logistics facilities are in place, it will ensure an efficient

movement of agricultural products, industrial raw materials, finished and semi finished products from the point of production to the market centres as well as people from their home to work, market, recreation and religious centres among other places.

Every mode of transport, from planes, helicopters, trains and luxurious buses to large goods vehicles, vans, ships, private cars and taxis, requires a driver or pilot. In addition, a vast number of people in these industries work in support roles, including: operational, distribution and transport managers, planners and schedulers all of whom are involved in co-ordinating people and goods; safety specialists such as air traffic controllers, driving instructors and examiners, railway station assistants, conductors and signallers who all ensure that vehicle operators are following strict health and safety regulations; customer service personnel who take reservations, answer queries and act as the public face of the transport and logistics sector; warehouse personnel who select, package and prepare items for delivery.

The focus of the paper is to educate and enlighten the policy makers and the general public especially students, teachers, parents, guidance counsellors to have an understanding of the role of transport- logistics as well as to know the prospects and the requirements in building a career in transport and logistics management. It is against this background that this paper is structured into 5 sections. Section one is on the introduction of the paper as well as revealing the objectives and coverage of this paper. Section two examine the concept of transport-logistics management education and section three focuses on the requirements for studying transport and logistics while section four examines the opportunities in the field of transport and logistics in Nigeria. Section five concludes the paper.

### An Overview of Transport and Logistics Management Education

Not much work has been done on transport and logistics management education across the globe in general and in Nigeria in particular. But for the purpose of this study and paper, there are certain concepts that need to be explained for better understanding. Among these are education and training, transportation, transportation and management, logistics, logistics management and transport and logistics management.

There is now a widespread realisation that adequate training and development of employers is necessary for rapid economic growth according to Oriabor (1993). Buckley and Caple (1990) define training as a planned and systematic effort to modify or develop knowledge, skill or attitude through a learning experience in order to achieve effective performance in an activity or range of activities while Oriabor (1993) see training as a

learning process by which employers acquire skill, knowledge and aptitude. Training therefore represents a viable investment that cannot be ignored and is one of management's most important means of achieving set objectives. It is not an end in itself, but essentially a part of the total framework of effective management.

A renowned educationalist, William Rouven observed that education is not a mere means to life... Education is life! This statement was made several years ago but it still stands till today even in the area of transport and logistics management. Education on the other hand is a process and a series of activities aimed at enabling an individual to assimilate and develop knowledge, skills, values and understanding that are not simply related to a narrow field of activities, but allow a broad range of problems to be defined, analyzed and solved according to Oyeneye et al (1996). The distinction between training and education is shown in Table 1 according to Osisioma (1995).

**Table 1: Distinction Between Training and Education** 

S/N	Training	Education
1	More precise, More job oriented	Less precise, More person oriented
2	Defined in a specific job context	Broader process of change
3	results in uniform behavior	Increased individual variability
4	Mechanistic process producing	g More organic process producing less
	predictable responses	predictable change in the individual
5	Knowledge and skills for specific task	Analytical and critical abilities generally. More
		theoretical and conceptual.
6	Observable in short time	More profound and long term effect.

Source: Osisioma, 1995

Transportation on the other hand, is the movement of people, goods, services and information from one geographical location to another through a specific mean or means for a particular purpose according to Ajiboye (1995). For instance, getting to and from office, school, religious or recreational centres require transportation, so does getting agricultural products from farms or industrial products from manufacturing companies into markets for the end users to purchase as observed by Adefolalu (1977), Ajiboye (1994,1995), Ajiboye & Afolayan (2009), Ajiboye and Fapohunda (2008).

Transportation is derived from the Latin word 'trans' meaning across and 'portare' meaning to carry. It creates time utility, which is getting a product to a destination on time and space utility which is the optimal utilization of space available for to carry large volumes of goods at a low cost. For instance, if a finished product is not moved to the market at the

right time, it ceases to have value. In other words, transportation is basically the movement of goods, people and services as well as information from one location to another.

Transport management is the technique, practice or science of controlling, planning, developing and maintaining adequate transport services that meet the individual and corporate needs. It is also the process of ensuring that people, freight services and information are delivered to the right place, at the right time and at the right price according to Ajiboye (1995, 2007), Nnadi (2008) while the Council of Logistics Management in United States of America (2003) see Transport Management as the art of managing inventory in motion for delivery to the right place, at the right time and in the right condition, choosing the right equipment and in the right direction while it encompasses management of inbound and outbound transportation. In broad terms, it also consists of the management of areas such as shipment scheduling, routing, freight cost management, shipment tracking and parcel management in optimal way. However, Ajiboye (2007) observed that the main objective of Transport Management is to provide a functional and sustainable transport services for the nation and this has to be done by providing a consistent general approach and realistic guide for the operation of transport sector which is described as the engine of the nation's economic growth and development.

Logistics is a common terminology but most often misused or misrepresented. However, each profession applies it according to its suitability. For instance, Helsinki (1996) looks at logistics from the business perspective and defines it as a business planning framework for the management of material, service, information and capital flows. It includes the increasingly complex information, communication and control systems required in today's business environment. The military according to JCS (undated) sees logistics as the science of planning and carrying out the movement and maintenance of forces.... those aspects of military operations that deal with the design and development, acquisition, storage, movement, distribution, maintenance, evacuation and disposition of material; movement, evacuation, and hospitalization of personnel; acquisition of construction, maintenance, operation and disposition of facilities; and acquisition of furnishing of services.

On the other hand, it is the science of managing inventory both in motion and in static condition. The Council of Logistics Management (CILM) of United States of America (1998) defines logistics as the process of planning, implementing and controlling the efficient, effective flow of storage of goods, services and related information from point of origin to point of consumption for the purpose of confirming to customer requirements.

The Canadian Association of Logistics Management (1998) see logistics as the process of planning, implementing, and controlling the efficient, cost effective flow and

storage of raw materials, in-process inventory, finished goods and related information from point of origin to point of consumption for the purpose of meeting customer requirements. In summary logistics is often referred to as supply chain management and focuses on the management and control of goods between people, companies and organizations.

Transport and logistics management is defined according to Chartered Institute of Logistics and Transport (CILT) International (2003) as any activity consistent with the general objectives of the institute as stated in the charter including prejudice to the generality there of: (i) the administration, management, planning, conduct or operation of any of the principal forms of transport, transit, traffic, locomotive, physical distribution, logistics or any activity related thereto and (ii), the research, development, study, education in or of the art and science of logistics and transport in all its branches.

# Education Requirements for Training as a Transport and Logistics Professional in Nigeria

Modern transport and logistics use a battery of sophisticated methods and require a range of skills and personal qualities. These are summarized as good in general numerical skills, a grounding knowledge in statistics and sampling methods, some knowledge of analyses, computers and data good presentation and communication organizational/administrative abilities, a flexible approach both in academic and practical as well as using one's own initiative. The need for increased efficiency and therefore continued human capital development has become even more urgent as mega cities - cities with more than 10million inhabitants emerge. In Nigeria, for instance Lagos, the economic and financial hub of the country is the largest metropolitan city area in sub-Saharan Africa. With a current population in excess of 15million, it is ranked the 8th largest mega city in the world according to Oyesiku (2002) and Nnadi (2008). Findings in a global research project on 25 of the world's mega cities including Lagos show transportation as the topmost mega city infrastructure challenge. There is no doubt a desperate need to keep up efficiency in the sector.

The role of human element in the production process cannot be compromised. Of all the factors of production, among all the inputs into the productive process, human capital remains the most strategic co operant factor according to Nnadi (2008). The manpower need of the nation can only be achieved through education and training to the extent that the people are guided, trained and directed according to their own interests and abilities as well as to the needs of the nation. Experience has shown according to Sofenwa (1982) that a lot of frustration and manpower wastage occur where people are either not sufficiently

aware of their own capabilities or not able to utilise such abilities effectively within the context of the society in which they live. The choice of subjects at school, the application of one self and the channelization of interests and abilities will be more purposeful and more rewarding if one is aware of one's own professional destination and the opportunities that exist for the realisation of personal ambitions. Regardless of the educational requirements of the job you are contemplating, start today to chart your future so that you make it happen.

In the Nigerian transport and logistics industry, human capital development has been vigorously pursued over the years, incorporating both training and education but it is still a far cry to the need of the industry while the most cogent rationale for human capital development in the transport industry is the need to keep performance efficiency at a satisfactory level. For instance, Ajiboye (2007) notes that the efficiency of transport has become the yardstick by which the socio and economic development of a country is measured.

A critical appraisal of the human resources available in the transport sector indicates an acute shortage of personnel among the professionals and technicians. This has resulted in an unduly high independence on foreign experts to carry out planning, design, construction and maintenance work in the transport sector while the artisans and operators are very large in number but are usually poorly trained and therefore ill equipped to carry out those minor but important functions in the transport sector as required by their trade or be part of a program of quality improvement within the sector.

Furthermore, there is also the demand created by expansion in the transport sector which must be met by well trained manpower. Here in lies a further rationale for human capital and development. The manpower needs of the nation can only be achieved through education to the extent. Currently, a student in Nigeria can enrol into transport and logistics management program at diploma's, bachelor's, master's and doctoral degree level.

The educational requirements for candidate coming in into transport and logistics management vary from one entry point to another. For instance, a diploma degree in transport and logistics prepare graduates for entry-level career in transportation and warehousing which are two key areas involved in the industry. However, a graduate of a bachelor's or master's degree program in the field is qualified to pursue managerial and administrative positions in transportation and logistics / supply chain management while a doctoral degree primarily prepares graduates for careers in transport and logistics research and teaching.

A diploma certificate in transport and logistics gives students an overview of transport- logistics and includes some business topics. General education courses are

required as well as core courses in transport-logistics and business management. Some of the topics usually covered in a diploma program in transport-logistics include introduction to transport and logistics, transport and logistics technology, commerce and e-business, business law, inventory management and international transport and logistics. Courses also introduce students to computer operation and common software programs used in transport and logistics operations.

A bachelor's degree program in transport-logistics prepares graduates for transport and supply chain management roles while some bachelor's degree programs allow students to specialize. The specialized areas of study may include transport operations and management, inventory and stock control management, international transport and logistics, material handling and management, packaging, routing and fleet management and data analysis. However, before a student can choose a concentration area, he or she must first complete core transport-logistics courses in areas such as principles of transport, modes of transport, marketing of transport and logistics, consumer and industrial sales, distribution channels, logistics technology, procurement and materials handling among other.

For admission into the diploma and Bachelor degree programmes of the transport-logistics offerings institutions are 5 credits at WASC,NECO, GCE O/L or SSCE or merit in Grade II or Technical certificate at not more than 2 sittings including English Language and Mathematics while at Olabisi Onabanjo University (OOU), Ago Iwoye, Lagos State University (LASU), Ojo, Tai Solarin University of Education (TASUED), Ijebu Ode, Redeemer University for all Nations (RUNS), Lead City University, Ibadan, The Polytechnic Ibadan and College of Technology, Yaba at least a social science subject like Geography and Economics are required. However at Federal University of Technology (FUTA) Akure, Federal University of Technology (FUTO), Owerri as well as Ladoke Akintola University of Technology (LAUTECH), Ogbomoso and Bells University of Technology (The Bells), Otta all candidates are suppose to have passed science subjects like Physics and at least any two from the following Chemistry, Biology or Agriculture.

In addition to the general university requirements in above, 2 passes at GCE Advanced level including a social science subjects like Geography or Economics is required at OOU, LASU, TASUED, and Lead City or a science subject like Physics or Chemistry at LAUTECH, FUTO, FUTA, FUT Minna etc or at least Merit pass at NCE in any two teaching subjects including a social science at OOU, LASU, TASUED and Lead City or a science subject at LAUTECH, FUTO, FUTA, FUT Minna and the Bells or Diploma with not less than Lower credit in relevant disciplines as may be approved by the institution senate.

For the admission requirements into the Post Graduate Programmes in Transport and logistics candidates must have the general university requirements in addition to a very good first degree academic programme in related fields such as Transport, Geography, Economics, Urban and Regional Planning, Engineering, Environmental Studies, Business Administration, Marketing and other allied subjects.

A master's degree program in transport and logistics may include a thesis option. Students who are planning on continuing their studies at the doctoral degree level are encouraged to complete a thesis and graduate with a PhD grade which is 3.5 in most universities but 4.0 at Federal University of Technology, Owerri while the goal of a master's degree program in transport and logistics is to equip students with the skills and knowledge necessary to manage a company's transport and supply chain operations. Critical thinking and problem solving ability are keys to succeeding as a transport or logistics manager and these skills are sharpened and tested while taking courses in transport, business logistics, operations research, information systems for transport-logistics and design of logistics distribution systems. Presently, the following universities offer MSc/ M Tech in Transport Studies / Management. They are Olabisi Onabanjo University Ago Iwoye (Pioneer in Post Graduate Programme in Transport), Federal University of Technology Owerri, Ladoke Akintola University of Technology, Ogbomoso, University of Lagos, Akoka- Lagos, Lagos State University, Ojo and Ahmadu Bello University Zaria.

The Doctor of Philosophy (Ph.D.) in Transport with option in logistics, shipping and maritime, land (road and rail), air and aviation and pipeline are presently been offered by the three pioneer universities in the field of Transport and logistics. They are Olabisi Onabanjo University Ago Iwoye, Federal University of Technology Owerri and Ladoke Akintola University of Technology, Ogbomoso. Students enrolled in a doctoral degree program in transport-logistics spend a majority of their time conducting research and working towards completing their dissertations. The first two years of enrolment focus on foundation transport- logistics courses. Topics covered include quantitative techniques, research methods, advanced transport and logistics management as well as information technology/ management while they are to offer elective courses in areas such as business ethics, transport/supply chain modelling and e-commerce. Many logistics doctoral degree programs also require that students teach while enrolled Graduates who hold Ph.D.s in Transport-logistics sometimes enter the private sector but generally conduct research and have teaching positions with universities.

# Career Information and Opportunities in Transport and Logistics Management in Nigeria

One can pursue many different occupations within the field of transport and logistics generally in any part of the world and in Nigeria in particular. Graduates of bachelor's and advanced degree programs are best suited for managerial, marketing and consultancy positions while students who have completed a diploma certificate in the field may work in airline, aviation, documentation, shipping, transportation and warehouse operations. Employment change in the transport and logistics industry is heavily influenced by the state of the nation's economy. For instance, the United States Bureau of Labour Statistics (2010) (www.bls.gov) reports that overall employment of in the transport-logistics industry will grow 11% for the 2008 to 2018 period. The BLS reported that the average hourly wage in 2008 for non-supervisory warehouse and truck transportation positions was \$18.08. Meanwhile, Payscale.com reports that logistics managers with 1-4 years of experience were earning annual salaries of about \$41,000-\$59,000 in 2010.

Ajiboye (2007) observed that the outlook for transport and logistics planners, managers and engineers in Nigeria in 2000's continues to be promising despite the meltdown episode. This growth depends upon a number of factors such as the fact that transportation and logistics management profession is relatively young and small while the transport and logistics industry is expanding at a rapid rate and has resulted in an ever increasing demand for professionals with balanced knowledge of the various aspects of transport and logistics management to meet the current challenges and future changes while the success of any nation's transport and logistics development is very much depends on the quality and quantity of human resources available to assist in formulation and implementation of transport and logistics policy.

In transport and logistics sector, three of categories of such human resources can be recognised. The first are the professionals who consist of transport and logistics managers, planners or engineers who are mainly the ones who possess the basic qualifications in the field according to Filani (2003). They are those whose job demands substantial familiarity with experience and expertise in the art and science of transport. The second are the technicians who qualified in specialised technical knowledge in transport and they include National and Higher National Diploma graduates from the mono and polytechnics in such fields as transport technology, traffic/ highway engineering and transport planning while the last group are the artisans and operators which are the largest and consist primarily those whose work involve knowledge and skills which are acquired by training either in technical colleges and trade centres or through private master – craftsmen. The master-craftsmen

include the auto- electricians, auto mechanics, driver-mechanics, motor painters, panel beaters, spare part and accessory dealers, vulcanizers, welders etc.

An appraisal of the human resources available in the transport and logistics sector in Nigeria according to Filani (2003) also indicates an acute shortage of personnel of the first and second category. This has resulted in an unduly high dependence on foreign expert to carry out planning, design, construction and maintenance work in the transport and logistics sector. For the third a category, the size is very large and are usually poorly trained and therefore ii equipped to carry out those minor but important functions in the transport and logistics sector as required by their trade or be part of a programme of quality improvement within the sector. Nevertheless all the three categories of transport and logistics personnel required training and retraining in order to cope with the ever changing technology in the sector.

Despite the high level of development in transport and logistics industry in United Kingdom with over two million people in England working in the transport and logistics sector while over 570,000 people work in passenger transport according to Salvatore (1976). There is currently a shortage of skilled workers in some areas and jobs can be found throughout the United Kingdom. This shows that there are opportunities to work both at home and abroad with proper training.

In an attempt to introduce the prospective transport and logistics managers to a field that offer both variety and specialisation as well as opportunities for work in the private / public sector, local or international companies. It is observed that employers range from small companies to international logistics organisations and transport providers operating fleets of vehicles. Among such organisations are airlines, courier firms, oil and gas marketing and distribution companies, shipping companies, truck and haulage companies, railways, public transits, pipeline industry, manufacturing and processing companies, armed forces, road safety commission, paramilitary, travel agencies, tour and tourism companies, air, river and seaports, government agencies and ministries, higher institutions, consultancy firms, post and telecommunication companies, electricity and gas industries, warehouse management, air and ship broking, air traffic control and so on. See appendix I for the list of likely working places in transport and logistics management for the professionals in Nigeria.

Furthermore a vast number of people in the transport and logistics industries work in supporting roles. This includes operational, distribution and transportation managers, planners and schedulers all of whom are involved in co-ordinating people and goods; safety specialists such as air traffic controllers, driving instructors and examiners, railway station assistants, conductors and signallers who all ensure that vehicle operators are following

strict health and safety regulations; customer service personnel who take reservations, answer queries and act as the public face of the transport and logistics sector as well as involve in documentation; warehouse personnel who select, package and prepare items for delivery. See appendix II for various job titled the professional in transport and logistics management.

The transport and logistics industry operates a 24-hour service, part-time work and shift rotations are common. In many jobs, it may be necessary to work early morning, evening and night shifts, as well as at weekends. Jobs are based in a wide range of locations, including airports, railway and bus stations, warehouses and offices while many workers consider the inside of their vehicle as their main working environment. They may involve a mixture of indoor and outdoor work while most involve some degree of travelling within and outside your location.

Concentration and safety awareness are essential in this industry, especially for those operating vehicles and other machinery. Employers normally look for people with good communication and customer service skills while many jobs require people with problem-solving skills, who can remain calm in a crisis. Jobs involving driving and operating machinery may have age restrictions.

Most organisations provide training for new entrants, followed by regular in-house courses to update knowledge and skills and many large employers offer graduate training schemes. It is possible to study for relevant qualifications, such as Chartered Institute of Logistics and Transport (CILT) International and NVQs while health and safety training is regularly provided by employers. Many specialist jobs such as air traffic controller or railway signaller involve regular performance checks and ongoing training both locally and abroad while structured opportunities for promotion to supervisory and management levels are often available with large employers. Self-employment may be an option for some drivers and instructors and many jobs offer opportunities for overseas work.

## **Conclusion**

The nation's vitality has always been linked to mobility- from rural dwellers to the urban centres, to trailers wagons moving north, luxurious buses moving from west to east and north and east to north planes fanning across the ocean and within the country as well as the ships carry good from one continent to another while the vehicles racing into space. Transportation is an engine for economic growth and a link between the regions and the businesses and the people of the nation and the world. This demonstrate the importance of

transport and logistics to the socio- economic of the nation as there is constant need to move, assemble, transfer people and goods from one location to another.

An appraisal of the human resources available in the transport sector indicates an acute shortage of personnel among the professionals and technicians. This has resulted in an unduly high independence on foreign experts to carry out planning, design, construction and maintenance work in the transport sector while the artisans and operators are very large in number but are usually poorly trained and therefore ill equipped to carry out those minor but important functions in the transport sector as required by their trade or be part of a program of quality improvement within the sector. There is therefore need to encourage the institution offering transport- logistics courses to be able to produce excellent graduates who will be able to solve all the challenges facing transport and logistics industry and also to encourage the students by providing them with grant and scholarship that will motivate them.

In conclusion, the choice of subjects at school, the application of one self and the channelization of interests and abilities will be more purposeful and more rewarding if one is aware of one's own professional destination and the opportunities that exist for the realisation of personal ambitions. Regardless of the educational requirements of the job you are contemplating, start today to chart your future so that you make it happen. Do not be discouraged.

#### References

- Adebisi, O. (1988). Training needs survey of the Nigerian transport sector. A paper delivered at NITT Workshop on Training Needs in the Nigerian Transport Sector on 25th 27th April, 1988.
- Adefolalu, A. A. (1977). Significance of transportation in rural development in environmental and spatial factors. Proceeding of the 20th Annual Conference of Nigeria Geographical Association, University of Ife, Ile Ife.
- Ajiboye, A. O. (1994). Rural accessibility and transportation problem: A case study of Ijebu North Local Government Area, Ogun State. Unpublished Postgraduate Diploma in Transport Studies, Geography and Regional Planning Department, Ogun State University, Ago Iwoye.

- Ajiboye, A. O. (1995). Transportation and distribution of agricultural products: A case study of kolanut production in Remo land, Ogun State. Unpublished M.Sc Thesis, Centre for Transport Studies, Ogun State University, Ago Iwoye.
- Ajiboye, A. O. (2007). Opportunities and challenges in the field of transport and logistics management in Nigeria. In Nnadi, K. U and Ogwude I. C. (eds); Transport in Nigeria Economics, Management Policy. Owerri: Reliable Publishers. Pp 49-73.
- Ajiboye, A. O. (2008). Analysis of the nature and conditions of road transport facilities in Remo land, Ogun State. Journal of Faculty of Environmental Sciences, LAUTECH, Ogbomoso. Vol.1, No.1 Pp 45- 64.
- Ajiboye, A. O. & Afolayan O (2009a). The impact of transportation on agricultural production in a developing country: A case study kolanut production in Nigeria. International Journal of Agricultural Economics and Rural Development, Vol 2. No.2 pp 49-57.
- Ajiboye, A. O. & Afolayan, O. (2009b). A study of the transportation factors militating against agricultural production in a developing country: The case of Nigeria. Africa Journal of Technology Policy. Vol. 5, No1, Pp 263- 271.
- Ajiboye, A. O. & Ayantoyinbo, B. B. (2009c). Analysis of transportation and distribution problems of agricultural products marketing in Sub-Saharan region: An application to kolanut. Journal of Technology, Entrpreneurship and Rural DevelopmentVol. 4, No 1, Pp 188- 200.
- Ajiboye, A. O. & Fapohunda, T. A. (2008). The effects of transportation system on marketing and distribution of kolanuts in Nigeria. International Journal of Management Sciences. Vol. 3, No 1 and 2, Pp 57-68.
- Badejo, D. (1996). Transport and urban development in Nigeria: An enlightenment and education approach. OSU Journal of Education Studies, 4(1), 142-150.
- Buckley, R. & Caple, J. (1990). The theory and practice of training. London: Kagan page

- Canadian Association of Logistics Management (1998). http://www.calm.org/calm/AboutCALM/AboutCALM.html, 12 Feb,
- CILM (1998). Opportunities in logistics management: A publication of the council of logistics management of United States of America. Retrieved on the 12th February, 1998 from http://www.clm1.org/mission.html.
- CILT (2003). The chartered institute of logistics and transport international royal Charters and Bye laws, London.
- Filani, M. O. (2003). The relevance of CILT to transport development and sustenance in Nigeria. Key note address at the launch of the CILT, Southwest Zone on December 1, 2003 at NISER Ibadan.
- Helsinki, F. I. (1996). What is logistics? Logistics Partners Oyo. JSC (undated). What is Logistics? JCS Publication 1 02.
- Nnadi, K. U (2008). A travelogue of human capital development in the transport and logistics industry. A paper presented at a National Workshop on Train the Trainers in Transport and Logistics Industry, organized by CILT at Precious Palm Royal Hotel Benin between 18th and 19th June, 2008.
- Onakala, P.C. (1988). The role of transportation in economics development in Nigeria. A case study of the Development of the Rural Transportation System and Agricultural Projects in Imo State. In Salau and Izeogu (eds) Development and the Nigerian Rural Environment. Proceedings of the 31st annual Conference of the Nigerian Geographical Association.
- Oribabor, P. E. (1993). An Approach to the diagonosis of training needs. A paper presented at the workshop of on realising the objectives of commercialisation through training. Held for the managers of Nigerian Ports Authority Plc, Western Zone Apapa, between June 2 and 11, 1993.
- Osisioma, B. C. (1995). Training professional accountants. Which way? A paper presented at the National Association of National Accountants of Nigeria, ANAN, Jos.

- Oyeneye, O. Y, Ajayi, T. & Ogunyemi, B. (1996). Education, human resources and vision 2010. OSU Journal of Educational Studies, 4(1), 134 –141.
- Oyesiku, O. O. (2008). From womb to tomb. 24th Inaugural Lecture, Olabisi Onabanjo University, Ago Iwoye, Tuesday, August27, 2002.
- Payscale.com (2010). Salary and wages survey at various institutes & Art Institute of Seattle.
- Safenwa, L. A. (1982). Foreword. In Olumidekuti, M.A.A. book of selected Jobs. Evans Brothers (Nigeria) Publishers Limited Ibadan. pp 5 6.
- United States Bureau of Labour Statistics (2010), Overview of BLS Wage Data by Area and Occupation in United States of America (www.bls.gov).