# RESTRUCTURING ACCOUNTANCY PROGRAM OF NIGERIAN UNIVERSITIES FOR THE CHANGING ENVIRONMENT: STRATEGIES FOR SUSTAINABLE **DEVELOPMENT**

Emeka-Nwokeji, N. A. Anambra State University **NIGERIA** 

#### **ABSTRACT**

Accountancy program of Nigerian universities as currently structured is outdated and inappropriate in terms of helping graduates acquire the skills and competencies needed in the real world. This undoubtedly contributed to massive unemployment, high poverty rate, crime and other social ills experienced in the country. This motivated the study on restructuring accountancy program of Nigerian universities as strategies for sustainable development. Data were collected though questionnaire structured on 5 point Likert scale administered to major accounting stakeholders in Anambra State. Data were analysed using descriptive statistics and the three hypotheses formulated was tested for acceptance or rejection using z -test. The study revealed that co-op in the university accountancy program can facilitate wealth creation and accelerate economic growth. The study also indicated that co-op in the accountancy program of the university can increase graduates competitiveness in the marketplace for accounting positions. More so, integrating collaborative teaching in the accountancy program of Nigerian universities can significantly influence acquisition of problem solving and interpersonal skills needed to succeed in today's global accounting and business environment. The researcher recommended among other things, that there is need to restructure the curriculum significantly to react to the marketplace demands though integrating co-op program and collaborative teaching in the university accountancy program to develop graduates' skills greatly and also build a link between the profession, academics and industry.

Keyword: Co-operative education, accounting education, restructuring, sustainable development, collaborative.

#### INTRODUCTION

There is increasing evidences, based on observations, based on data that is available, that Nigeria University graduates in general and graduates of accountancy programs in particular lack the essential real-world employable skills and competencies needed in growing knowledge industries, complex business environment and globalised capital market. Companies want their new hires to possess skills that require practical application. Theory alone isn't good enough (Wijewardena and Roudaki 1997; Boritz, 1999; Craig et al., 1999; Iroegbu, 2007; Hermanson et al, 2000; Kavanagh and Drennan, 2007; Wright and Chalmers, 2010). Certainly one of the drivers for change has been the criticism that, the more 'traditional' accounting degree programmes do not adequately prepare accounting graduates for their professional careers in the changing environment' (Carr and Mathews 2004:93). The shortcomings of our old educational system have been criticized by Ikejiani (1991) who asserted that:

'Our education has been consumptive instead of productive. We teach our youths to master their subjects, but have failed to relate those subjects to Nigerian needs in order to enable our school leavers and graduates solve the fundamental problems of living. We have imprisoned the minds our youths instead of releasing them to invent, discover, build and produce. Our education has been barren, so that, very soon we shall face the problem of having many "educated' people who none qualified to do the work for the welfare of the people'.

Lack of workforce with the required skills and capacity is caused partly by redundancies and gaps in the university accountancy curriculum and inadequate resources, either human or financial, to make significant improvements. 'In the minds of some, the current curriculum model has come to be perceived as an impediment' rather than a facilitator of change. (Boritz, 1999:15; Anyaeze, 1997; Ovuawe, 2010; Uriah and Wosu 2012; Evans and Lovewell 2012:1) No wonder current accounting curricula have been criticized as being rule-based and demanding rote memorization; with students being 'trained' rather than 'educated' (Adams et al., 1994). The Current NUC curriculum of is stale and obsolete because the world has witnessed new changes and innovations which have almost completely altered the nature, environment, content and competencies of accountancy profession and functions all over the world.

problems have hindered economic development and contributed to the myriad of These problems and harse realities which include poverty, unemployment, crime, hunger, conflicts and diseases (Okoye, 2007). The latter, perhaps more than the other criticisms, formed the basis for the clarion call for sustainable development.

Several studies have been conducted in the past on strategies for ensuring sustainable development. For instance, Boritz (1999:4) noted that 'some academic institutions are addressing this problem by revising their curricula to focus on skills, such as information technology skills, which would make their students more attractive to other firms.' Oviawe (2010) in his study on repositioning Nigerian youths for economic empowerment through entrepreneurship education found that well planned entrepreneurial education implemented will among other things, equip the students with skills on decision making, and establishing business relationships. He further noted that through entrepreneurship education, qualitative ability that facilitates computation and record keeping are further learnt. These he asserted will enable Nigerian youths to be productive and committed as employees and employers of labour. In a similar study Moore (2007:56) found that 'repositioning University MBA through revised programs, involving partner companies and workshops will help universities refine its products – the graduates so that they can effectively implement initiatives'. Martin and Tang (2007), posit that Universities can develop networks and stimulate social interaction, enhance problem-solving capacity and create new firms as a way of contributing to sustainable development.

However, these previous attempt focused mainly on theoretical issues like including Entrepreneurial and Information Technology education among the courses done, waste management, financial and regulatory matters, developing networks etc, to the detriment of adjustments that would develop the essential skills needed in growing industries. These previous strategies do not enable graduates have solid foundation of business experience or develop the necessary competencies so as to be competitive in the market.

A key requirement for the future is the need to prepare students to participate in the changing environment, where knowledge is the most crucial factor in the social and the economic development of a country (Belias et al 2013). In line with this view, this study on restructuring university accountancy program which involve determining the skills

companies prize most highly in their new hires, and structuring curriculum around those skills is a step in the right direction. The study propose making accounting graduates to be value relevant by incorporating Co-operative education program and Collaborative teaching in the university accountancy program. Cooperative education program involve providing learning opportunities beyond the classroom walls. A cooperative education program, commonly known as a "co-op", provides academic credit for structured job experience. It is a structured method of combining classroom-based education with experience. While Collaborative teaching is a process in which two or more individuals work together to integrate information in order to enhance student learning. Collaborative teaching also mean to work jointly with others or together especially in an intellectual endeavour.

Incorporating co-op and collaborative teaching in accountancy program of Nigerian universities will enable graduates from the program to acquire both professional skills that future accountant will require and the technical knowledge that is required in today's global businesses. They will promote the acquisition of such skills and competencies as problem-solving, writing, communication, interaction, collaborative, critical thinking and interpersonal communication as equipment for the individual to live in and contribute to the development of the society. Acquisition of these skills will make graduates of accountancy employable and reduce hunger, poverty, crime and overall improved standard of living. Universities can thus contribute to sustainable development through increasing the stock of knowledge and ensuring supply of skilled graduates by incorporating the proposed change in the existing program.

Thus the need to reduce massive unemployment of Nigerian universities accountancy graduate by equipping them with employable skills and competencies necessitate this study which focused on the perceptions of group of accounting academic, professional accountant, accounting students and employers of labour in both private and public companies.

# **Statement of Problem**

Nigerian university graduates in general and graduates of accountancy programs in particular lack the essential real-world employable skills and competencies needed in growing knowledge industries, complex business environment and globalised capital market. This undoubtedly contributed to massive unemployment, high poverty rate, crime and other social ills experienced in the country. Albrecht and Sack, (2000), noted that accounting education is in a precarious condition as there are significant complaints about the services and products it delivers. Most accounting positions in the Banking Industries are occupied by engineers. These problems in the view of Orimolade and Diabalen et al cited in Ovuawe (2010:113), 'is traceable to the disequilibrium between labour market requirements and lack of essential employable skills by the graduates'.

Several features of current university accounting curriculum are not appropriate in terms of educational objectives and economic conditions of the country. Companies want their new hires to possess skills that require practical application. Theory alone isn't good enough 'the traditional classroom is insufficient for students' (Smollins, 1999). In the view of Uriah and Wosu (2012:135) 'the educational system has not been able to produce enough qualified people in the relevant disciplines to meet the needs of the labour market. The focus of education now seems to be on liberal arts and the social sciences, to the detriment of adjustments that would develop the essential skills needed in growing industries'. This obvious critical skill gaps inhibits the development of entire nation.

Ikejiani (1991) highlighted that 'Our education has been consumptive instead of productive. We teach our youths to master their subjects, but have failed to relate those subjects to Nigerian needs in order to enable our school leavers and graduates solve the fundamental problems of living.

More so, concerted efforts have not been made towards involving many individuals (Experts, Professionals) in solving these complex educational problems. Similar concern was raised in the study of Boritz (1999:15), who noted that 'even with well-intended curriculum and guidelines it is important to note that many accounting programs do not have the resources, either human or financial, to make significant improvements in their curriculum. There is a shortage of instructors, facilities for students to use and financial resources required to keep those facilities up to date'. Meanwhile there is gap in the relationship among the stakeholders in accounting profession which inhibit fostering an infrastructure of linkages and interconnectedness (Baxter, 1988; Tilt, 2010; Roos and Pike, 2011; Parker et al 2011; Tucker, 2011).

The implications of current accountancy program of Nigerian Universities is that, there are educated people but none qualified to work in the modern economy, graduates that lack skills which prepares one for self-reliance. As a result of theory based education, there is mass unemployment; the crime rate increases; poverty rate is high; low economic growth due to negligence of the country's technological development needs etc.

These criticisms and the desire to reduce unemployment by equipping our graduates with the required skills and competencies, to lift them out of poverty and obtain means to participate fully in their communities with the resultant improved standard of living, that this study on incorporating co-op and collaborative in the university accountancy programs is justified.

## **Objectives of this Research**

The main objective of this study is to examine the strategies for sustainable development through restructuring accountancy program of Nigerian Universities for the changing environment. The research intends to achieve the following specific objectives:

- To evaluate the extent to which co-op education program in the university accountancy program can facilitate wealth creation and accelerate economic growth.
- To determine whether co-op education program can increase graduates competitiveness in the marketplace for accounting positions
- > To assess whether collaborative teaching can significantly influence acquisition of problem solving and interpersonal skills needed to succeed in global accounting and business environment.
- To identify the critical success factor for integrating co-op education and collaborative teaching in the Nigerian university accountancy program.

# **Research Questions**

The following questions guide this study

To what extent can co-op education program in the university accountancy program facilitate wealth creation and accelerate economic growth?

- Can co-op education program increase graduates competitiveness in the marketplace for accounting positions
- Can collaborative teaching significantly influence acquisition of problem solving and interpersonal skills needed to succeed in global accounting and business environment?
- What are the critical success factor for integrating co and collaborative teaching in the Nigerian university accountancy program

# **Hypotheses of This Research**

The following hypotheses in their null form guide the study.

- Co-op in the university accountancy program cannot facilitate wealth creation and accelerate economic growth.
- Co-op in the accountancy program of the university cannot increase graduates competitiveness in the marketplace for accounting positions
- Collaborative teaching cannot significantly influence acquisition of problem solving and interpersonal skills needed to succeed in today's global accounting and business environment.

# LITERATURE REVIEW Conceptualization

## **Development**

Development is the process by which people create and recreate themselves and their life circumstances to realize higher levels of civilization in accordance with their own choices and values. Uriah and Wosu (2011:133) posit that development often revolves around humans. Thus development refers to any form of improvement in the living conditions of humans, be they social, economic, political, cultural or educational. Continuing they noted that through the process of education, humans continue to mold and remold their own lives and the lives of others in their society. 'Education according to them helps in the provision of skills preparatory for youth economic, social and political empowerment'. In this regard, education ensures the development of social stability and the production of new knowledge, and serves the complex interests of society. Accordingly, nations can progress in a sustainable direction if they embrace these values of education overtime.

From the above it is clear that no society can effectively transmit its values and aspiration without education. Thus Ololube et al (2012) opined that education as an instrument for sustainable national development is no longer a contestable fact. What should rather capture attention now is the type, methods, dynamics of education as well as making the goals of education instrumental to the changing context of national development. No wonder Cavalcanti cited in Matai and Matai (2007) opined that education in the 21<sup>st</sup> century will be supported over four pillars, to learn how to acquire knowledge; to learn how to realize; to learn how to socialize and to learn how to be. They pointed out that the conventional education program cannot achieve all this and thus the need for new educational models.

# **Sustainable Development**

The concept of sustainable development, which integrates the three pillars of economic growth, social development and protection of the environment, includes a long-term perspective to ensure the well-being of future as well as present generations. It is also participatory, to reflect the perspectives of all parts of society. 'It was at the core of the United Nations Conference on Environment and Development, held in 1992 in Rio de Janeiro, and has subsequently been reaffirmed in the United Nations Millennium Declaration, the 2002 Johannesburg Plan of Implementation, and other international agreements. All countries have committed themselves to the principles of sustainable development' (UN 2008:259).

If a country should move forward, the education system should be reviewed focusing on the areas that can and will promote the acquisition of appropriate skills, abilities and competences both mental and physical as equipment for the individual to live in and contribute to the development of the society.

#### **Co-operative Education Program**

This is about combining classroom based education and practical work experience. It is designed to provide 'learning opportunities beyond the classroom walls' (Furco 1996:9). It integrates academic studies with career related work experience and involves an alternate and sequential arrangement of periods of study and period of work experience. A cooperative education experience, commonly known as a "co-op", can be defined as an education model that presents an alternation of academic periods at the university and work term periods (Internship programs) in corporations. It provides academic credit for structured job experience. Cooperative education is taking on new importance in helping young people to make the school-to-work transition, service learning, and experiential learning initiatives. It enables students also to explore a wide range of career possibilities. Co-op is an educational system in which students may earn academic credit for career work done in their filed. This is based on combination of work and study and is a powerful learning model for undergraduates (Lin and Miller 2011).

## **Collaborative Teaching approach**

Collaboration is a ubiquitous term that has been defined in numerous ways across diverse fields. The need for the society to think and work together on issues of critical concern has shifted emphasis from individual efforts to group work (Austin2000;Leonard2001). Collaboration describes a process of working together to create value. Collaboration is a mutually beneficial relationship between two or more individuals who work toward common goal by sharing responsibility, authority and accountability for achieving results (Rowitz). Collaborative Teaching is a process that channels the energy and creativity of all members of the educational community toward an overarching mission: the success of all students across the curriculum. (Montiel-Overall, 2005:1). Collaboration is regarded as a way of changing instruction in order to have a positive effect on student learning outcomes, such as higher standardized test scores (Lance, Rodney, and Hamilton-Pennell 2001). Perhaps the power of collaboration lies in students' greater understanding of material from being exposed to diverse opinions and distinct teaching and communication styles. This type of learning is characterized by the learner's collaborative participation. Paradise and De Haan (2009) noted that participation is a key component to collaborative learning as it functions as the method by which the learning process occurs.

Collaborative teaching is used as an umbrella term for a variety of approaches in education that involve joint intellectual effort by students or students and teachers. Collaboration is of great benefit to students and also enables schools to establish formal partnerships with practitioner and industry. A class where Lecturers collaborate, it provides real-life modelling of working together and creates a great environment for learning.

In order to fully understand the cooperative education and collaboration teaching, the relationship between the two and student academic achievement, the theory guiding cooperative and collaboration is needed.

#### **Theoretical framework**

This paper draws on the existing theories discussed under this section. For Wilson, Stull & Vinsonhaler (1996:158), co-op is a curriculum model that links work and academics – 'a model that is based on sound learning theory' Also Ricks (1996) affirms that work-based learning principles upon which co-op is based, fosters self-directed learning, reflective practice, and transformative learning; and integrates school and work learning experiences are grounded in adult learning theories.

The collaborative teaching concept is based on the idea that diversity of knowledge and experience positively impacts learning outcomes. The collaborative teaching method is based in part on social constructivist learning theories of John Dewey, Jerome Bruner, Lev Vygotsky, and others who have written extensively about collaboration and also on Jean Piaget's theory that children learn when they're 'cognitively ready' collaborative teaching is used as an umbrella term for a variety of approaches in <u>education</u> that involve joint intellectual effort by students or students and teachers.

A social constructivist view of education envisions collaboration as a new way of learning for students, and a new way of planning and teaching for specialists and teachers, drawing on the collective wisdom of a wide range of domains including corporate sector (Montiel-Overall, 2005).

# Previous studies on Education and National Development, Trends in Accounting Education, Benefits of Co-op and Collaborative Education Program

Education is the cornerstone for national development (Azubuike 2007). It is concerned with the process of building, training and developing the inborn potentials and capabilities of an individual so as to make him or her useful member of the society.

The goals of a university education can be seen as liberal, utilitarian, or some combination of the two (Symes et al., 2000). A strictly liberal view of education, founded on the ideals of nineteenth-century scholarship, holds that university learning is about acquiring and appreciating theoretical, disciplinary, formal, foundational and general knowledge, in a learning environment that is independent of the demands of the economy or the workplace. It has been argued that universities have always had a commitment to ensure graduates develop broad based, generic skills such as "critical thinking", "problem solving", "analytic capacity" and so forth. The utilitarian view of education holds that learning is about acquiring and applying practical, interdisciplinary, informal, applied and contextual knowledge in preparation for, and in response to, the demands of the workplace, and as a cornerstone of economic growth. (Evans 2010:81)

Uriah and Wosu (2012) noted that education is the foundation for national, social, economic, political and human development. It is an effective instrument of positive change in the society and a fundamental social institution for transmitting basic knowledge including

values, norms, skills and culture to the younger ones in the society. Every single problem you can think of: poverty, peace, the environment, is solved with education or including education. Some writers on social change and nation building see education as one of the variables to be discussed, especially when it has to do with agents or factors of change and national development. On the other hand, a few feel the issue of education in relation to social change and national development can be condensed into a separate theory. From whatever angle one approaches it, it is no longer in doubt that education has come to be accepted as a major source of social change as regards nation building and development. It has been generally conceived that only educated population can command the skills necessary for sustainable economic growth and a better quality of life. According to Azi (2007), a major goal of every school curriculum being to form character, gaining understanding and skill acquisition; to promote pupils' spiritual, moral, social and cultural development and prepare all pupils for opportunities, responsibilities and experiences of life. The quality of development in any nation is directly related to the quality of and attention given to education.

Nevertheless, accounting education, as currently structured, is outdated, broken, and needs to be modified significantly. Accounting education today is plagued with many serious problems and our concern is that if those problems are not seriously addressed and overcome, they will lead to the demise of accounting education (Albrecht and Sack 2000). 'The present system of education in sub-Saharan Africa and its implementation cannot bring about the much talked about national development' (Uriah and Wosu (2012:130). In a research on the need to integrate skills in education, Jones and Abraham (2009) are of the view that, educators need to provide students with the opportunities to understand and develop the skills that they will require to succeed in the working environment and educators have the responsibility to provide their graduates with a strong foundation in both technical and emotional training so that they will be well-rounded individuals, and hence worthy employees, effective managers and dynamic leaders.

Gap between education and practice has widened, call to bridge this gap and enhance connectivity between them have intensified in recent times. One way to initiate that dialogue according to Tilt (2010) is through collaboration. It is important for accounting academics, the practitioner community and professional accounting organisations to reflect on the relevance of the accounting academy's to practice. There need to be more extensive institutional support and encouragement for the debate to continue between all parties until something meaningful, practical and long-lasting about roles, responsibilities and interrelationships is forthcoming and agreed by all. Supporting collaboration as one of the strategies for making accounting education relevant, Wright and Chalmers (2010:79) asserted that:

'One way that academics can be future-proof is to be more politically astute by acting in partnership with the profession. The accounting profession can offer political advocacy that academics may not have. However, academic collaboration with the profession is a challenge to some on both sides, and it is important to recognise differences as well as common interests. What is welcome is the opportunity for academics to engage in dialogue with the profession concerning the challenges facing accounting education'.

In the view of Boritz (1999), many of our educational curriculums is no longer adequate, thus the educational system is going through many changes which include co-operative education (co-op) and competency -based model to maintain the pre-eminent position of the accounting profession. According to him a co-op educational model is based on the theory of alternating work and study periods during an education program.

Also, given the changing nature of business world and nature of accounting, Albrecht and Sack (2000) suggested that redesigning the accounting curriculum might be very attractive, so that graduates are consultants/accountants with a strong basis in measurement. Such program would include some accounting, but would also include more coverage of information systems, economics and business strategy. The expanded scope of such curriculum would mean a reduction in the amount of time and depth that could be devoted to traditional accounting courses. It might make sense to package this broadened curriculum in a five-year program, as the originators of the 150-hour rule envisioned.

Concern over skills of accounting graduates is not new (Jones and Abraham, 2009). In their study on Accounting for the Future, Hancock et al (2010) reviewed the changing skill requirements for professional accounting graduates from university accounting programs over the next 10 years. They found that accounting education should include some nontechnical skills in addition to a minimum level technical competency. Communication, problem solving, critical analysis, self-management and teamwork are all rated as important non-technical skills by their study and other studies. 'Essentially these skills, also called graduate attributes or capabilities, along with relevant content are seen to be preparation for the workplace, or making graduates work ready' (Evans 2010:80). There is need to demonstrate integration of these generic skills desired by employers such as analysis, communication, teamwork and leadership skill development within the whole course or program of accounting (Nelson 2002).

Jones and Abraham (2009) highlighted that the tasks and skills that are required of accounting practitioners in today's global business environment have changed significantly since the early 1990s. They did two independent studies at an Australian University. The first of these investigated the perceptions of the three groups of stakeholders in accounting education in relation to the current role of accountants; the second study specifically addressed the skills required for graduates to be successful in the workplace. They suggested that incorporating emotional intelligence skills into the education of accounting students, by providing a variety of learning environments and tasks, may be beneficial to accounting graduates as they seek employment. Mathews (1990) made a series of recommendations covering a broad range of issues for the accounting discipline including the need to integrate communication and computing skills into accounting programs.

According to Boritz (1999), a co-op educational model based on the theory of alternating work and study periods during an education program enables students to see the various stages of the business cycle, and to relate theory to practice and practice to theory. Another advantage of co-op education programs in his view is that they enable students to support themselves economically while engaging in study. In the same vain, Jackling and Calero (2006.) opined that students with more work exposure in accounting appear to have a more broadly based view of the attributes required of accountants. Writing on the benefits of coop, Cates and Cedercreutz (2008) noted that the assessment of student work performance as pursued by co-op employers can be used for continuous improvement of curriculum. It has also been discovered that the value of cooperative education is embedded in the culture of the institution and the region. In this supportive culture, employer support does not have to be repeatedly obtained and there are clearly understood long-term expectations on all sides (schools, employers, students). This 'informal culture of expectations around work-based learning may be more powerful in the long run than a complex set of regulations and bureaucratic requirements' (Grubb & Villeneuve 1995:27). The only way in which co-op programs can find a permanent place in schools and colleges is for the work-based component to become so central to the educational purposes of the institutions that it becomes as unthinkable to give it up as it would be to abandon math, English, or science (Grubb & Badway 1998). Co-op's proponents identify benefits for students (including motivation, career clarity, enhanced employability, vocational maturity) and employers (labour force flexibility, recruitment/retention of trained workers, input into curricula) as well as educational institutions and society. There is an unverified claim that several of the more successful graduates had worked to earn money before graduation.

Social, economic, and historic forces are making cooperative education more relevant than ever (Grubb & Villeneuve, 1995), including emphasis on university-industry-government cooperation, new technology, the need for continuous on-the-job learning, globalization, and demands for accountability (John et al 1998). However co-operative is not without cost. It extends academic program to at least five years and this attract additional fees.

Several benefits arise from adopting collaboration in both teaching and learning. These include: it enable educators achieve the goal of helping each student reach their full intellectual potential and enrich student learning experiences (Shults 2009; Buzzeo, 2002), improve delivery of curriculum content by expanding the possibilities of instruction (Lieberman, 1986; Haycock, 1998). Provide forum for diverse members to come together for problem solving which eventually foster development of trust among the diverse groups (Rowitz, 2014). Students may develop a sense of importance in the collaborative effort when they witness deep commitment to innovative instruction from those responsible for their education. Students also gain from integration of information that mutually reinforces learning and brings about a greater understanding of content and information literacy (Montiel-Overall, 2005). In a similar vein, Freeman et al (2009) reported that deliberately and actively engaging a range of leaders distributed across an organisation is more likely to result in success than a uni-directional introduction of new policies or technologies into the teaching and learning function of a higher education provider. Venable and Vik (2014) highlighted that using teams extensively both in and out of class teaches students problemsolving and interpersonal skills. Collaboration involving accountant in practice and academic working as equal partners could transform education for our diverse population of students, particularly those who are disinterested, failing, and have lost hope. Through collective efforts exciting new learning experiences could be created. No wonder Shults (2009) asserted that:

'as collaborators continue to work together, their collaboration will gain depth and complexity. They will know their partner's curriculum as well as they know their own. They cannot fail to notice the transformative power of their students' growing interest and deepening knowledge. Their students are no longer passive and almost lifeless classroom occupants. They have become excited learners. Something miraculous is happening. Teachers who work collaboratively at this high level begin to experience the true joy of teaching. They are no longer isolated, but more importantly, they can see their students growing toward the end goal of education: independent, critical thinking.'

In a study by Still and Clayton (2004), on utilizing service-learning in accounting programs through internships, they found that group that participated in internships performed better in audits as compared to group that did not. Hwang et al (2005) in an empirical test of cooperative learning in a passive learning environment found that collaborative teachinglearning improved the performance of students in comparison to lectures. In a study by Hosal-Akman & Sigma-Mugan (2010) on effects of teaching methods on academic performance of students in accounting courses, in the first group of students, cases studies and problem-solving was undertaken in collaboration with the teacher, while in the second group problem-solving was carried out by the teacher (only). No significant difference was found between the two groups (and teaching practices), with the exception that the collaborative group had slightly better grades on tests than the group attending lectures. Similarly Stanley and Edwards (2005) found interactive multimedia teaching of accounting information system cycles acceptable by students and has positive impact on teaching the course. Indeed the application of innovations has the potential to motivate students by allowing mutual learning and facilitate cooperation (Love & Fry, 2006; Potter & Johnston, 2006). Belias et al (2013) in their study of traditional teaching methods versus teaching through the application of information and communication technologies in the accounting field, found that use of computers and computer programs in accounting courses seems to have a positive impact in terms of valuable time savings, the simplification of instruction and the enhancement of the learning process. Bonwell & Eison (1991) proposed several techniques to support and promote active learning including the use of visual media during the lectures (video, multimedia, slides), and the use of collaborative learning.

### **Attributes of Collaboration**

The word collaboration has been described in numerous ways in the literature. 'Attributes of collaboration are characteristics that describe qualities, features or activities apparent within the definition of the phenomenon' (Montiel-Overall, 2005:19). The attributes include: Reciprocity, Congeniality, Partnership, Interaction between coequal parties, Information Sharing, Shared Vision, Joint negotiation of common ground, Shared power, Joint construction of knowledge, Complementarities of skills, efforts and roles, Joint planning, teaming, strategic alliances, joint ventures, creating new value together.

# **Co-operative Education Model**

It is important to emphasise here that the co-op model includes school-based and work-based learning. According to <u>Grubb & Villeneuve (1995</u>), there are two predominant models. In one model, students alternate a semester of academic <u>coursework</u> with an equal amount of time working, repeating this cycle several times until graduation. The parallel method splits the day between school and work, typically structured to accommodate the student's class schedule. There should be a policy statement that all accountancy students should participate in the university's Co-Op Program as part of their academic requirements for graduation, working as paid, full-time employees in local, national, or international setting. It involves the following:

- > Specify the total terms and week that students are to spend. This should be distributed throughout their undergraduate years.
- ➤ Work must be productive
- > Student progress monitored and evaluated by the university
- > Student receives remuneration(s) for work performed
- > Student work performance supervised and evaluated by the employer

For instance, Matai and Matai (2007) suggested a cooperative quarterly structure model. This means that for a five year program, classroom will take 36 months while work will take 24 months. This model according to him means a reduction in resources for classroom activities while students will be exerting functions in different companies, departments and research institute. There should be connecting activities like seminars to integrate school and work based learning. These are essential part of co-op and helps students make connections by giving them a structure within which to reinforce employability skills, examine larger issues about work and society, and undertake the crucial activities of critical reflection (Grubb & Badway 1998).

### **Collaborative Teaching Model**

There are several levels of collaboration (Shults, 2009), the proposed model here involve individuals coming together to share their expertise and ideas in order to construct a fresh and innovative way of something, bearing in mind that 'through the process of working together new understanding evolves that could not have come about through individual efforts' (Montiel-Overall, 2005:5). Both the practitioner and the Lecturer contribute to the instruction as scheduled. Each brings expertise in the subject content, methodology, research process etc to create a powerful learning experience together than they could not create individually For collaboration to be successful, it requires University management (synergy). commitment. So Management must be involved from the beginning. The following should be included in the model:

- Identify the accounting areas that need collaboration,
- Agree on the mission values and principles of the effort
- Agree on which people you will be working together with
- Set clear expectations and guidelines
- Design structure
- Structure your environment
- Monitor and evaluate the learning experiences of the students together.

### **Keys to Successful Cooperative and Collaboration**

To determine if cooperative education and collaboration teaching that integrates curricula is powerful enough to accomplish their mission ie education achievement and acquisition of employable skill, there is need to know the conditions and environmental factors affecting them: Kuhlthau (1993) identified the following:

- Management commitment
- Team approach among all participants having an essential role on the instructional team- the University, Practitioner and Lecturer;
- shared commitment to lifelong learning;
- competence in designing learning activities to improve student learning
- the environment
- resources (fund, trained academic with both accounting, IT interests and skills)

The literatures revealed that the current accountancy curriculum is inadequate to meet the demand of the employers in the global business environment. This trigger the start of the call for action by firms, professional bodies, publishers, academics, universities, governments, non-governments organisations and all stakeholders with an interest in maintaining a vibrant and informed accounting profession. For educators, a new era is emerging where the profession of accounting need to stimulate the education of future and present accountants with 'the education they derserve' (Diamond, 2005:361

#### **METHODOLOGY**

The survey research design was used in carrying out this study as it deals with getting detailed and factual data direct from group of accounting academic, professional accountant, accounting students and employers of labour in both private and public companies. The target population of the study consist of the major accounting stakeholders in Anambra State - accounting academic, professional accountants, accounting students and employers in private and public companies. It is important to emphasise that there are only two Universities in Anambra State: one state and one federal. The accounting academics and undergraduates accounting students were drawn from the two Universities. There are 300 accounting stakeholders in all as shown below:

**Table 3.1 Population of the Study** 

S/No	Category of accounting Stakeholder	Total
1	Accounting Academic	30
2	Professional Accountant (ICAN & ANAN)	104
3	Undergraduate Accounting Students-Final year	120
4	Employers in private and public companies	46
	TOTAL	300

Source: Field Survey 2014

The study cannot be carried out on the entire population because the population is large. In that case there is need to work with the data from the sample. To determine the sample size scientifically, the Taro Yemeni's formula was adopted: (1967)

$$n = \underline{N}$$

$$1+N(e)^2$$

Where n= sample size

N= Population

E = Error limit = 0.05

1= constant

Therefore,

$$n = \frac{300}{1 + 300(0.05)2}$$

This number was randomly distributed to the entire stakeholder using cluster random sampling technique. The purpose is to ensure that each group of the stakeholder sampled represent the population

Table 3.2 Sample of Stakeholders Studied

S/No	Category of accounting Stakeholder	Total
1	Accounting Academic	17
2	Professional Accountant (ICAN & ANAN)	59
3	Undergraduate Accounting Students-Final Year	69
4	Employers in private and public companies	26
	TOTAL	171

Source: Field Survey 2014

Questionnaire was used as the data collection instrument. It consisted of 20 questions which were carefully designed from literature to collect relevant data. The questions were designed using 5 point Likert summation rating scale with choice of strongly agree to strongly disagree. The value ranking of the choices ranges between 5 and 1. A mean value of 3 and above was considered significant. The researcher produced and distributed questionnaires through the help of research assistants. The research assistants were detailed on what they are expected to do. Out of 171 copies of questionnaire distributed, only 87 were properly filled and returned. This represents 51% and considered adequate for the study.

The data collected were analysed using descriptive statistics, while z –test was used in testing the three hypotheses formulated for acceptance or rejection at 5% significance level. Z – Test is a statistical hypothesis test and is appropriate in determining the difference between two population mean in a normal distribution when the sample size is large.

Decision rule: Reject null hypotheses if calculated Z – value is greater than critical value, and accept if otherwise at 5% significance level.

#### ANALYSIS OF DATA AND TESTING OF HYPOTHESES

This section is devoted to analysis of data collected from the 87 questionnaires returned by the respondents. The descriptive statistics for the data are presented in the table below:

**Table 4. 1: Descriptive statistics** 

	IV 2											
Hypothese	Ave	Std. Error from	Mean	Mode	Std.	Variance	Skewness	Std. Error of	Kurtosis	Std. Error of Kurtosis	Max	ïï
H1	3.22	0.34	3.25	3.5	0.322	0.104	-	0.25	0.094	0.51	3.5	2.5
	7	5					1.087	8		1		
H2	3.24	0.04	3	3	0.422	0.178	0.568	0.25	-0.799	0.51	4	2.5
	4	5						8		1		
Н3	3.75	0.54	3.75	4	0.512	0.263	-	0.25	-0.252	0.51	4.75	2.5
		9					0.364	8		1		

Field survey 2014

Table 4.2: Result of testing the hypotheses

Hypotheses	Average	Standard	Z – Value	Decision
		Deviation		
H1	3.227	0.322	6.470	Accept
H2	3.244	0.422	5.389	Accept
Н3	3.75	0.512	13.639	Accept

Source: Field survey 2014

### **Discussion of Result for Hypothesis One**

Co-op in the university accountancy program can facilitate wealth creation and accelerate economic growth. Z statistics concerning the test of this hypothesis is equal to 6.47 (Table 4.2). By comparing this value with the critical value of 1.645, Thus accept H1 and reject H0, and therefore, conclude that Co-op in the university accountancy program can facilitate

wealth creation and accelerate economic growth. The average of the questions measuring this hypothesis from table 4.1 is 3.227 and with the Skewness of -1.087. The kurtosis of 0.094 indicates that the distribution of our data is slightly taller than normal distribution with 0.322 standard deviation.

## Discussion of Result for Hypothesis Two

Co-op in the accountancy program of the university can increase graduates competitiveness in the marketplace for accounting positions. Table 4.2 shows the z value of testing the second hypothesis equal to 5.389. Again, comparing this value with the critical value of 1.645, therefore, accept H1 and reject H0 thus conclude that co-op in the accountancy program of the university can increase graduates competitiveness in the marketplace for accounting positions. Descriptive statistics shown in Table 4.1 gives the average of 3.224 to the questions measuring the second hypothesis, skewness of 0.568, kurtosis of -0.799 and standard deviation of 0.442. This information indicates that the distribution of our data is slightly shorter than normal distribution.

### **Discussion of Result for Hypothesis Three**

Collaborative teaching can significantly influence acquisition of problem solving and interpersonal skills needed to succeed in today's global accounting and business environment. For this hypothesis, the z value is equal to 13.639 (Table 4.2), which is again above the critical value of 1.645, therefore, H1 is accepted and H0 is rejected and conclude that collaborative teaching cant significantly influence acquisition of problem solving and interpersonal skills needed to succeed in today's global accounting and business environment. Table 4.1 reports some descriptive statistics related to this hypothesis. It showed that the average mark for the questions measuring the third hypothesis is 3.75, with skewness of -0.364, kurtosis of -0.252 and standard deviation of 0.512. The distribution of our data is slightly taller than the normal distribution.

### **SUMMARY OF FINDINGS**

This study focused on restructuring Accountancy Program of Nigerian Universities for the changing environment as strategies for Sustainable Development. Summary of the findings are presented below:

- The study revealed that co-op program in the university accountancy program facilitates wealth creation and accelerate economic growth by enabling students earn while learning, enhancing prospects for employment as well as increase profit of the employer by reducing personnel cost among others.
- The findings of the research indicated that co-op in the accountancy program of the university by helping students Make better informed career choices, gain valuable accounting-related experience and competencies before graduation, and improve their ability and performance can increase graduates competitiveness in the marketplace for accounting positions
- It was also discovered that Collaborative teaching can provide real-life modelling of working together, and creates improved environment for learning which significantly influence acquisition of problem solving and interpersonal skills needed to succeed in today's global accounting and business environment.

#### **CONCLUSION**

Universities can contribute to sustainable development through increasing the stock of knowledge and ensuring supply of skilled graduates and researchers. They can create new methodologies, develop networks and stimulates social interaction, enhance problem-solving capacity and create new firms. Education equips people with basic skills which eventually help them in wealth creation. All this can be realized by restructuring the existing accountancy program of the university to integrate co-op program and collaborative teaching.

Co-op enable students get real-world training, opportunities to explore career options, and enhanced employability skills such as communication, problem solving, and leadership as well as awareness of community and social problems. Combining co-op and service learning thus prepares students for roles as workers and citizen.

Co-operative education and collaborative teaching are inherently committed to improving the economy, people's working lives, and lifelong learning abilities. It can thus position itself to serve the experiential learning needs of students into the 21st century and beyond. Adopting powerful collaborative relationships involving greater intensity and commitment may propel improvements in accounting education because of powerful symbiotic relationships between Practitioner and Academic. This no doubt creates far more interest in teaching and learning than current practices. Collaborators feel a particular sense of accountability to their working partner, which affects the quality of instruction created for students

With unemployment looming and pressure on university to improve the skills of their graduates, collaborative teaching and cooperation is imperative.

#### RECOMMENDATIONS

Since the findings revealed that co-op education program can facilitate wealth creation and accelerate economic development, the study recommends that there is need to restructure the curriculum significantly to react to the marketplace demands though integrating co-op program and collaborative teaching in the university accounting education program to develop graduates' skills greatly and also build a link between the profession, academics and industry.

Providers of education should invest sufficient resources in universities and departments to enable them make the kinds of changes needed to stay engaged with the fast-paced changing world of business.

It is essential that the accounting program and periodically reviewed and necessary changes are made to make them up-to-date and relevant to the changes taking place in the accounting discipline and the economic environment of the country. There is need for concrete and accelerated interventions at policy and programme levels for attaining the sustainable development related to education

### REFERENCES

Adams, S.J., Pryor, L.J. and Adams, S.L. (1994) Attraction and retention of high-aptitude students in accounting: an exploratory longitudinal study. *Issues in Accounting Education 9 (1)*, 45–58.

- Albrecht, W.S., & Sacks, R.J. (2000). Accounting education: Charting the course through a perilous future. Accounting Education Series 16. Sarasota, FL: American Accounting Association.
- Anyaeze, M. C. (1997). Curriculum crises in technology education in nigeria: The implication. In G. C. Obodo (Ed), Stress and Crisis in Science and Technology Education in Nigeria. Enugu: Rejoint Publication Ltd.
- Austin, J. E. (2000) Principles for partnership. Leader to Leader, 18, 44-50
- Barton, Paul E. (1996), Cooperative education in high school: Promise and neglect, Princeton, NJ: Educational Testing Service.
- Azi, J. I. (2007) Trends in instructional design: A quest for an indigenous computer-aided learning model for nigeria, Contemporary Issues in Nigerian Education [Accessed 15<sup>th</sup> August, 20141 Available from http://www.academia.edu/6110457/ICT\_Integration\_in\_Nigeria\_and\_the\_Quest\_for\_ Indigenous\_Contents\_Prospects\_of\_the\_i-CLAP\_Model\_Design\_Initiative
- Belias, D., Sdrolias L., Kakkos N., Koutivam M. Koustelios A. (2013) Traditional teaching methods vs teaching through the application of information and communication technologies in the accounting field: Quo vadis? European Scientific Journal, 9 (28), 73-101.
- Boritz, J. E. (1999) The accounting curriculum and IT. University of Waterloo, Canada. [Accessed 13<sup>th</sup> August, 2014] Available from http://www.icjce.es/images/pdfs/TECNICA/C01% 20-% 20IFAC/C.01.052% 20-%20Education%20-%20IEG/EDC-IEG11-Update.pdf
- Bruffee, K. (1999) Collaborative learning: Higher education, interdependence, and the authority of knowledge. 2nd ed. Baltimore: Johns Hopkins University Press.
- Buzzeo, T. (2002) Collaborating to meet standards: Teacher/library media specialist *partnerships for K–6.* Worthington, Ohio: Linwort.
- Carr, S. and Mathews, M. R. (2004) Accounting curriculum change and iterative programme development: A case study. Accounting Education, 13(1), 91-116.
- Cates, C., & Cedercreutz, K. (2008). Leveraging cooperative education to guide curricular innovation: The development of a corporate feedback system for continuous improvement. Center for Cooperative Education Research and Innovation, University of Cincinnati.
- Chalmers K, and Wright, S. (2011) Bridging accounting research and practice: A value adding endeavour. In E. Evans, R. Burritt, & J. Guthrie (Eds), Bridging the gap between Academic Accounting Research and Professional Practice. 59-68 Institute of Chartered Accountants in Australia [Accessed 7th July, 2014] Available from http://www.charteredaccountants.com.au/News-Media/Reports-andinsights/Academic-leadership-series
- Craig, R.J., Clarke, F.L. and Amernic, J.H. (1999), 'Scholarship in university business schools - Cardinal Newman, creeping corporatism and farewell to the "disturber of the peace"?". Accounting, Auditing and Accountability Journal, 12 (5), 510–524.
- Diamond, M. (2005) Accounting education, research and practice: After enron, where do we go?. European Accounting Review. 14 (2), 353–362.
- Dillenbourg, P. (1999). Collaborative learning: Cognitive and computational approaches. Advances in Learning and Instruction Series. New York: Elsevier Science, Inc.
- Evans, E.(2010) Jurisdictional Disputes in accounting: Education or training. In E. Evans, R. Burritt, & J. Guthrie (Eds), Bridging the gap between Academic Accounting Research and Professional Practice. 80-89 Institute of Chartered Accountants in Australia
- Evans and Lovewell (2012) Curriculum renewal at ryerson university: White paper

- [Accessed 28<sup>th</sup> July, 2014] Available from http://www.ryerson.ca/senate/documents/CRC\_White\_Paper\_May\_3\_2012.pdf
- Mathews, R.L. (1990) Accounting in higher education: *Report of the review of the accounting discipline in higher education*. Canberra: Australian Government Publishing Service. [Accessed 5<sup>th</sup> August, 2014] Available from <a href="http://trove.nla.gov.au/work/6126726">http://trove.nla.gov.au/work/6126726</a>
- Freeman, M., Treleaven, L., Ramburuth, P., Leask, B., Caulfield, N., Simpson, L., Ridings, S. and Sykes, C. (2009) Embedding the development of intercultural competence in business education. *Australian Learning and Teaching Council*. [Accessed 5<sup>th</sup> June, 2014] http://www.altc.edu.au/resource-embedding-development-business-usyd
- Furco, A. (1996) Service learning and school-to-work. Journal of Cooperative Education. 32. 7–14.
- Grubb, W. N., & Badway, N. (1998) Linking school-based and work-based learning: The implications of laguardia's co-op seminars for school-to-work programs. National Centre for Research in Vocational Education, University of California, Berkeley.
- Grubb, W. N., & Villeneuve, J. C. (1995) Co-operative education in cincinnati, Berkeley, CA. National Centre for Research in Vocational Education. University of California, Berkeley
- Hancock, P., Howieson, B., Kavanagha, M. Kent, J., Tempone, I., & Segal N.(2010)

  Accounting for the future. In E. Evans, R. Burritt, & J. Guthrie (Eds), *Bridging the gap between Academic Accounting Research and Professional Practice*. 54-62

  Institute of Chartered Accountants in Australia
- Haycock, K. (2003) Collaboration: Because student achievement is the bottom line. Knowledge Quest, 32, 54-54.
- Hermanson, D. R., Hill, M. C., & Ivancevich D. M. (2000) Information technology in the undergraduate accounting curriculum, Review of Accounting Information System. 3, 1-10.
- Hwang, N.R., Lui, G., & Tong, M.Y.J. (2005) An empirical test of cooperative learning in a passive learning environment. *Issues in Accounting Education*, 20, 151–165. Ikejiani, O. (1991) Nigerian *education*. Ikeja: Longman Nig. Ltd.
- Iroegbu, A. N.(2007) Technology education and national development. *Contemporary Issues* in Nigerian Education. [Accessed 15<sup>th</sup> August, 2014] Available from http://www.academia.edu/6110457/ICT\_Integration\_in\_Nigeria\_and\_the\_Quest\_for\_Indigenous\_Contents\_Prospects\_of\_the\_i-CLAP\_Model\_Design\_Initiative
- Jackling, B. and Calero, C. (2006) Influences on undergraduate students' intentions to become qualified accountants: Evidence from australia. *Accounting Education*, 15(4), 419–438.
- John, J. E. A., Doherty, D. J., & Nichols, R. M. (1998) Challenges and opportunities for cooperative education. Journal of Cooperative Education 33. 10–16.
- Jones, G., & Abraham, A. (2009) The value of incorporating emotional intelligence skills in the education of accounting students. *Australasian Accounting Business and Finance Journal*, 3, 48-60.
- Kavanagh, M. & Drennan, L. (2007) Graduate attributes and skills: Are we as accounting academics delivering the goods?. Paper presented at the annual Accounting and Finance Association of Australia and New Zealand conference, Gold Coast, Australia).
- Kavanagh, M., & Drennan, L. (2007). Graduate attributes and skills: Are we as accounting academics delivering the goods?. In *Proceedings of the 2007* Accounting & Finance Association of Australia and New Zealand *Conference*. 1-30.
- Kuhlthau, C. (1993) Implementing a process approach to information skills: A study

- identifying indicators of success in library media programs. School Library Media Quarterly 22, 11–18.
- Lance, K. C., Rodney, M. J., & Hamilton-Pennell, C. (2001). Good schools have school library media specialists: Oregon SLMSs collaborate to improve academic achievement. Salem: Oregon Educational Media Association.
- Leonard, P. E., & Leonard, L. J. (2001) The Collaborative prescription: Remedy or reverie?. *International Journal of Leadership in Education*, 4, 383–399.
- Lieberman, A. (1986) Collaborative work. *Educational Leadership*, 43, 4–8.
- Linn, H. & Miller (2011) Handbook for research in cooperative education and internships. Mahwah: Lawrence Erlbaum Publishers.
- Love, N., & Fry, N. (2006) Accounting students' perceptions of a virtual learning environment: Springboard or safety net?. Accounting Education: An International Journal, 15, 151-166.
- Martin, B. and Tang, P. (2007), The benefits from publicly funded research, SPRU Electronic Work ng Paper Series 41.
- Dos Santos Matai, P. H. L., & Matai, S. (2007) Cooperative education: the physical environment. In international conference on engineering education, -1CEE. http://ineerweb.osanet.cz/Events/ICEE2007/papers/471.pdf
- Montiel-Overall, P. (2005) Towards a Theory of Collaboration for Teachers and Librarians, School Library Media Research, 8, 1-31.
- Moore, T. E. (2001) Repositioning the MBA, BizEd, 50–56
- Nelson, B. (2002) Higher Education at the crossroads: An overview paper, DEST, Canberra [Accessed August, 2014] Available from http://www.voced.edu.au/content/ngv13176
- Okoye, C. M. (2007) The impact of science and technology on poverty alleviation. Contemporary Issues in Nigerian Education [Accessed 15th August, 2014] Available
  - http://www.academia.edu/6110457/ICT\_Integration\_in\_Nigeria\_and\_the\_Quest\_for\_ Indigenous Contents Prospects of the i-CLAP Model Design Initiative
- Ololube, N. P., Onyekwere, L. A., Kpolovie, P. J., & Agabi, C. O. (2012) Human security and educational development in the niger delta region. Journal of Human Security, 8,
- Oviawe, J. I. (2010) Repositioning nigerian youths for economic empowerment through entrepreneurship education. European Journal of Educational Studies, 2, 113-118.
- Parker, L. D., Guthrie, J. & Linacre, S. (2011) The relationship between academic accounting research and professional practice, Accounting, Auditing and Accountability Journal,
- Paradise, R., & De Haan, M. (2009) Responsibility and reciprocity: social organization of mazahua learning practices. Anthropology & Education Quarterly, 40, 187-204.
- Potter, B.N., & Johnston, C.G. (2006) The effect of interactive on-line learning systems on student learning outcomes in accounting. Journal of Accounting Education. 24. 16-34.
- Ricks, F. (1996) Principles for structuring cooperative education programs. Journal of Cooperative Education, 31, 8-22.
- Roos. G. and Pike, S. Accounting research, policy and practice: Worlds together or world apart?. In E. Evans, R. Burritt, & J. Guthrie (Eds), Bridging the gap between Academic Accounting Research and Professional Practice, 31-40 Institute of Chartered Accountants in Australia.
- Rowitz, L. (2014) Models of collaboration. [Accessed 10<sup>th</sup> June, 2014] Available from http://www.uic.edu/sph/phtpg/Content/Documents/LinksResources/SpeakerPresentati ons/Collaboration.

- Schoenherr, A. B. (2014) Effective collaboration teaching strategies. [Accessed 10<sup>th</sup> June, 2014] Available from http://www.ehow.com/way 5728619 effective-collaborationteaching-strategies.html
- Shults, D. (2009) Defining collaborative teaching. [Accessed 10<sup>th</sup> June, 2014] Available http://debbieshultsblog.blogspot.com/2009/02/defining-collaborativefrom teaching.html
- Smollins, J. P. (1999) The making of the history: Ninety years of northeastern co-op Northeastern University Magazine, 24, 19-25.
- Stanley, T., & Edwards, P. (2005) Interactive multimedia teaching of accounting information systems (AIS) cycles: Student perceptions and views. Journal of Accounting Education, 23, 21–46.
- Still, K., & Clayton, P. R. (2004) Utilizing service-learning in accounting programs. Issues in Accounting Education, 19, 469–486.
- Tilt, C. A. (2010) The Impact of Academic Accounting Research on Professional Practice, In E. Evans, R. Burritt, & J. Guthrie (Eds), Bridging the gap between Academic Accounting Research and Professional Practice, 35-40, Institute of Chartered Accountants in Australia
- Tucker, B. (2011) Practitioners are from mars, academics are from venus? Some thoughts on the research – practice gap in management accounting, unpublished discussion paper, Centre for Accounting, Governance and Sustainability, University of Australia.
- United Nations. Office for ECOSOC Support. (2008) Achieving sustainable development and promoting development cooperation: dialogues at the Economic and Social Council. United Nations Publications.
- Uriah, O. A. & Wosu J. I. (2012) Formal education as a panacea for sustainable national development: A Theoretical discussion, International Journal of Scientific Research in Education, 5, 130-137.
- Venable, Carol F. & Vik, Gretchen N. (2014) Computer-supported collaboration in an accounting class. [Accessed 9<sup>th</sup> June, 2014] Available from http://wac.colostate.edu/books/.../chapter19.pdf
- Wijewardena, H. & Roudaki, J. (1997) Undergraduate accounting curriculum: The unique case of Iran Accounting & Finance Working Papers. University of Wolongong Research Online Faculty of Commerce.
- Wilson, J. W. (1996) Rethinking cooperative education. Journal of Cooperative Education, 31, 154-65.
- Wright, S. & Chalmers K. (2010) The Future for Accounting Academics in Australia, In E. Evans, R. Burritt, & J. Guthrie (Eds), Bridging the gap between Academic Accounting Research and Professional Practice, 72-79, Institute of Chartered Accountants in Australia.