# Relevance of Academic Research Collaboration: Pathway for Obtaining Qualitative Teaching and Learning

Ibe Helen (Ph.D), Onyeagbako Stella (Ph.D), Ezere Chimmuanya

Department of Life Science Education, Faculty of Education, Imo State University Owerri, Nigeria.

Abstract: Collaborations in academic research have been popularized previously in the academic world. This study examines the perception of academics towards academic research collaborations. The survey research design was adopted for this study. The population of the study comprises of all the academic tutorial staff of Imo State University Owerri. The sample was selected in multi stages and 100 tutorial staff were drawn using purposive and random sampling techniques. Four objectives guided the study. Questions which sought to find out lecturers' level of involvement in academic research collaborations, patterns of collaboration, application of new methodologies in the research collaborations and impact of the collaborations on productivity guided the study. Data was presented using pictorial graphs and simple percentages. Results from the study amongst many reveal that 73% of the sampled population engage in academic research collaborations, 40% of these collaborations are intra departmental/faculty/institutional, 27% are inter departmental/faculty/institutional while 20% are both intra and inter while 13% of the sample did not engage in academic research collaborations. It was recommended that academic research collaborations between different institutions, departments and faculties should be emphasized by academics to enhance cross fertilization of ideas in the world of education and academics should think out ways to carry out joint (collaborative) groundbreaking researches which would bring about an increase in academic opportunites.

#### I. INTRODUCTION

Collaboration in the context of higher education, is a situation where two or more higher institutions of learning, team up to work together towards sharing educational and research goals, achieving common goals, and enhancing collective effort in meeting educational needs in focus (Depaepe, Verschaffel, & Kelchtermans, 2013). Collaboration between higher institutions of learning has long been an accepted practice in the educational system and as a result, academics from different disciplines in either the same or different institutions team up to carry out a research (Read, 2010).

Studies exploring collaboration often focus on cross boarder higher education; information exchange amongst universities etcetera (Lewis, Ross, & Holden, 2012). This focus is relevant to the field of academics, however, studies on interdisciplinary research is rare (Bammer, 2008). While collaboration is increasingly recognized to be important for research, researchers' collaboration networks are still not adequately recognized as a form of research capacity in the literature (Ibe, 2016).

Research is a knowledge creation activity and interpersonal research collaboration networks are important for knowledge cross-fertilization and research productivity (Montague, 2015). An academic research collaboration is likely to take place between individuals from the same academic institutions. It can as well be among individuals from different academic institutions (Amabile, Patterson, Mueller, Wojcik, Odomirok, & Marsh, 2001).

Academic Research Collaboration has provided novel opportunities for researchers to develop their skills in management, communication and excel in the academic pursuits. Adapted from Amabile et al's model for research collaboration, we suggest a three dimensional structure which can be used to describe academic research collaboration.



Academic research collaboration is a very valuable tool that not only accelerates the progress but also enhances the quality of the work and extends the repertoire of the partners (Pascoe & Vonortas, 2015). Academic collaboration is beneficial to the faculty in learning new teaching tools, and to the students in increasing the breadth of their knowledge and learning different approaches to solving a problem (Akınoğlu, 2012). This tool is being increasingly utilized with success in developed countries UNESCO (2013). Some benefits of collaboration include; New applications for research methodologies; Stimulation of new interdisciplinary fields; Increased productivity; Opportunities to develop leadership skills; Opportunities to develop communication skills; Access to new funding streams; Increased opportunities for meaningful impact (Voss, Kunter, & Baumert, 2011).

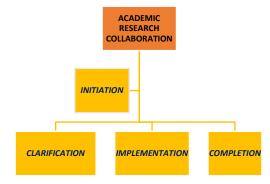
#### Benefits of Academic Collaboration

The word collaboration according to (Wagner, 2008) means working jointly with others or together especially in an intellectual endeavor. Academic collaboration is primarily a relationship between people; the researchers or administrators of different institutions (Amey, Eddy & Ozaki, 2007). It is a valuable tool that not only accelerates the progress but also enhances the quality of and extends the repertoire of the partners (Bukvova, 2010).

This study is anchored on Social network theory which forms a major paradigm in contemporary sociology. The social network theory was propounded by Burt, Kilduff, & Tasselli (2013). The theory focuses on how people, organizations or groups interact with others in social networks. In this sociology paradigm, the social relationships are studied in terms of diagrams of social networks which constitute nodes (e.g., people) and ties (e.g., the relationships among people). The diagrams according to Dellasalle (2014) can be used to understand social capitals, the advantage being that an individual, cluster or a network may gain from social interactions as a result of their location in social networks (e.g., who they are connected with). Social network theory is developed to explain why people interact, how they interact, at what level of closeness and with what kind of outcome (Hu & Racherla, 2008).

Sargent and Waters (2004) developed a framework for academic research collaboration. Their framework puts into consideration, three dimensions: the collaboration process, the interpersonal processes within the team, and the contextual factors. The collaboration process is iterative and has four phases: (1) initiation, (2) clarification, (3) implementation, and (4) completion. Additionally, there are interpersonal processes in every team, concerned with management and social issues. The research collaboration team are influenced by the context including national and institutional climate, the institutional support and available resources.

# II. FRAMEWORK FOR ACADEMIC RESEARCH COLLABORATION



Another model is presented by Stokols, Misra, Moser, Hall and Taylor (2008). They developed a conceptual framework to enable better analysis of research collaborations. The framework brings to light three areas:

- antecedent conditions (intrapersonal, social, physical environmental, organizational, and institutional), that influence the researchers' readiness to collaborate;
- intervening processes (behavioural, affective, interpersonal, and intellectual), that are active throughout the collaboration and that contribute to;
- research products and outcomes (novel ideas, integrative models, new training programs, institutional changes, and innovative policies).

Kraut, Galegher and Egido (1987), identify and describe three stages of research collaboration: (1) the initiation stage, in which the collaboration partners get acquainted and establish a work agenda, (2) the execution phase, in which the actual research work is carried out, and (3) the public presentation, which serves the documentation and publication of research results.

#### **III. OBJECTIVES OF THE STUDY**

The major objective of this study is to assess the involvement of academic staff in academic research collaborations. However, the study specifically sought to:

- 1. find out the rate of lecturers' involvement in academic research collaborations
- 2. ascertain the pattern of academic research collaborations engaged in by lecturers of Imo state university.
- 3. find out whether new methodologies are being used in the process of academic research collaborations
- 4. determine whether academic collaborations enhance productivity in study, communication skills amongst academics, cross fertilization of academic ideas and increase in academic opportunities.

#### **IV. METHODS**

This study uses a survey design method to inquire into the research experience of Academics (researchers) in Imo state University, Owerri, Nigeria. Participants were selected through purposive and random sampling techniques. A structured questionnaire comprising 10 items was used to gather information from the sample on their participation in academic research collaborations, type of collaboration taken, new methodologies adopted during the course of collaboration, the impact of such collaborations on work and academic productivity etc. The results are presented using pictorial bar graphs, pie charts and simple percentages.

#### V. RESULTS

Involvement in Academic Research Collaboration

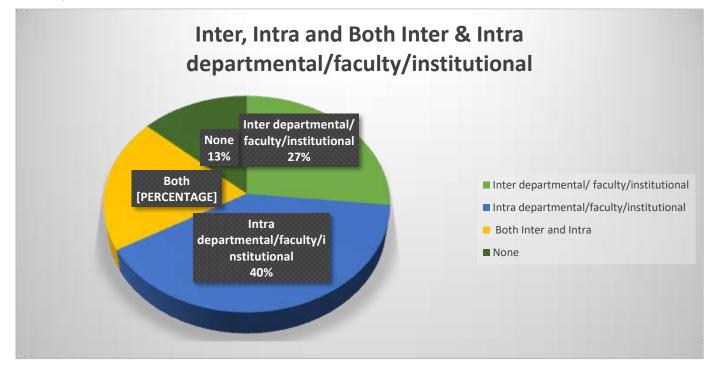
Adapted from Sargent and Waters (2004)

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There is a high rate of involvement in academic research collaboration on the part of academics. Most are have been involved in academic research collaborations.

Pattern of academic research collaborations



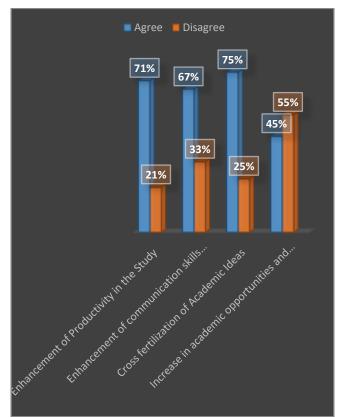
This entails the kind of academic research collaboration which academics are involved in. Inter departmental/faculty/institutional academic research collaboration entails collaborations amongst academics in different departments, faculties or institution. Intra departmental/faculty/institutional academic research collaboration entails academic collaboration amongst academics in the same departments, faculties or institutions. However, 13% of the academics' population have not been involved in academic research collaboration.

Application of New methodologies in the study



64% of the academics who have been involved in academic research collaborations stated that involvement in academic research collaborations exposed them to the use of new methodologies in the studies being carried out while 36% did not use new methodologies in their studies.

Enhancement of Productivity in the Study, Enhancement of Communication skills amongst academics, Cross Fertilization of academic ideas and Increase in Academic opportunities



71% of the academics involved in academic research collaboration agree to the fact that academic research collaboration enhanced productivity in the study while 21% believe otherwise.

67% acquiesce to the fact that academic research collaborations enhanced communication skills amongst academics while 33% have an opposite view on this.

On issue of cross fertilization of academic ideas, 75% of the academics who have been involved in academic research collaboration attest that it enhanced cross fertilization of academic ideas while 25% disagree.

Finally, a larger population of the academics attest that academic research collaborations have not made impact to the world in general and have not increased academic opportunities.

#### VI. DISCUSSION

The findings from the study reveal that a greater number of academics are involved in academic research collaborations.

This results coincides with that of Delasalle (2014) who is of the view that research collaborations are always a welcome idea in any organization set out to yield positive returns and that a huge number of individuals especially in an academic setting, are involved in different types of research collaboration.

Also, the study shows that the dominant pattern of academic research collaborations is intra departmental/faculty/institutional. This finding is backed up by Amy, Eddy and Ozaki (2007), who reported a high level of research collaboration amongst academics of the same institution.

Finally, the study also revealed that academic research collaborations open rooms for the use of new methodologies, enhance productivity in study, enhance communication skills amongst academics and encourages cross fertilization of ideas across disciplines. These findings are largely supported by Bukvova (2010) who reported in his study on comparing various research processes that research collaboration is a valuable tool that not only accelerates the progress but also enhances the quality of and extends the repertoire of the individuals involved.

## VII. CONCLUSION

This study surveyed the perceptions of academics in Imo State University Owerri, Nigeria. The results showed that while majority of the academics sampled have been involved in academic research collaborations and see it as a worthwhile endeavor, a fewer number have never been involved in academic research collaborations.

This study provides insight into benefits of academic research collaborations. The study also brings to light, the need to further propagate academic research collaborations as academics see it as a welcome idea. The study shows that a fewer percentage of the sampled population agreed that their previous academic research collaborations had impact on the world in general. Sequel to this, more impactful academic research collaborations ought to be embarked upon in order to increase the relevance of these collaborations in the world.

## VIII. RECOMMENDATIONS

- 1. Academic research collaborations between different institutions, departments and faculties should be emphasized by academics to enhance cross fertilization of ideas in the world of education.
- 2. Academics should think out ways to carry out joint (collaborative) groundbreaking researches which would bring about an increase in academic opportunites.

#### REFERENCES

- Akınoğlu, O. (2012). New approaches in teaching and learning. In Behçet Oral (Ed.): Theories of learning and teaching approaches (pp: 413-446). Ankara: Pegem Academy.
- [2] Amabile, T. M., Patterson, C., Mueller, J., Wojcik, T., Odomirok, P. W., & Marsh, M., (2001). Academic-practitioner

collaboration in management research: A case of crossprofessioncollaboration. The Academy of Management Journal, 44(2), 418–431.

- [3] Amey, M. J., Eddy, P. L., & Ozaki, C. C. (2007). Demands for partnership and collaboration in higher education. Retrieved from http://onlinelibrary.wiley.com/doi/10.1002/cc.288/pdf
- [4] Bammer, G. (2008). Enhancing research collaborations: Three key management challenges. ResearchPolicy; 37(5), 875–887.
- [5] Bukvova, H. (2010). Research as a process: A comparison between different research approaches. Retrieved from http://sprouts.aisnet.org/9-29
- [6] Burt, R.S., Kilduff, M., & Tasselli, S. (2013). Social network analysis: Foundations and frontiers on advantage. Annual review of psychology, 64, 527-547
- [7] Delasalle, J. (2014) Four issues when undertaking collaborative projects. Retrieved fromhttps://www. jobs.ac.uk blog
- [8] Depaepe, F., Verschaffel, L., & Kelchtermans, G. (2013). Pedagogical content knowledge: A systematic review of the way in which the concept has pervaded mathematics educational research. Teaching and Teacher Education, 34,12-25.
- [9] Hu, C., & Racherla, P. (2008). Visual representation of knowledge networks: A social network analysis of hospitality research domain. International Journal of Hospitality Management; 27(2), 302–312.
- [10] Ibe, H.N. (2016).Facilitating creativity in science students through teacher professional development. African Research Review. An International Multi-disciplinary Journal, Ethiopia
- [11] Koul, G.C. (2007). Principles of Educational Measurement. Lagos: Mc.Davison Publishers
- [12] Kraut, R.E., Galegher, J., & Egido, C. (1987). Relationships and tasks in scientific research collaboration. Human-Computer Interaction, 3(1), 31- 58.

- [13] Lewis, J., Ross, S. & Holden, T. (2012). The how and why of academic collaboration:disciplinarydifferences and policy implications. Higher Education, 64(5), pp. 693-708
- [14] Montague, J. (2015). Strengthening research through collaborative partnership. Retrieved from http://www.jobs.ac.uk blog
- [15] Pascoe, C., & Vonortas, N. S. (2015). University entrepreneurship: A survey of US experience. In N. S. Vonortas, P. Rouge, & A. Aridi (Eds.), *Innovation policy: A practicalintroduction*. New York:Springer. professional development. African Research Review. An International
- [16] Read, M. (2010). Collaboration in higher education and its benefitsforICT.Retrievedfromhttp://www.educause.edu/ero/article/ collaboration-higher-education-and-its-benefits-ict
- [17] Sargent, L.D., & Waters, L.E. (2004). Careers and academic research collaborations: An inductive process framework for understanding successful collaboprations. Journal of Vocational Behavior, 64(2), 308-319
- [18] Stokols, D., Misra, S., Moser, R., Hall, K., & Taylor, B. (2008). The ecology of team science understanding contextual influences on transdisciplinary collaboration. American JournalofPreventive Medicine; 35(2), 96–115.
- [19] UNESCO (2013). Teachers for 21st century global citizenship. Retrievedfromhttp://www.unesco.org/new/en/education/resources/ onlinematerials/singleview/news/teachers\_for\_21st\_century\_globa l\_citizenship
- [20] Voss, T., Kunter, M., & Baumert, J. (2011). Assessing teacher candidates' general pedagogical/ psychological knowledge: Test construction and validation. Journal of Educational Psychology, 103(4), 952-969.
- [21] Wagner, Tony. (2008). The Global Achievement Gap: Why Even Our Best Schools Don't Teach the New Survival Skills Our Children Need—and What We Can Do About It. New York: Basic Books.