ASSESSING THE RELEVANCE OF ACADEMIC RESEARCH PRODUCTIVITY IN TEACHING PRACTICES IN NIGERIAN UNIVERSITIES

AGHA, Nancy C.,
Ebonyi State University
Abakaliki, Nigeria,

ADAM, Abel U.,
Kogi State Polytechnic
Lokoja Nigeria

&

UJEBE, Nomeh,
Ebonyi State University
Abakaliki Nigeria

Abstract

Academic researchers in Nigeria seem to have themselves caught between the need to publish in reputed peer reviewed journals to ensure enhancement of their professional reputation and ranking of their institutions. The review process of these peer reviewed journals tends to emphasize methodological rigor rather than educational relevance. This often comes at the cost of relevance of the findings to teachers and causes a disconnect between researchers and teachers. This study sets out to assess the relevance of research productivity in teaching practices in Nigerian universities. The study employed survey research method involving correlation design. Primary data were collected through the use of the questionnaire administered to a sample size of 181 respondents drawn from three state universities in south east Nigeria. The finding revealed that research productivity is relevant in teaching practices in Nigerian universities.

Key Words: Research relevance; Teaching practices, Collaborative research, Research – Teaching gap

Introduction

The ultimate goal of educational research in Nigeria is to enable teachers, teacher educators and institutions make sound decisions about the educational activities and experiences that will best serve students. Ogugua (2014) is of the view that teaching can influence research by stimulating meaningful research questions; challenging researchers’ thinking and renegotiating the educators’ mindset. Research in its various forms enables teachers to introduce students to relevant and newly developed ideas demonstrating the
various ways of using research to evaluate work place scenarios and thus making the research process relevant to their future development. This reciprocal relationship seeks consideration of what research is and its purpose. From the students’ perspective, some value the opportunity to work with academics in a one- to- one relationship while others dislike learning research skills as they do not see their practical relevance. For academics, research-teaching- attitude also varies; whilst some academics believe that teaching and research are positively correlated, others regard research as more important than teaching and vice versa.

Research also means different things in different contexts. While a general meaning of research outside the academic context is “finding out” information in order to perform a specific task, in the academic context research involves a systematic process of investigation in which the findings and method are valid and represent a contribution to the existing knowledge (Griffiths, 2004). These different views cause misunderstanding and even inhibit the integration of research and teaching.

Researchers undertake research as a quest for basic understanding or with consideration of use or a bit of both. These scholars deeply influenced by the fundamental facts of basic disciplines seem to strive for better understanding of concepts and ideas, rather than their applicability in practice. They tend to focus on the rigorous analysis of concepts to explore inter – relationship among various concepts to explain a phenomenon rather than on how the research insights culled out of academic research can be useful in the classroom.

The results of these differences in the perspective of the practicing teacher and the professional researcher is that many teachers tend to see research findings as addressing solutions to problems that are not relevant to their day to day needs. Some of the findings of professional researchers that are publicized in scholarly journals are perceived to be remotely related to the real world of practicing teachers. The reason for limited relevance of these researches is primarily attributed to the professional researchers who seem to be “out of touch” with the language, problems and concerns of the practicing teachers. Hence the knowledge created by these researchers seems to have limited usefulness for practicing teachers. The implication of this situation is that, if the research findings are to be useful to classroom practices, practitioner- based questions must predominate.

If research is to be used by teachers and useful in classrooms, it must focus on the complex issues teachers face on daily basis. Research becomes valuable for teachers when it is applicable to their work with students in their classroom. Such application grounds research in practice and translates the theoretical into reality. However, the concept of applicability differs between the researchers and teachers. It is precisely at this point that a distance between the two begins to emerge.

There has been a growing awareness and acknowledgement of the disconnection that exists and the challenges of making academic research more context - specific and relevant to teaching practice. The study therefore, sets out to assess the relevance of academic research productivity in teaching practices in Nigeria universities. The study will specifically try to ascertain the nature of relationship between research relevance and teaching practices in Nigeria universities. Relevance is found in generating insight that teachers find useful in their teaching practices. The study focuses on the extent to which
academic researches generated prescriptions, make recommendations, offers solutions and develop principles that are actually applicable.

**An Overview of the Relationship between Research and Teaching**

When research and teaching are viewed as learning processes, it is easier to conceive at least conceptually how they can and should be mutually reinforcing (Cohen 2007). Consistent with Cohen’s (2007) focus on strengthening the research teaching link, Adamu and Agha (2015) proposed the pursuit of research inspired teaching, instruction that draws upon and is grounded in relevant discipline theory and research. Incorporating existing research evidence in our teaching will help set the stages for increased students learning and use of evidence based practice.

In research inspired teaching, teachers share their own research studies, findings and work when relevant. Bennis and O’Toole (2005) advocate the use of a professional model as an approach to education, emphasizing on integration of knowledge and practice. The integration of knowledge and practice may be as simple as integrating cases, personal research and examples into classroom curricular or as complex as completely changing the way courses are taught. Egwuatu (2012) suggests involving students more in learning process by applying knowledge, reflecting on it and deriving principles themselves rather than learning through lecturers.

Eze (2014) argues against linking research to practice because not all researchers have practice in mind and the results of many studies are not validated enough to make claims about teaching. Chapelle (2007) states that pedagogical implication drawn from research including new and replicated studies should benefit the practitioners because insights drawn from these studies can start new dialogues about practice. Shapiro, Kirkman and Courtney (2007) have noted two types of gaps, the “lost in translation gap (relevant research fails to reach practitioners) and the “lost before translation” gap (when relevant research is not undertaken by researchers). Kieser and Leiner (2009) elaborate that “getting lost before translation” means that scientific results are un-connectable and therefore untranslatable for practice.

Calls have been made to analyze the relationship between research and practice in various fields of knowledge (Tuckers and Lowe, 2011). Some argue that some introduction of doctoral studies created a mini revolution that induced a rapidly growing level of sophistication in research (Baker 2011).

Jenkins (2004) used data from student focus groups to argue that integrating research can benefit students through “staff enthusiasm, credibility and institutional reputation.” Ogugua (2014) reported student’s opinion that integrating research helped teacher’s impact positive and inquisitive approach to learning. Both articles also noted, however that some students they interviewed saw negative effects of research integration, such as inappropriately skewing the focus of courses or detracting from the teachers’ interest in time for undergraduate teaching.

The implication is that integrating research into undergraduate teaching courses may be beneficial provided that the research illuminate’s essential course content without distraction or confusing more than it clarifies, but at this point the argument that bringing
research into classroom has improved teaching practice is yet to be demonstrated by the relevant scholarship.

**Methodology**

The study employed survey research method involving correlation design. The design was appropriate in measuring the degree of relationship between research relevance and teaching practice in Nigeria universities.

Data for the study were collected from primary source through the use of questionnaire administered to a sample size of 181 drawn from the five state owned universities from south east Nigeria. Cronbach’s alpha was employed to determine its internal validity. The data collected were analyzed with product moment correlation coefficient (r).

**Test of Hypotheses**

The text of hypothesis is based on the assumption that (i) the sampling distributions are normal and (ii) the sampling distributions are independent.

**Statement of hypothesis:**

Ho: There is no significant relationship between integration of research into teaching courses and teaching practices in Nigerian universities.

Data and computation of r, \( r^2 \) and \( t_c \)

Table 1: Test of hypothesis one; Summary of data

<table>
<thead>
<tr>
<th>No</th>
<th>X</th>
<th>Y</th>
<th>XY</th>
<th>X²</th>
<th>Y²</th>
</tr>
</thead>
<tbody>
<tr>
<td>181</td>
<td>3107</td>
<td>3655</td>
<td>65568</td>
<td>54751</td>
<td>76749</td>
</tr>
</tbody>
</table>

**Source:** Field survey, 2018

Table 1 shows the summary of independent variable (X) and dependent variable (Y) computations needed to test hypothesis 1

From table 1, number of respondents = 181, \( \Sigma x = 3107, \)

\[ \Sigma y = 3655, \quad \Sigma xy = 65568 \]

\[ \Sigma x^2 = 54751 \quad \text{and} \quad \Sigma y^2 = 76749 \]

\[ r = \frac{n\Sigma xy - (\Sigma x)(\Sigma y)}{\sqrt{(n\Sigma x^2 - (\Sigma x)^2)(n\Sigma y^2 - (\Sigma y)^2)}} \]

\[ t = \sqrt{\frac{181 \times 65568 - 3107 \times 3655}{65568}} \]

\[ r = \sqrt{\frac{181 \times 54751 - 9653449}{181 \times 76749 - 13359025}} \]

\[ r = 0.679 \]
\[
\sqrt{256482 - 532544} = 511723
\]
\[
r = \frac{511723}{\sqrt{1365879502}}
\]

\[
r = 6695780
\]
\[
r = 0.76
\]

Coefficient of determination \( (r^2) = (0.76)^2 = 0.5776 \)

Computation of the value:

\[
t_c = r \frac{\sqrt{n - 2}}{\sqrt{1 - r^2}}
\]

From the \( t \)-calculated formula we have:

\[
T_c = \frac{0.76\sqrt{181 - 2}}{\sqrt{1-0.5776}}
\]

\[
t_c = \frac{0.76\sqrt{179}}{\sqrt{0.4224}}
\]

\[
t_c = \frac{0.76(13.38)}{0.65}
\]

\[
t_c = 15.64
\]

At 0.05 level of significance, the calculated \( t \)-value of 15.64 is greater than the critical \( t \)-value of 1.96 (15.64 > 1.96), so the study rejects the null hypothesis that there is no significant relationship between integrating research into teaching courses and teaching practices in Nigeria universities and accepted the alternate hypothesis. This means that there is a significant relationship between integrating research into teaching courses and teaching practices in Nigeria universities.

This is in agreement with Okoye (2014) view that greater emphasis on classroom based research would be more useful in understanding the role of contextual factors in teaching and learning. He maintained that an alternative way to integrate research into classroom and one with much empirical support in terms of improving students learning is to teach in a manner that replicates the research process by using an inductive learning approach such as inquiry-based or problem-based.
As teachers begin to apply the research of others to their own classroom contexts, they inevitably will come up with questions like: does the research address the concerns I have about my classroom? If not how would I have the answers to my question? As a teacher asks such questions, he/she will begin to make reflection that leads to the generation of his or her own research. Teachers who ask questions and then systematically study their own teaching generate new research about teaching that can be shared with others.

The study revealed that teachers also take the method they used in their scholarly activities and translate them into inductive teaching environments by borrowing elements of their own research or choosing challenges more appropriate to the subjects and levels of the courses they are teaching. Their research knowledge and experience from supervising research students could all be brought into their teaching, thereby enriching student instruction in the classroom environment. These would help students to develop critical thinking and problem solving skills that will serve them well in any career path they undertake.

If students are taught inductively as fresh students, it could induce many of them to seek research experience later in the curriculum. Repeated exposure to inductive teaching throughout the curriculum would equip students to function effectively as researchers by the time they graduate.

**Test of hypothesis two**

**Ho2:** There is no significant relationship between collaborative research and teaching practices in Nigerian universities.

Data and computation of \( r, r^2 \) and \( t_c \)

Table 2: test of hypothesis two
Summary of Data

<table>
<thead>
<tr>
<th>No</th>
<th>X</th>
<th>Y</th>
<th>XY</th>
<th>X²</th>
<th>Y²</th>
</tr>
</thead>
<tbody>
<tr>
<td>181</td>
<td>3059</td>
<td>3496</td>
<td>62698</td>
<td>5337</td>
<td>70592</td>
</tr>
</tbody>
</table>

Table 2 shows the survey of independent variable (X) and dependent variable (Y) computations needed to test hypothesis two. From the table above, number of respondents = 181; \( \sum X = 3059; \)

\[ \sum Y = 3496; \sum XY = 62698; \sum X^2 = 53375, & \sum Y^2 = 70592 \]

\[ r = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{(n\sum X^2 - (\sum X)^2)(n\sum Y^2 - (\sum Y)^2)}} \]

\[ r = \frac{181 \times 62698 - 3059 \times 3496}{\sqrt{(181 \times 53375 - 9357481)(181 \times 70592 - 1222016)}} \]
\[ r = \frac{11348338 - 10994264}{\sqrt{303394 \times 555136}} \]

\[ r = \frac{354074}{\sqrt{1684249316}} \]

\[ r = \frac{354074}{4103960} \]

\[ r = 0.86 \]

Coefficient of determination \((r^2) = (0.86)^2\)

Computation of \(t_c\) value = 0.7396

\[ t_c = \sqrt{\frac{n - 2}{1 - r^2}} \]

From the \(t\) calculate formula we have

\[ t_c = 0.86\sqrt{181 - 2} \]

\[ \sqrt{1 - 0.7396} \]

\[ t_c = 0.86\sqrt{179} \]

\[ \sqrt{0.2604} \]

\[ t_c = \frac{0.86(13.38)}{0.51} \]

\[ t_c = 22.56 \]

At 0.05 level of significance, the calculated \(t\) value of 22.56 is greater than the critical \(t\) Value of 1.96 (22.56 > 1.96), so the study rejects the null hypothesis that there is no significant relationship between collaborative research and teaching practice in universities in Nigeria and accepted the alternate hypothesis. This means, there is a significance relationship between collaborative research and teaching practice in Nigeria universities.

This corresponds with Okechi (2014) study which showed that sustained interactivity among teachers and researchers is likely to lead to more research utilization. When teachers and researchers interact repeatedly during the course of the research, the meaning and validity of the study are not negotiated by both parties. What this translates into is that researchers should work with teachers to develop research agenda.

The study recommended that researchers should be in constant dialogue with teachers about the challenges faced by them and about the role research can play in responding to those challenges. It is especially
important that teachers be invited to participate in determining the issues on which research should focus. Such a collaborative form of inquiry helps both the teacher and the researchers leverage their unique perspective to have a holistic understanding about the teaching phenomenon, making for what is called intellectual arbitrage. Practice needs theory to shape it and theory, on the other hand, is tested and developed through practice. Teachers, while evaluating academic research, look for findings that are related to issues on problem pertinent to their teaching areas.

Researchers need to understand what teachers really expect from the result of their research. Thomas and Tymon in Agha (2011) identify five areas of expectation namely:

1. Practitioners would be interested in knowing if the research is dealing with real educational problems and issues. Discipline relevance, checks for the accuracy of the research findings in capturing phenomena encountered by practitioners in their professional settings. This relevance can be checked at the problem formulation stage. Researchers should ensure discipline relevance by identifying research problems which are on the interest of the practitioners.

2. Teachers should be interested in knowing whether the research findings potentially helped them have a better hold on certain factors which are critical to the achievement of their set goals. Goal relevance checks the correspondence of outcome of (dependent) variables in a theory to the factors the practitioner wishes to influence.

3. Educational practitioners often maneuvered many educational factors to achieve a desired result hence they would be more interested in educational factors that they can influence which, in the parlance of academic research, are independent variables. They would be less interested in factors which cannot be maneuvered. This relevance operational validity checks for whether the practitioner can or would like to maneuver the factor identified by the researchers as causal (independent) variables.

The researcher can check for both goal relevance and operational validity during the second phase of the hypothesis development and operationalization of research design. The research is said to have a high degree of operational validity and goal congruence if the variables identified by the researcher are relevant to educational issues and can be manipulated by teachers. High degree of operational validity is ensured by selecting appropriate independent variables that can be maneuvered by the practitioners.

4. Teachers expect researchers to provide new insight in form of knowledge and information which goes beyond intuition. This relevance non-obviousness checks for the extent to which a theory meets or exceeds the intuition of a practitioner. In order for the research to be useful to teachers the insight from the research should be available for use in time. This relevance is labeled as timeliness. The researchers need to ensure both non-obviousness and timeliness of the insight on offer. This can be checked in the final stage of research where researchers draw inferences and conclusions based on the interpretation
of data. The researchers should attempt to provide some recommendations based on these research insights that are applicable to teaching practice. Researchers should find ways to share the same early findings with the teachers at relevant forums, before the findings become relevant for the teachers.

The biggest challenge faced by the academic community is to balance the requirement of practice (relevance) and building rigor into the enquiring process through specialization. The relevance of academic research can be enhanced by:

a. Doing research in relevant areas and or
b. Working collaboratively with teachers to understand research findings.

Collaboration between teachers and researchers will facilitate academic research with relevance. Such a collaborative approach represents a distinct departure from the conventional soloist approach of identifying research problems on the basis of review of literature.

Conclusion

It is clear that research programmes that fail to carefully and deliberately consider contextual factors ignore the realities of the education enterprise and produce research findings that have a low probability of being adopted by practitioners. There is need to bring the focus back to generating and sustaining valid and relevant knowledge whether it is obstruct, empirical, or practical, rather than submit to the rat race of “publish or perish” and the clamour for rankings of Nigeria institutions.

Recommendations

The paper recommends that research should focus on problem solving research by treating teachers as their primary stakeholders and be specific and substantive while articulating research problems and communicating findings. They should expand their methodological repertoire by including methodologies which take cognizance of the role of practical issues and explicitly address the interdependence of theory and practice.

References


Shapiro, D. L, Kirkman, B.L. and Courtney , H.G (2007). Perceived causes and solutions of the translation problems in management, Research Academy of Management Journals, 150: 249 – 266
