

# Strengthening the Synergy between Teaching and Research

Divya Singhal [1]

[1], Associate Professor  
Goa Institute of Management,  
Goa, India

divyasinghal@gim.ac.in;  
divyagim@gmail.com

## ABSTRACT

It is now proved that with the changing context role of management education has become much more important. Teaching-learning process at management education institutions means more than facilitating learning environment and it address the demands and challenges of the knowledge based economy. In the area of management education an ongoing global debate about the teaching-research link is going on. The present paper attempts to answer how research informs teaching and how teaching is informed by research. This paper explores the linkage between teaching and research and suggests ways to strengthening that link. In the first part of the paper it talks about the Research and Teaching relationship; in the second part it discusses the Research-informed teaching. Last part of the paper deals with the Teaching - inform Research aspect.

Keywords: *teaching-research, management education, india*

## INTRODUCTION

We live in an increasingly interdependent world. There is greater diversity at workplace. Managers have to face new challenges everyday, they have to grapple with uncertain issues and find ways to revamp their organizations in such conditions. In these kinds of scenarios we need to have decision-making talent capable of flourishing in the new environment.

*"Involving students in inquiry - in research - is a way of improving their learning, motivating them more. After all, what motivates large numbers of academics is engaging in the excitement of research. Bringing research and teaching together is a way of enhancing the motivation of both academics and students."*

*(Brew, in preface to Jenkins et al., 2003, ix)*

In this context the role of management education has become very important. Management education in general is concerned with imparting knowledge that is relevant for managerial career and also concerned with developing capabilities to use this knowledge in problem analysis, diagnosis, anticipating events, etc. and in decision-making. (Dayal 2002)

The quality of education or teaching-learning process should enable future managers to contribute global learning solutions to their organizations as quickly as possible.

## Recent Debate

Teaching-learning process at management education institutions means more than facilitating learning environment where academics staff and students are 'working together'; teaching and learning are interwoven towards the needs of students and the demands/challenges of the knowledge based economy.

There is an ongoing global debate in the teaching-research nexus. There are issues such as how research inform and enhances leaning and teaching? How research is useful in the management education context? How Teaching-informs Research?

The present paper attempts to answer these questions. This paper explores the linkage between teaching and research and suggests ways to strengthening that link. In the first part of the paper it talks about the Research and Teaching relationship; in the second part it discusses the Research-informed teaching. Last part of the paper deals with the Teaching –inform Research aspect.

Feeding research knowledge into teaching can be viewed as a knowledge transfer process. The relationship between Research and Teaching has been widely studied in the last two decades. Jenkins and Zetter (2003) view the value of creating such a link from three perspectives: experientially (both students and faculty benefit); conceptually (benefit from development of knowledge); and operationally (benefit from reciprocity of Research and teaching as learning activities. Scarfe Adam in his paper, 'Conceptualizing the Teaching - Research Contrast: A Process Philosophical Perspective' formulates an argument by definition, inspired by Whitehead's manner of thinking, by which we can poist how teaching informs and enhances research and further conceptualize the teaching-research contrast. Similarly Vammila (1995) and Henkel (2000) pointed out that there are a number of studies, which show that academics feel strongly about the problems caused by the desire/wish to do research and to teach.

According to Sagor (2003) as cited by Donna R. Everett argued that teachers, who conduct action research, bring certain skills to their classrooms. They are observers (looking at what is happening and thinking about information they already have); they are questioners (everything that occurs in a classroom can be seen as data to be understood); they are learners (reflecting on what they learned rather than on what they taught); and they are more complete teachers because they bring together the concepts of knowing and doing. Senaratne, *et al.*, (2005) as cited by McFarland indicates that the changes in quality assurance and funding mechanisms have created a tension between research and teaching. Firstly the separation of research and teaching quality assurance has created problems within universities as regards choosing a mission statement (research excellence versus teaching excellence) and allocating resources. A second tension arises among academics "as research is more rewarding compared to teaching, academics aim for research excellence at the expense of teaching" (p.588). Brown considers that the academic discussion on the linkage between research and teaching "contains a certain confusion. It is uncertain whether the research that academics are supposed to overtly link to their teaching is the research already undertaken and published by others in books, journals or textbooks, or whether what is to be introduced to teaching is their own personal research" (2005, p.394). Scott (2008) opined that business school must articulate what type of research is valued (pedagogic, discipline based or applied). AACSB International - The Association to Advance Collegiate Schools of Business in their Accreditation Standards- talks about the Portfolio of Faculty Contributions which is explained by a generalized categorization of intellectual contributions includes contributions to learning and pedagogical research, contributions to practice, and discipline-based scholarship. According to AACCB accreditation standard, Learning and Pedagogical Research contributions influence teaching-learning activities of the school. Preparation of new materials for use in courses, creation of teaching aids, and research on pedagogy all qualify as learning and pedagogical research contributions. Watkins, C. & Mortimore, P. (1999) expressed pedagogic research as applied research into teaching and learning practice. The primary aim of such research is to enable the teacher to understand and interrogate their practice, rather than add to the global stock of knowledge.

Pedagogic research plays a key role in the university's plans for future development, building on existing expertise in areas such as experiential learning, education for sustainable development. Thus, Pedagogical research can pave the right path for the development of b-school. Applied research is designed to solve *practical problems* of the modern world, rather than to acquire knowledge for knowledge's sake. It is basically to answer appropriately to the needs of businesses by dissemination and valuing knowledge and know-how.

Cooper and Mcalister(1998) in their paper suggested that Business schools in research universities can compete effectively if we focus on research that is both basic (influencing further knowledge development) and applied (problem driven), and if we differentiate our offering by incorporating the findings of our basic, applied research into our curriculum. Paul et. Al (1998) also talks about the use of applied research extensively by different B-schools. Many educational institutions believe in the strong relationship between teaching and research. Foundation for Organizational Research and Education (FORE) school of Management believes in research strongly and to boost

their presence in field of Research, the institute has formed a “Centre of Research” under which faculty work in the varied functional areas of management with particular emphasis on organizational research. They have their refereed research journal for more than last twenty-seven years. Goa Institute of Management in its philosophy of education details core functions of GIM which includes:

- Through a learning centric mode (as against being learner centric or teaching/teacher centric), impart knowledge that is contemporary, practical and useful to managers, organizations and society.
- Generate knowledge through research that informs teaching and is informed by teaching

**Research That Informs Teaching**

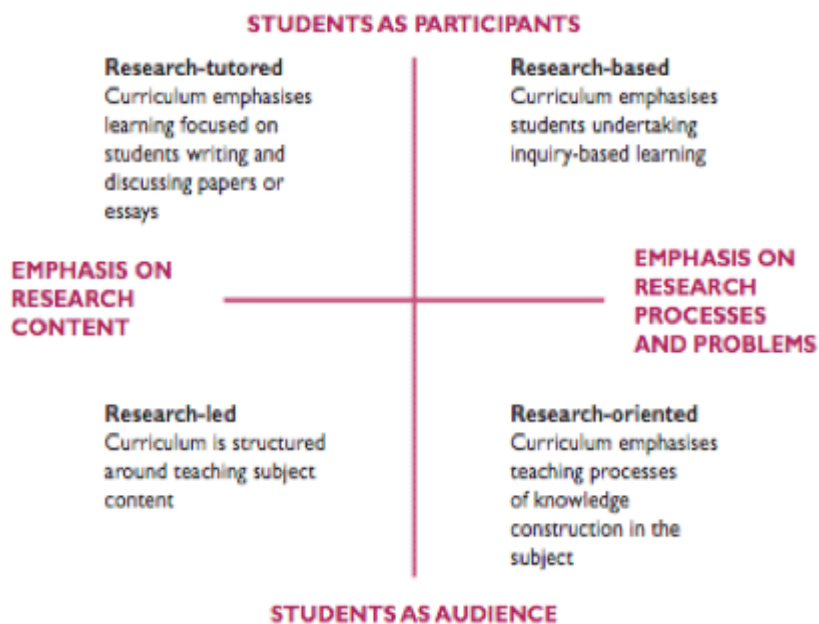
There is a widely held axiom in universities that ‘research informs teaching’. But what does this actually mean? Teaching in discipline and subject areas should reflect research knowledge, as it informs the discipline or subject area.

Research can directly inform teaching through example and practice by mirroring the thought process. (Ray and Woods berry 2009). Here are some points for research – led-teaching primarily taken from University of Melbourne experience. (Baldwin 2005)

**1. Sketch on your own research in designing and teaching courses**

This facet of research informed teaching Research *in* Teaching focuses on teaching that reflects the impact of research that occurs in the context of teaching practices as they intersect specific discipline/unit/course content, teaching experiences and student experiences. In this context faculty plays role of a reflective practitioner.

**Fig. 1: Curriculum design and the research-teaching nexus**



Source: Based on Healey (2005a, 70)

According to Garnett and Holmes (1995) one obvious way in which research used in teaching is in underpinning curriculum, especially at postgraduate level.

It is true that its not easy to use personal research directly in teaching, however, there could be possibilities in this direction.

*"We are all researchers now ....Teaching and Research are becoming ever more intimately related ...In a 'knowledge society' all students – certainly all graduates –have to be researchers. Not only are they engaged in the production of knowledge; they must also be educated to cope with the risks and uncertainties generated by the advance of science."*

Peter Scott, Vice Chancellor of Kingston University 'High wire: We are all Researchers now,'  
Guardian Education, January 28, 2002, 13

There are many opportunities for teachers to introduce their own research experiences into classes in the form of illustrations.

In my course on Research Methods, I use my recent research project during my sessions to give them practical examples. I used my papers in various occasions such as when I was teaching Factor Analysis, that time I refereed my paper and asked students to see how in that context factor analysis is useful. Similarly when taking a session on questionnaire design and data coding etc; I again shared my questionnaire development process to give them practical understanding.

Garnett and Holmes (1995) stated that research can provide teachers with a framework for the development of up-to-date course material and research related projects.

It is believed that good teacher is constantly searching for relevant examples and anecdotes. If a teacher is engaged in research in his/her areas, then this can very well keep him/her up-to-date with the current innovations in the respective field and the dynamic changes too. This understanding provides ample scope for using those facts/data in class room environment.

## **2. Plan learning activities around contemporary research issues**

In many disciplines/ subjects it is possible to ask students to explore some of the cutting-edge research themselves. Such as in Marketing discipline; while taking a session on 'online marketing'; faculty may ask students to find out the current trends in advance and share their finding in the class.

These kinds of experiential activities may be more effective as they give a chance to involve students' in practical exposure as well as break the monotony of chalk and talk technique. For example, students in one course were asked to investigate the Management Information System used in the different organisations.

## **3. Integrate research activity into students' assignments**

This facet of Research *Skills & Practices* most directly on students (and, where appropriate, academic staff) acquiring skills needed to successfully undertake and complete their own research.

Some courses can include full research project or given a chance to analyze 'real data' from an existing research project. Here again the author would like to cite an example of the Research Methods course at Goa Institute of Management where Project is an important part of the course. The project there is used to engage students through a process of experiential learning.

A group comprising 4- 5 students generally choose a specific research topic in consultation with the Course Instructor(s). They have to identify a work – based issue in the area of Human Resource /Finance/Marketing/Operations/Social that can be investigating using a qualitative and quantitative approach. This research project is aimed to provide students with lasting benefits, e.g.

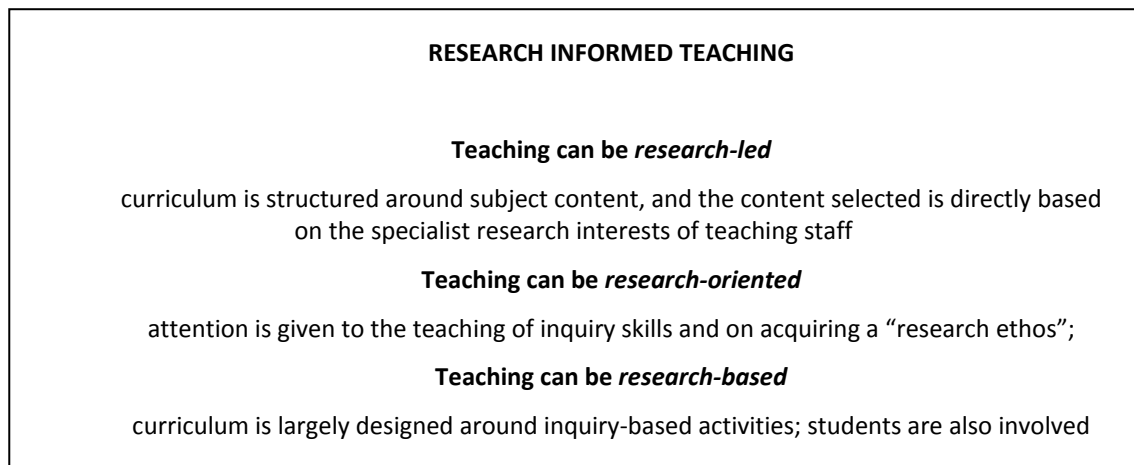
- The student selected project reinforces classroom instruction and students learning about both the qualitative and quantitative aspects of research.
- The students will become more experienced in applying suitable research tools, working in teams, brainstorming, so necessary for professional success.

The author have witnessed some of the very good quality projects in last four years at GIM. Many of the projects taken up by students were applied in nature and live projects. This has given them a chance to enjoy the unique kind of learning that comes with it. Through their projects students were able to understand the technicalities of the research process apply them in their projects and again contribute their experience in the class.

A student project is the ideal form for active learning- learning by doing, rather than just listening. Professor Ranjini in her internal document for CIS and dissertation opined that GIM could consider offering students the option of doing a Comprehensive Project of about three units. The project would require students to take up a live problem

or opportunity (of defined and modest scope) facing a company and help the company to respond effectively *on the ground*. Thus the student must help the company act effectively; he must help the company execute decisions. (A library based project would not be considered acceptable as a comprehensive project.) A comprehensive project would provide student with an opportunity to (a) integrate learnings across the disciplines/ fields of management (b) learn the challenges in execution. Faculty members guiding the project have to be permanent faculty of the Institute. The student could access help from others within or outside the institute; however, the guiding and evaluation would primarily be the responsibility of the permanent faculty member who is the guide.

Brew and Bound (1995b) stressed that latest research into teaching and learning suggests that actively engaging with content is a way of gaining in depth understanding of the contents. An effective way of achieving that is by having students carry out research.



#### 4. Encourage students to feel part of the research culture of the institute

At institute level one can stimulates students’ interest in research through different clubs/ societies or by holding guest lectures to keep students up-to-date with new discoveries and ideas. Many institutes have components of dissertation, case writing etc in their curriculum. The Dissertation allows students to explore deeply, a research question of interest and relevance to the student.

Sadeghi Abbas (2009) talks about the benefits of teaching from research and explained that active involvement in the research process directly improves the quality of teaching by promoting a critical engagement with the subject matter and by providing experiential learning environment. It keeps the academic up to date with the frontiers of knowledge within the discipline. He opined that research gives teachers the opportunity to convey to students not only specific new information but an understanding of the value and intrinsic excitement of scholarly endeavor and an appreciation of the spirit of enquiry underlying it.

#### Research Which Is Informed By Teaching

The aim of teaching is knowledge transmission and many a times there could be possibilities where teaching can be key to research or we can say teaching-led research.

Specially when designing/re-designing of curriculum; one needs to think through. Here the core is to teach ‘a subject’ and in the process of understanding that subject teacher requires research. For example when an idea came to the author of this paper to launch an elective related with Lyrics and Management at GIM last year; the author have to do whole lot of research on justifying her idea; creating the course outline; collating the relevant material. The author decided to link role of music in advertising; this gives her ample scope to research in order to understand the conceptual background. Launching this kind of a totally new course can provide research opportunities.

In this context; author used research at understanding level. Also later, she included this experience in one of her paper and shared with the intellectual world. This is an example of teaching –led research.

Teaching-led research can be used to showcase new courses/new developments with stakeholders group. Sometimes questions from students can led to substantiate research or class hours with students can give new ideas of refining research. In a paper by Becker and Kennedy (2004), interviews of the faculty members in respect to the question as to how their teaching informs their research were discussed. And, there was a consensus of responses to the effect that teaching substantially informs research.

One professor expressed that “Teaching keeps research in perspective – I can think of several instances in which teaching has forced me to come to my senses and give up on a topic because I couldn’t explain why it is important.

## CONCLUDING REMARKS

Thus, there's a synergy between teaching and research -- research informs teaching and teaching informs research. It should be very significant that management education ensure ways to strengthen this synergy. Many research studies suggest that Indian B-Schools lack research culture. In light of this, to strengthen the teaching-research relationship; it is important that business school first recognize its importance and find ways to create a research culture.

## ACKNOWLEDGEMENT

The paper is an outcome of author’s work to understand the Educational Philosophy of her own institute.

## REFERENCES:

- AACCB, Accreditation Standard. Retrieved from [http://www.aacsb.edu/resource\\_centers/research/standards\\_2\\_intellectualcontributions.asp](http://www.aacsb.edu/resource_centers/research/standards_2_intellectualcontributions.asp) accessed on March 18, 2010
- Baldwin Gabriel (2005) *How research informs and enhances learning and teaching in the University of Melbourne*. Centre for the Study of Higher Education. Retrieved from <http://www.cshe.unimelb.edu.au> accessed on March 19, 2010
- Becker, William E. and Kennedy, Peter E., (2004) *Does Teaching Enhance Research in Economics?*. Retrieved from SSRN: <http://ssrn.com/abstract=601504> accessed on March 18, 2010
- Brew, A & Boud, D. (1995b) *Teaching and Research Establishing the Vital Link with Learning* Higher Education, 29 (3), 261-273.
- Brew, A (2003) *Teaching and research: new relationships and their implications for inquiry-based teaching and learning in higher education*, Higher Education Research & Development 22(1), 3-18
- Brown, R. (2005) *Why link personal research and teaching?* Education and Training, 47 (6/7), 393-407.
- Cooper William and McIster Leigh (1998) *The Importance of Basic, Applied Research*. Journal of Market Focused Management, 2, 303–308 (1998)
- Dayal Ishwar (2002) *Developing Management Education in India*, Journal of Management Research Vol2-2
- Sadeghi Abbas (2009) *Relationship between Teaching and Research: Conflict or Harmony? with special focus on Guilan University (Faculty of Humanities), Iran* Retrieved from [www.ictl.intimal.edu.my/proceedings](http://www.ictl.intimal.edu.my/proceedings) accessed on March 18, 2010.
- Garnett, P & Holmes, R. (1995) *Research, Teaching and Learning: A Symbiotic Relationship* in B. Smith & S. Brown (Eds), *Research Teaching in Higher Education* (pp. 49-57), London: Kogan Page.
- Griffiths R (2004) *Knowledge Production and the research-teaching nexus: the case of the built environment disciplines* Studies in Higher Education, 29(6) 709-726.
- Henkel, M. (2000) *Academic Identities and Policy Change in Higher Education*, London: Jassica Kingsley Publishers.
- Healey, M. (2005) *Linking Research and Teaching: Disciplinary Spaces* R.
- Barnett (Ed.), *Reshaping the University: New Relationships Between Research, Scholarship and Teaching*, 30-42. Maidenhead: McGraw- Hill/Open University Press.
- Mann, Leon, & Dunning, Jeremy. & Bain, Paul (1998) *The relationship between transformational leadership and project performance in applied research development teams / by Leon Mann, Jeremy Dunning and Paul Bain* Melbourne Business School, University of Melbourne, [Carlton, Vic.]
- McFarland Paul (2007) *Developing a Research Culture from Undergraduate Teaching*. Retrieved from [www.anzaps.org/.../Paul\\_McFarland\\_Research\\_Culture\\_ANZAPS\\_07.pdf](http://www.anzaps.org/.../Paul_McFarland_Research_Culture_ANZAPS_07.pdf) accessed on March 18, 2010



- Ray Cooksey and Woodberry Eve (2009) *How Research Informs and Influences Teaching at UNE: A Statement about Aspirations and Realities*, Academic Board Document. Retrieved from [www.une.edu.au/policies/.../research-informed-teaching-at-une-statement.pdf](http://www.une.edu.au/policies/.../research-informed-teaching-at-une-statement.pdf) accessed on March 18, 2010
- Seneratne, S. et al. (2005) *Research knowledge transfer into teaching in the built environment*. Engineering, Construction and Architectural Management, 12 (6), 587-600.
- Watkins, C. & Mortimore, P. (1999) *Pedagogy: What do we know?* In P. Mortimore (ed.), *Understanding pedagogy and its impact on learning*. London, Paul Chapman Publishing. 1-19. Retrieved from <http://www.ljmu.ac.uk/lid/ltweb/81557.htm>
- Valimma, J. (1995) *Higher Education Cultural Approach* Jyvaskyla Studies in Education, Psychology and Social Research . No 113. Jyvaskyla: University of Jyvaskyl.
- Woodhouse, D. (1998) *Auditing Research and the Research/Teaching Nexus*, *New Zealand Journal of Education Research* 33 (1), 39-53.

*"Involving students in inquiry - in research - is a way of improving their learning, motivating them more. After all, what motivates large numbers of academics is engaging in the excitement of research. Bringing research and teaching together is a way of enhancing the motivation of both academics and students."*

*(Brew, in preface to Jenkins et al., 2003, ix)*