

Administrating the Implantation of Distributing Equal Efforts between Teaching and Research within the Faculty Member

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Abstract—There is a unanimous agreement that scientific research in general and, in higher education institutions specifically, has an excessive prominence. It is often considered as the corner stone of scientific progress and scientific inventions. Believing in its active role in the process of development in all its forms and fields, some Iraqi universities have begun to teach the scientific research approach in various faculties as a basic subject in most specialties.

This paper presents a study of Iraqi universities and the findings are based on a questionnaire of 55 faculty members. The results of the study could contribute to the discussion about the educational and strategic goals in the educational policy that must be accompanied by integrated preparation in all aspects of scientific and educational management, teaching, curricula, and teaching methods. The aim is to form a real scientific environment through the policy of teaching the culture of scientific research as a gradual process that begins with basic education by writing scientific reports and working on the method of criticism, scrutiny, and analysis. Eventually, the student will be able to deal with scientific research easily.

Keywords: higher education, teaching, scientific research, iraqi universities.

Introduction

It is not an overemphasis to state that universities are the source of academic radiation and the responsible institutions of development and modernization in society. Correspondingly, it is needless to say that universities, whether their main focus is on sciences, humanities or both, are the means by which diverse economic, social, political and cultural progresses could be achieved. The sole task of these institutions, in teaching and research, is to serve the community.

However, it is more important to signify that higher quality universities are characterized by knowledge building, and scientific research. Brennan L,et.al,2019 highlights this idea: “Our qualitative analysis revealed a dynamic framework with three interacting phases: 1) teaching is enhanced by research 2) learning research skills and competencies, and 3) student engagement with research practice. These themes contribute to the development of the student as a researcher and the implicit vision of the research-intensive university as a ‘community of scholars’ where teaching enhances research and research enhances teaching”.

Consequently, the most vital elements of university success in academic performance depend on the faculty members. The faculty member is considered as the driving force and the tool to achieve the required objectives.

In Iraq's universities, the faculty members are required to fulfill their duties of teaching and research simultaneously. Accordingly, they often face some difficulties that prevent them from carrying out their research work in the required form or to submit the results in a timely manner because they are already burdened with long teaching hours. Yet, it is also needful to state that the complications that hinder the process of research are different from one university to another according to the work environment.

Some studies list the difficulties experienced by researchers. They can be summed up by the following:

- * The lack of financial support for scientific research.
- * The long teaching hours that consumes the time and efforts of the faculty member.

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- * The problems of publication.
- * The lack of scientific resources.
- *The deficiency of objectivity in the subject of the research.
- * The need to attend conferences and administrative complications.
- *The absence of care for the university library and the shortage of research assistants.
- * The difficulty in obtaining equipment, materials and supplies.
- *The lack of time for research in addition to unreliability of information.
- * The lack of awareness of the importance of scientific research, the lack of material resources, the difficulty of working conditions.(Ahmed; I. et.al, 2013).

Knowing for a fact that research is the back bone of creative achievements and the most crucial element for goals accomplishment in the academic institution, yet it is inappropriate to give more weight and importance to research issues, casting aside the significance of good teaching as an indispensable means to reach out for a good learning. As an alternative, it is better to adopt a more systematic balance between teaching and research. According to Elaine & Paul (1996) “pressures to improve the quality of university education have led to more attention being paid to ways of recognizing and rewarding good teaching.” (Para. 1).

Therefore, the aim of this study is to determine a systematic balance between teaching and research for the Iraqi universities and find out the way to reach that goal.

Literature Review

The relationship between teaching and scientific research are complementary. Constant research work would impose a positive influence on the whole process in the form of a motivation to the teacher as well as the student who should collaborate together to make the process work successfully. This integrated relation between teaching and research will service the goals of the university so as to achieve quality and can support and enhance the students’ knowledge. However, there are numbers of factors that may cause a negative influence on this relation. These factors might include management strategies and funding pressures. For instance, universities often value scientific research more but at the same time the facilities to do research (especially time) are limited, because of high teaching demands.

Healey and colleagues (2003) summarize key findings of studies into students’ perceptions of the relevance of research to their learning. Those findings start with the positive effect of the staff encouragement and enthusiasm to students’ projects, in addition to the credibility of staff and the reflected pride of being taught by known researchers. Moreover, they recognize that being actively involved in research would increase the students’ awareness of the nature and process of research and enhance their research skills (Healey et al., 2003).

(Elsen et al,2009), explains through his research that M Robertson and Bond (2005) interviewed academics about their perceptions of the research-teaching nexus. It becomes clear that the epistemological framework of the participants determined their experiences with, and approaches to, research and teaching (Robertson & Bond, 2005).

Likewise, Coate, Barnett and Williams (2001) found a range of relationships between research and teaching, both positive and negative. Healey argues that the connection between teaching and research can be constructed along three dimensions, according to whether (1) the emphasis is on research content or research processes and problems, (2) the students are treated as the audience or participants, (3) the teaching is teacher-focused or student-focused (Healey, M. 2005).

Also, (Elsen et al,2009), explained through his research that Griffiths (2004) focused on the curriculum level by examining different forms of knowledge production in research and discussed the implications of these differences for teaching. In particular, Griffiths compared differences between research and knowledge production in technology (for example, built environment disciplines) and other fields. Taking these differences into account, he suggested that there are qualitatively different ways to strengthen the research-teaching nexus. In particular, he described the following curriculum models of the research-teaching nexus:

1-The curriculum can be research-led. This means that the content is selected is mostly traditional, focusing on the transmission of information and emphasizing the understanding of research findings rather than research processes.

2. The curriculum can be research-oriented, implying an emphasis on understanding the processes by which knowledge is produced in the field as much as on learning subject content; teaching focuses on inquiry skills and on acquiring a 'research ethos'.
3. The curriculum can be research-based which means that it contains many activities in which students actually conduct research (for example, projects); these activities are based on authentic processes of inquiry (they are connected to the research of the institute); the division of roles between academic staff and student is minimized.
4. The curriculum can be research-informed in the sense that it is designed and constantly adapted on the basis of results of systematic inquiry into the teaching and learning process itself. In this mode, the 'scholarship of teaching' refers to teachers who are actively involved in designing and researching their own courses.

Methodology

Study Population

The experiment was conducted at the University of Babylon among a random sample of faculty members participating in two major activities in this university: teaching and scientific research. They have differences in scientific rank, years of experience, and scientific research activities.

Experimental Design

Based on the previous studies, the researchers have used different methods of research to study a systematic balance between teaching and scientific research for the Iraqi universities in order to find out the way to reach that goal. The researcher has a difficulty in her perceptions of this relationship and which methods and tools she would use. In addition to the differences in the ability of transforming the variable into quantitative or qualitative information, there appeared the differences in methods used to disclose the potential relationship between them.

A quantitative survey method is used for this study, simultaneously with using face-to-face and telephone interviews. The participants have been given a close-ended questionnaire that is delivered personally by the researcher. The participants are the faculty members of some of the Iraqi universities in different majors: humanities and scientific. The study is carried out on a random sample of 80 faculty members to identify their views about a systematic balance between teaching and scientific research. The instrument by Healey, (2005) is adapted for this study. This instrument is Healey's scheme 2005 (see Figure 1), which is changed to the close-ended questionnaire given to the faculty member to find out their opinion about it.

Research-tutored

A course or
curriculum is
focused on writing
and discussing
papers or essays,
aimed at challenging
insights existing in
the field

Research-based

A course or
curriculum is focused
on students
undertaking authentic
research activities
contributing to
insights which are
new to the field

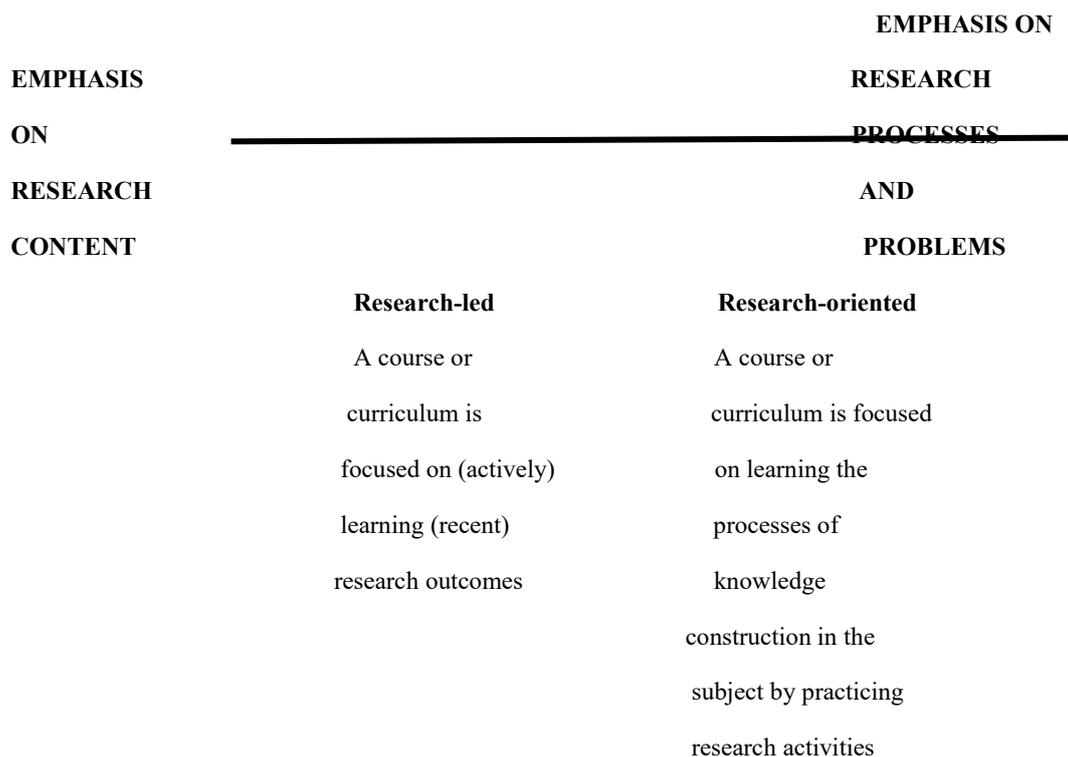


Figure 1 Curriculum design and the research-teaching nexus (Adapted from Healey, 2005).

Results

The study distinguishes between the role of a faculty member as a teacher and as a researcher. A. J.(2000) explains that “relationships is that of positive interactions between teaching and research activities.”

The most common assumption from research-active respondents is that research enhances teaching. Also, Srikoon (2014) cited in his study by (Schapper & Mayson,2010) states that “Research-Based Learning should be applied in many majors in order to expand research in the study at all institutions, and to apply research in education, the link between research and teaching”. In addition, Brennan L, et.al.(2019) confirms the relationship between scientific research and teaching. The debate about research and teaching relationships is neither new nor UK-specific. However, the debate has come to have significant implications in terms of research and teaching policymaking at both the national and institutional level. If research does inform teaching and, more specifically, has a positive impact on the quality of teaching, then this may be used as an argument for increasing the funding of research. If the opposite is true, then there may be a case for diverting funding from research to teaching. Similarly, relationships between teaching and research have implications in terms of organization of universities and their departments.

After the completion of collecting questionnaires from the respondents, it is found that the number of the valid questionnaires subjected to statistical analysis is (55) questionnaire out of 80 faculty members as it is shown in Table 1 sample of the close-ended questions. Also, Table 2 summarizes the questionnaires that were used in the face –to –face and telephone survey interview.

Table 1: showed the sample of the close-ended questions.

Questionnaire used in the quantitative study (face –to –face and telephone interviews).	
A systematic balance between teaching and scientific research	
(face –to –face and Telephone Survey)	
Questionnaire: Closed Questions	Duration: 4 to 7 minutes

Good day,

We are currently conducting a face- to – face and telephone survey. The goal of this study is to determine whether a systematic balance between teaching and scientific research for the Iraqi universities and find out the way to reach that goal.

The interview takes about 4 to 7 minutes.

0. Screening Questions

a. Do you work at Iraqi university as faculty member?

-Yes (follow with b) \ no (end the interview)

b. The interview is specifically about the systematic balance between teaching and scientific research for the Iraqi universities. Do you know the goal of the study?

- Yes (follow with Question 1) / No (end interview)

1. Do you practice teaching and research at the same time at your university?

- Yes / No

2. Do you have philosophy of teaching and learning with your student?

- Yes / No

3. Do you prefer more resources which require to successfully continuing your research agenda?

- Yes / No

4. Is the number of years' experience as a faculty member at the University commensurate with the number of completed research?

- Yes / No

5. Are you loaded in teaching rather than scientific research?

- Yes / No

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15. Do you think using Research-based approach is the best to improve your research and teaching activities?

- Yes / No

16. Do you think using research-led and research-oriented approach is the best to improve your research and teaching activities?

- Yes / No

17. Do you think that the research based curriculum is the best link between teaching and scientific research?

- Yes / No

18. Do you think that the student is the focus of the link between teaching and scientific research?

- Yes / No

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End the interview

Table 2: summarizes the questionnaires that used in the face –to –face and telephone survey interview.

	Items	Yes	Some times	No
1	Do you practice teaching and research at the same time at your university?			
2	Do you have philosophy of teaching and learning with your student?			
3	Do you prefer more resources which require to successfully continuing your research agenda?			
4	Is the number of years of experience as a faculty member at the University commensurate with the number of completed research?			
5	Are you loaded in teaching rather than scientific research?			
6..	.....	.....	.....	.....
15	Do you think using Research-based approach is the best to improve your research and teaching activities?			
16	Do you think using research-led and research-oriented approach is the best to improve your research and teaching activities?			
17	Do you think that the research based curriculum is the best link between teaching and scientific research?			
18	Do you think that the student is the focus of the link between teaching and scientific research?			

The results of the study include: systematic balance between teaching and scientific research for the Iraqi universities to find out the way to reach that goal, and the effect of each of the variables through the response of the sample members on the study tool and analysis of the statistical data obtained. In order to answer the research question, the researcher calculated the repetition, weight, weighted mean, and the percentage of the responses of the random sample of the study for each items of the questionnaire.

The results of the study show that the faculty members chose a curriculum directed towards a learning strategy in which the student is a participant in the research, research-based where the student is prepared to carry out real research activities to access new information that enriches the curriculum. Furthermore, there is no motivation on the part of faculty members due to some obstacles such as the research activity is not counted as part of the academic quorum, the high academic burden and there are few benefits related to the scientific production of faculty members regardless of scientific rank. Table3 shows the Academic Title of the respondents.

Table3: showed the Academic Title of the respondents.

Variable	Level	Number
Academic title	Assistant Lecturer	13
	Lecturer	10

	Assistant Professor	18
	Professor	14

As it is shown in Table 3, the assistant professor and professor are the most responding groups to the questionnaires because they have a long time experiences in teaching and scientific research. Table 4 shows the results of statistical analysis for (55) participants which includes 18 items for each Questionnaire. This table shows some items.

Table (4): showed statistical analysis for some items.

	Items	Repetition			Weighted Mean	Percentage
		Yes	Some Times	No		
1	Do you practice teaching and scientific research at the same time at your university?	50	4	1	2.8	96%
2	Do you have philosophy of teaching and learning?	33	12	10	2.4	80 %
3	Do you prefer more resources which require to successfully continuing your research agenda?	53	2	0	2.96	96.6%
4	Is the number of years of experience as a faculty member at the University commensurate with the number of completed research?	41	9	5	2.6	86.6
5	Are you loaded in teaching rather than scientific research?	54	1	0	2.9	96.6%
6..	.....	.....	.....	.....	.....	.....
15	Do you think using Research-based approach is the best to improve your research and teaching activities?	38	4	13	2.4	80 %
16	Do you think using researched and research-oriented approach is the best to improve your research and teaching activities?	20	13	22	1.9	65.4%
17	Do you think that the research based curriculum is the best					

	link between teaching and scientific research?	40	12	3	2.6	89%
18	Do you think that the student is the focus of the link between teaching and scientific research?	42	8	5	2.6	89%

The first item achieved weighted mean (2.8) with (96.3%) percentage which means most of the faculty members at Iraqi universities practice both activities: teaching and scientific research. The second items achieved (2.4) with (80%) percentage which means that they need to be more specific and determined about their philosophy with students. Also, the results show that faculty members need more resources to improve their scientific research based on item three (2.96) with (96.6%). Therefore, they are loaded with teaching rather than research with weighted mean (2.9) and (96.6%).

Furthermore, the faculty members at Iraqi universities agreed with items that encourage them to use research-based approach in their research and teaching activities with (2.8) and (80%) percentage. Also, they believe that research based curriculum is the best link between teaching and scientific research for their student with weighted mean (2.6) and (89%) percentage.

Conclusion

Many studies tried to identify the relationship between research and teaching and the multiplicity of methodologies and methods of quantitative and qualitative measures to clarify this relationship.

The focuses of the educational process in the university are students and their learning. Therefore, the relationship between scientific research and teaching is a vital aspect of those focuses. In order to make this relation effective, a number of factors should be taken into consideration among which is the increasing numbers of the specialized magazines. Lack of Technological developments and the decline in employment opportunities in some disciplines and the continuous change in the demand of faculty members are other factors that must be considered. Also, there is a competition between universities to meet the requirements of higher classifications and accreditation.

University research must develop in sciences and humanities on an equal scale. The faculty members must use more recent technology in teaching. These kinds of practices will lessen the load of teaching, and therefore the faculty members have more time to do good research to improve the curriculum that they use. Jusoh R, Abidin (2012) clarified "to support curriculum development that encourages undergraduates to be exposed widely to and participated actively in the research cultures of their departments. In this case, academic development units in these institutions have to play a vital role in encouraging and supporting academic staff, through academic development programs, influencing institutional strategies, and in exploring and implementing appropriate and effective pedagogy for integrating research into the classroom".

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