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Learning with Each Other: Peer Learning as an Academic Culture among Graduate Students in Education

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Abstract The major objective of the present study is to examine the extent to which peer learning is common among graduate students in educational programs in Saudi universities. Moreover, it also investigates the obstacles which may hinder spreading the culture of peer learning, and the proposals to overcome such obstacles from the graduate students' perspectives. Data were collected through an electronic questionnaire conducted to a sample of 375 of graduate students in educational programs in Saudi universities. The major findings of the study revealed majority of respondents (69%) agree and strongly agree to the items of the questionnaire, while (12.4%) disagree and strongly disagree, and (21%) were neutral. The most agreed upon items in part (1) are: "I do feel embarrassed to ask my peers for new knowledge and information" and "I feel happy with the comments of my peers on my research and work papers. The most agreed upon items in part (2) are: "Lack of non-classroom activities that support the culture of peer learning" and "Lack of equipped classrooms of graduate students that support peer learning". The most agreed upon items in part (3) are: "Urging professors to support and supervise academic discussions among students" and "Encouraging students to attend the seminars when their peers present their research proposals".

Keywords: *academic culture, peer learning, interactive learning, graduate students, Saudi universities*

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1. Introduction

Peer learning, as a teaching-learning strategy, is highly productive and demanding at the same time. It assumes that learners have many potentials to share with others. At the time of rapid technological development, exchanging information is necessary for broadening learners' minds. Peer learning would change the nature of learning to be pleasant, beneficial and meaningful, as learners become more positive and deeply involved. Peer learning is a method that encourages 'meaningful learning' which involves students teaching and learning from and with each other [1]. It involves exchanging ideas, knowledge, and expertise among peers. "Peer-learning schemes now exist on all continents and hold relevance for students of all cultures" [2]. It becomes one of the main features of the process of learning and teaching in universities [3,4], and it is one of "the most cost-effective of learning strategies" [5].

Literature assured that peer learning is not a new strategy, rather it "has a long history. It is possibly as old as any form of collaborative or community action, and probably has always taken place, sometimes implicitly and vicariously" [5]. Gaillet [6] mentioned that it was about "two-hundred years ago, when George Jardine, professor of logic and philosophy at the University of Glasgow from 1774 to 1826, designed a method of peer review to help prepare his students for full participation in British society". In Islamic context of study, there was a semi position called "*Areef*" which refers to an older and experienced student who used to assist the teacher in the process of teaching and assessment.

Peer learning refers to the process through which learners acquire knowledge and skills through active helping and supporting among status equals or matched companions. It involves individuals from similar social groupings who are not professional teachers helping each other to learn and learning themselves by so doing [5]. Lupu [7] found that peer learning strategies have been associated with the development of generic skills (transferable skills): critical thinking, intellectual curiosity, problem-solving, logical and independent thought, communication and information management skills, intellectual rigor, creativity and imagination, ethical practice, integrity, and tolerance. Leijten & Chan [8] found that peer learning often results in improved classroom environment and enhanced collaborative and teamwork.

Peer learning provides immense improvement in student performance [9] and leads to high rates of attendance [10]. It encourages students to develop their learning to support their academic success and assists

graduates to be well equipped for lifelong learning [11]. Roberts [12] concluded that there are many benefits for collaborative learning. Academic benefits include the enhancement of critical thinking skills, the actively involvement of students in the learning process, the improvement of classroom results, and the reinforcement of students' problem-solving techniques. Socially, collaborative learning develops social support for students, constructs mutual understanding between staff and students and provides positive atmosphere for practice and corporation. Psychologically, it increases students' self-esteem and develops positive attitudes towards teachers.

Peer learning is not just "putting children together and hoping for the best" [5]. It is a form of interactive learning in which instructors heavily make use of in-class structured activities, ask questions, reply to students interrogates and correct misunderstandings. Students are encouraged to talk to each other, work with partners or in teams [10]. Peer tutoring and cooperative learning are the longest established and most intensively researched forms of peer learning. Peer tutoring is characterized by specific role-taking as tutor or tutee, with high focus on curriculum content and clear procedures for interaction. Cooperative learning is more than “working together” to achieve shared goals or outputs. It is operated in small groups of heterogeneous learners and requires in advance training to ensure equal participation and interaction [5].

One main reason for investigating peer learning in Saudi universities is that there are different academic cultures. Given that the academic culture in Saudi universities is different from other contexts, therefore the peer learning approaches may be different as well, or even rarely used in the academic environment in Saudi universities.

In the light of the abovementioned, the main objective of the present study is to shed light on culture of peer learning among graduate students in education. The study attempts to answer the following questions:

- What is the status quo of the culture of peer learning among graduate students in education in Saudi universities from their perspectives?
- What are the obstacles which may hinder spreading the culture of peer learning among graduate students in education in Saudi universities from their perspectives?
- What are the proposals to enhance the culture of peer learning among graduate students in education in Saudi universities from their perspectives?
- Are there any statistically significant differences in responses according to the study variables: university, students' specialization, program, type of study, and gender?

2. Literature Review

2.1. Peer Learning

There are many definitions for peer learning. According to Lupu [7] although “peer learning” is not an easy term to define, it promotes cognitive or intellectual skills, increases knowledge and understanding. Leijten & Chan [8] define peer learning as “pre-trade students’ informal sharing of knowledge, ideas, and experiences, which are of equal standing due to their role as students, either older or younger with different cultural back grounds, social class, and ethnicity”. Others define peer learning as “the use of teaching and learning strategies in which students learn with and from each other without immediate intervention from the teacher” [13].

Sedghi & Lunt [14] refers to Peer Assisted Learning as:

A student-to-student academic support scheme designed to typically benefit first-year students. Student volunteers from higher levels are trained to become PAL leaders who facilitate group discussions which support academic topics but also learning strategies more generally. The role of the trained PAL leaders is not to teach, but one of facilitating collaborative learning.

Peer learning is a ‘two-way reciprocal learning activity’ [15] in which there are mutual benefits to the parties involved in the learning process. The reciprocal nature of the activity is fundamental as students do not have power over each other by virtue of their position or responsibilities. “Peer learning can be both informal and formal. Informal peer learning occurs implicitly when students discuss lectures, assignments, projects, and exams in casual social settings. Formal peer learning occurs when group work or group projects are explicitly scheduled into courses” [1]. It is a “social process, in which peer interactions are fundamental” [16].

The above-mentioned definitions indicated that peer learning is developmental, cognitive, intellectual, cooperative, meaningful, productive and demanding. It can be either formal or informal. It depends heavily on discussion, exchanging ideas and team work. It is a learning teaching process in a social form.

The results of Keenan [2] indicated that students who are involved in peer learning activities as ‘peer leaders’ acquire higher levels of personal and professional skills, their subject learning is expanded, their grades are improved, and their relationships and intercultural awareness are enhanced. The results also proved that students who participate in peer learning sessions have a sense of belonging and enhanced academic confidence. They have enhanced friendship development, greater confidence in social integration and participate more fully in the community (p. 5). Such results have been assured, either partially or entirely, in literature [1,2,4,7,8,9,10,17-26].

The benefits of peer learning are well documented in literature. Among the advantages of peer learning is that it can develop self-directed learning skills; critical and creative thinking and problem-solving skills; communication skills; interpersonal and teamwork skills; peer assessment and critical consideration; and deep understanding of concepts, skills and enhancing self-image [27]. Hortsmanshof & Conrad [24] highlighted the graduate students need for "group approaches" to overcome the intellectual which was related to their dissatisfaction, delay, and withdrawal from study. Peer learning among graduate students provides opportunities for skill development and social interaction outside of the supervisor-student relationship [19]. Moreover, it is more suitable for some students rather than individualistic learning and teaching strategies [13]. Chilvers [18] assured that peer assisted learning is one of the best means to enable international students to adjust to the academic cultures within higher education.

To elaborate the need for peer learning, Boud, Cohen & Sampson [13] mentioned twofold reasons, pragmatic and principled. The pragmatic is the increased student-staff ratio that leads to staff teaching more students. Peer learning enables staff to carry out their jobs without increasing their work load. The principled reason refers to the emphasis on non-academic outcomes which are increasingly demanded by employers, such as soft skills, generic skills, and key competencies.

According to Liou-Mark, Dreyfuss, Han, Yuen-Lau &Yu [9] students participating in peer-led workshops had significantly higher grades and lower failure and withdrawal rates than those who did not take part. According to Malm, Bryngfors & Morner [9] students who attended peer learning workshops were higher than those who didn't participate in such workshops. Research by Andreanoff [28] indicated that peer coaching had a beneficial impact in particular for those in their first year of study and those who were performing less well at the outset. It deepened the students' involvement in the learning process throughout all stages of progress beyond the traditional roles [14]. Peer assessment, as a type of peer learning, enhanced the students' responsibility and changed the way in which they watch and consider each other. Moreover, it increased students' attention and motivation [29,30]. Even students with special needs, peer learning has been proved as a vital teaching learning technique which helps students to be self-actualized [31].

One of the techniques used for peer learning is "supervisory groups" which assist graduate students to discuss and exchange ideas and experiences. In such groups, supervisors intend to build and spread their own academic and intellectual schools of research. Supervisory groups can be similar to supplemental instruction, which is developed by Dr. Deana Martin in 1973 at the University of Kansas City at Missouri. Supplemental Instruction is an academic assistance program that increases student performance and retention. It provides regularly scheduled, out-of-class, peer facilitated study sessions [31,32]. In Australian universities, supplementary Instruction is also known as Peer Assisted Study Sessions [19,34].

Sometimes the process of peer learning takes the form of peer mentoring, as it involves trained higher years students (leaders) working in pairs to facilitate regular study groups with students in the years below. Research by Ford, Thackeray, Barnes & Hendrickx [20] revealed that peer leaders developed employability attributes including leadership, time management, and organization, communication, cultural awareness, and confidence. Giles, Zacharopoulou & Condell [22] counted academic, personal and professional benefits for such peer leaders. Academically, it gets them to be familiar with course materials. Personally, it enables them to gain self-confidence, build interpersonal relationships, improve their communication skills, and be familiar with teamwork and prepared for leadership.

Coping with the advancement of information technology, many studies intensively assured the necessity to make use of technology in peer learning. Scot, Castaneda, Quick & Linney [35] examined the use of live online peer-to-peer learning via video conferencing. Watts, Malliris & Billingham [36] concluded that "online PAL can make a significant contribution to learners in higher education by improving engagement through the flexibility afforded by the online space". The results of Boyd & Paterson [37] indicated that peer tutoring improves distance learners' experience and provide the opportunities to develop graduate skills that are key parts of the academic community. Participation in online peer learning gets students to be more confident, flexible, convenient and provides them expertise which enhances their opportunities to be selected as peer leaders [38].

2.2. Academic Culture

Learning is highly affected by "cultural beliefs and backgrounds which may affect the way people prefer to learn or process information" [39]. Valiente [40] concludes that culture is the key word that explains why some students' behaviors are different from what is considered high-quality learning. He recommends a clear understanding of the role of culture in learning styles, and proposes what he calls a 'cross-cultural learning style'. Vygotsky quoted in: Zaccagnini & Verenikina [41] mentioned that "students' interactions with more knowledgeable peers assist their adjustment to the new, unfamiliar culture of university".

Shen & Tian [42] refers to the academic culture as: "*The external manifestation of the common values, spirits, behaviour norms of people on campus who are pursuing and developing their study and research. This kind of culture can be embodied in the rules and regulations, behaviour patterns and the material facilities*".

It is also known as culture of learning, which is defined as:

> *Socially transmitted expectations, beliefs and values about what good learning is, what constitutes a good teacher and a good student and what their roles and relationships should be; about learning and teaching styles, approaches and methods; about classroom interaction and activities; about the use of textbooks; about what constitutes good work* [25].

One student presents his experience of learning which sums up one of the main features of Arab academic culture saying:

> *Since the time I started school, I was raised listening mainly to the teacher and was not encouraged to speak or engage in any discussion. Even in my social life, age, gender, and social status affected when one was to speak and how one was to speak, and pushed me to act as a passive listener. In this way, I became used to being a listener and favoured this style of learning* [39].

Jin & Cortazzi [25] compared the Chinese and British academic cultures of learning. Chinese teachers concentrated on knowledge and memorization, skills and critical thinking would be earned consequently. On contrary, British teachers stressed skills which would lead to knowledge consequently. It is obvious that what happens in classrooms is highly affected by cultural values and practices outside schools [43]. The American academic culture, for instance, is a learner-centred culture where students are expected to discuss, express their perspectives, think critically about content, interact, give presentations, work in groups and participate in the process of evaluation. Pham [44] advised international students to care for some

facts that characterize the American academic culture. They are classroom participation, American grading system, teamwork, group projects and presentations, and professors' office hours.

The results of major literature regarding Arab students in different educational environments assured the academic adjustment of students is highly affected by their academic cultures. The results of Al-Hattami & Al-Ahdal [45] revieled that there were great cultural differences between the Americans and the Arab students. It is common in most universities to get their international students familiar with their academic cultures. The Canadian academic culture, for instance, expect students to manage their time, be responsible for their own learning, to compete yet be helpful to each other, not being embarrassed to ask for clarification and explanation for not understood things, participate in class discussions and to accept criticism for student's work [46]. Mostafa [33] stated that proving graduate student's' competencies in Canadian universities exceeds beyond just passing exams and extends to publishing of papers, delivering conference presentations and participating in classroom discussions. One of the key elements in the academic cultures of learning is that it provides the framework of expectations, interpretations, and evaluations of learning, as both teachers and students, need to either have knowledge about each other's' cultures of learning, or they may not fulfil expectations [25]. The most two key components of an academic culture are the student teacher relationship and the students' involvement in the learning process.

3. Methodology

The data for this study were gathered through a questionnaire, which consisted of three parts. The first part included 19 items investigating the status quo of the culture of peer learning among graduate students in education in Saudi universities. The second part included 12 items shedding light on the obstacles which may hinder spreading the culture of peer learning among graduate students in education in Saudi universities. The third part included 11 items shedding light on proposals to enhance the culture of peer learning among graduate students in education in Saudi universities. The participants of the study were volunteered from among graduate students in educational programs in Saudi universities through contacting them on Facebook and Twitter. Completed forms of the electronic questionnaire were received from 375 respondents of graduate students in educational programs in six Saudi universities. The descriptive statistics of the sample population are given in Table 1. Data were analyzed using SPSS version 21. ANOVA, t-test, and frequencies are used in data analysis.

3.1. Profile of Respondents

The sample of the study is dragged from six Saudi universities. Al-Imam Muhammad ibn Saud Islamic University (IMSIU) had the highest percentage (52.8%), followed by the Islamic University at Al-Madinah with (26%), followed by King Saud University with (8.5%), followed by Tabuk University with (4.5%), then Umm Al-Qura University with (4%) and Taibah University with (3.5%). The fields of specialization of respondents were Islamic education (39.5%), then foundations of Education with (26.7%), followed by educational administration with (13.6%), followed by Curricula & Methods with (10.4%), followed by educational psychology with (2.9%). More than two-thirds of respondents were master students (69.3%) and the rest were Ph.D. candidates (30.7%). More than half of students were doing their theses or dissertations (57.3%), while the rest were in courses (42.7%). (46.7%) were male and (53.3%) were female. Table 1 shows the characteristics of the respondents surveyed.

Table 1. Characteristics of Survey Respondents

Variables		Frequency	Percent
University	Al-Imam Univ.	198	52.8
	Islamic Univ.	100	26.7
	Umm Alqura Univ.	15	4.0
	Tabuk Univ.	17	4.5
	Taibah Univ.	13	3.5
	King Saud Univ.	32	8.5
Specialization	Islamic Ed.	148	39.5
	Foundations of Ed.	126	33.6
	Ed. Administration	51	13.6
	Curricula & Methods	39	10.4
	Ed. Psychology	11	2.9
Program	Master	260	69.3
	PhD	115	30.7
Study type	Courses	160	42.7
	Thesis / Dissertation	215	57.3
Gender	Male	175	46.7
	Female	200	53.3
Total		375	100 %

4. Results and Discussion

The results of data analysis indicated that the respondents generally agree on the total items of the questionnaire with mean (3.86) and standard deviation (14.3). Regarding the percentage of responses, the majority of respondents (69%) agree and strongly agree to the total items of questionnaire, while who disagree and strongly disagree were (12.4%) and (21%) were neutral. This result can be considered in the light of what has been assumed in the literature for the importance and vitality of peer learning in the teaching/learning process. Table 2 shows the frequencies, Means and Standard Deviations of responses on the whole questionnaire.

Table 2. Frequencies, Means and Standard Deviations of responses on the whole questionnaire

No. of Items		Frequencies					M	S. D.
		SD	D	N	A	SA		
42	frequency	371	1545	3229	5306	5299	3.86	14.3
	%	2.4	10.0	21.0	34.5	34.5		

The statistical analysis showed no statistically significant difference in the responses of graduate students on the whole questionnaire according to all variables as proven by t-test and one-way ANOVA. However, statistically significant differences were found according to the variable of students' specialization as proved by one-way ANOVA. The differences were to the side of students whose specializations were Foundations of Education, and educational psychology (F = 3.863; d. f. = 370; p = .004).

The questionnaire consisted of three parts as follows:

Part (1) the status quo of the culture of peer learning among graduate students:

This part of the questionnaire contained 19 items. The results indicated that the respondents generally agree on the items of part (1) with mean (3.78) and standard deviation (0.47). The findings indicated that the item "*I do feel embarrassed to ask my peers for new knowledge and information*" came at the first rank (m = 4.384, s. d. = 0.74), followed by the item "*I feel happy with the comments of my peers on my researches and work papers*" (m = 4.381, s. d. = 0.69), followed by the item "*I feel happy with the comments of my peers on my speeches and oral interventions*" (m = 4.357, s. d. = 0.73), followed by the item "*I benefit a lot of the interventions and participations of my peers during lectures*" (m = 4.280, s. d. = 0.73), followed by the item "*The negative perception towards student has been changed; as knowledge is no longer the preserve of one over the other*" (m = 4.227, s. d. = 0.84), all these five items were in the range of the "strongly agree" response. The findings indicated that two items came in the range of "neutral" response. They are "*Faculty encourage their students to learn from their peers*" (m = 3.283, s. d. = 1.03), followed by the item "*Courses include activities contribute to spreading the culture of peer learning*" (m = 3.067, s. d. = 1.12). The respondents disagree on the item "*I look for information in the accounts of my colleagues in social networks*" (m = 3.067, s. d. = 1.17). Table 3 shows the Means, Standard Deviations and sorting of responses on part (1).

The statistical analysis of data revealed no statistically significant differences in the responses on part (1) according to the variables of university, program, type of study, and gender as proven by t-test and one-way ANOVA. However, statistically significant differences were found according to the variable of students' specialization as proved by one-way ANOVA. The differences were to the side of students whose specializations were Curricula & Methods, and educational psychology (F = 3.091; d. f. = 370; p = .016).

The results of this part stress the need of graduate students for peer learning, as it helps to broaden their experiences and provides them more confidence. Students need to change their belief about the abilities of their peers. Although asking questions freely is one of the key components of academic cultures in world class universities, respondents expressed their embracement to ask their peers. They assured their happiness with peers' comments on their works and presentations, this indicates that the learning environment is ready for utilizing such strategies of teaching and learning with graduate students.

Table 3. Means, Standard Deviations, and sorting of responses on part (1)

No.	Item	Mean	S. D.	Rank
9	I do feel embarrassed to ask my peers for new knowledge and information	4.384	0.74	1
6	I feel happy with the comments of my peers on my research and work papers	4.381	0.69	2
7	I feel happy with the comments of my peers on my speeches and oral interventions	4.357	0.73	3
19	I benefit a lot of the interventions and participations of my peers during lectures	4.280	0.73	4
15	The negative perception towards student has been changed; as knowledge is no longer the preserve of one over the other	4.227	0.84	5
12	my conversations with my colleagues motivate us to learn from each other	4.040	0.80	6
4	My peers own skills and knowledge which encourage me to take advantage of them	3.928	0.81	7
16	Professors allow us some time to debate and discuss issues in lectures	3.880	1.05	8
1	I ask my colleagues for information before faculty	3.861	1.02	9
5	My colleagues always look for me to search for information and new knowledge	3.853	0.79	10
14	Peer learning is one of the necessary skills for my current or future career.	3.843	0.96	11
11	scientific meetings, workshops, and seminar contribute to spreading the culture of peer learning in the academic environment	3.832	0.99	12
13	The peer learning is one of the most important practices in the graduate program, in which I'm enrolled	3.528	1.04	13
3	I trust in what is being learned from my peers	3.499	0.81	14
17	graduate programs enhance spreading the culture of peer learning	3.485	1.06	15
18	using peer learning prevails the educational practices in teaching graduate students	3.477	0.95	16
8	Faculty encourage their students to learn from their peers	3.283	1.03	17
10	Courses include activities contribute to spreading the culture of peer learning	3.067	1.12	18
2	I look for information in the accounts of my colleagues in social networks	2.581	1.17	19
	Total	3.78	0.47	

Part (2) obstacles which may hinder spreading the culture of peer learning among graduate students:

This part of the questionnaire contained 12 items. The results indicated that the respondents generally agree on the items of part (2) with mean (3.55) and standard deviation (0.605). The findings indicated that 9 items were in the range of response "agree" with statistical means between (3.984) and (3.483), while the other three items were in the range of response "neutral" with statistical means between (3.272) and (3.024). The item "*Lack of non-classroom activities that support the culture of peer learning*" came at the first rank (m = 3.98, s. d. = 0.96), followed by the item "*Lack of equipped classrooms of graduate students that support peer learning*" (m = 3.979, s. d. = 1.16), followed by the item "*Lack of classroom activities that support the culture of peer learning"* (m = 3.768, s. d. = 1.02), followed by the item "*The widespread of competition rather than cooperation in Arab academia*" (m = 3.672, s. d. = 1.15), The findings indicated that three items which came in the range of "neutral" response were "*Lack of confidence in the peer of Knowledge*" (m = 3.272, s. d. = 1.02), followed by the item "*Feeling that peers aren't better than me*" (m = 3.139, s. d. = 1.07), followed by the item "*Being Embarrassed to ask one's colleagues*" (m = 3.024, s. d. = 1.12). Table 4 shows the Means, Standard Deviations and sorting of responses on part (2).

The statistical analysis of data (Table 4) revealed no statistically significant differences in the responses on part (2) according to the variables of university, program, type of study, and gender as proven by t-test and one-way ANOVA. However statistically significant differences were found according to the variable of students' specialization as proved by one-way ANOVA. The differences were to the side of students whose specializations were foundations of Education, and educational psychology (F = 3.410; d. f. = 370; p = .009). The agreement of respondents on the obstacles which may hinder spreading the culture of peer learning among graduate students emphasizes the need for peer learning to be incorporated into the academic culture of Saudi universities.

Table 4. Means, Standard Deviations, and sorting of responses on part (2)

No.	Item	Mean	S. D.	Rank
8	Lack of non-classroom activities that support the culture of peer learning	3.984	0.96	1
12	Lack of equipped classrooms of graduate students that support peer learning	3.979	1.16	2
7	Lack of classroom activities that support the culture of peer learning	3.768	1.02	3
5	The widespread of competition rather than cooperation in Arab academia	3.672	1.15	4
10	Commonalty of answering questions without knowledge in the Arab Academia (being embarrassed to say I do not know)	3.653	1.07	5
1	Faculty lack of use of the techniques of peer learning (cooperative learning-peer assessment- peer remarks…).	3.643	1.01	6
6	Faculty lack of encouragement of peer learning	3.523	1.04	7
11	The nature of study in Arab Universities doesn't support the culture of peer learning	3.509	1.02	8
3	The common belief that professors are the most important and reliable sources of knowledge	3.483	1.14	9
9	Lack of confidence in the peer of Knowledge	3.272	1.02	10
4	Feeling that peers aren't better than me	3.139	1.07	11
2	Being Embarrassed to ask one's colleagues	3.024	1.14	12
	Total	3.55	0.605	

Table 5. Means, Standard Deviations, and sorting of responses on part (3)

No.	Item	Mean	S. D.	Rank
8	Urging professors to support and supervise academic discussions among students.	4.531	0.71	1
3	Encouraging students to attend the seminars when their peers present their research proposals	4.448	0.83	2
6	providing programs for professional development for faculty about academic cultures in different universities	4.379	0.87	3
9	Encouraging students to constructively criticize and review their peers' works showing both strengths and weaknesses.	4.373	0.86	4
7	Developing the culture of not answering without knowledge.	4.368	0.92	5
11	Utilizing social networks to support peer learning among students.	4.365	0.89	6
2	Encouraging collaborative and work in teams among graduate students	4.357	0.81	7
4	Students urging students to participate in scientific conferences	4.331	0.95	8
10	Encouraging students to teamwork through applying for funds for their joint researches.	4.304	0.85	9
5	Supporting the non-classroom activities that support the culture of peer learning	4.219	0.93	10
1	Including the courses of graduate students' activities to support the culture of peer learning.	4.203	0.98	11
	Total	4.35	0.612	

Part (3) proposals to enhance the culture of peer learning among graduate students:

This part of the questionnaire consisted of 11 items. The results indicated that the respondents generally agree on the items of part (3) with mean (4.35) and standard deviation (0.612). The findings indicated that all items in this part were in the range of response "strongly agree" with statistical means between (4.531) and (4.203. The item "*Urging professors to support and supervise academic discussions among students*" came at the first rank (m = 4.531, s. d. = 0.71), followed by the item "*Encouraging students to attend the seminars when their peers present their research proposals*" (m = 4.448, s. d. = 0.83), followed by the item "*providing programs of professional development for faculty about academic cultures in different universities"* (m = 4.379, s. d. = 0.87), followed by the item "*Encouraging students to constructively criticize and review their peers' works showing both strengths and weaknesses*" (m = 4.373, s. d. = 0.86). Table 5 shows the Means, Standard Deviations and sorting of responses on part (3).

The statistical analysis of data (Table 5) revealed no statistically significant differences in the responses on part (3) according to the variables of university, students' specialization, type of study, and gender as proven by t-test and one-way ANOVA. However, statistically significant differences were found according to the variable of study program as proved by t-test. The differences were to the side of Ph.D. candidates. (t = 4.849; d. f. = 373; p = .028). Many procedures should be considered to enhance the academic culture of interactive learning such as developing the faculty professionally, involving students actively and creating the right and reinforcing the educational environment.

5. Conclusion

The academic culture or culture of learning in world class universities depends intensively on strategies that get students heavily involved in the learning teaching process. Peer learning has been proved to be one of such effective strategies. It gives the process of learning a new life as students are active and positive and teachers are facilitators rather than being the source of knowledge. It also provides students with expertise which assist them in their future positions. Although peer learning has been proved to be effective for undergraduate students, the present study revealed its most beneficial for their peers in graduate studies.

The present study investigated the extent to which peer learning represents a key component of the cultures of learning among graduate students in educational specializations in Saudi universities. For the culture of peer learning to be intensively used in Saudi universities, the respondents proposed that: professors should support and supervise academic discussions among students, students should be encouraged to constructively criticize and review their peers' works showing both strengths and weaknesses, and non-classroom activities that support the culture of peer learning should be supported.

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