The impact of changing learning environment on students' learning in marketing education: A case-study applied in higher education in Egypt

Samia Adly Hanna El Sheikh, Reda Youssef Assaad
October University for Modern Sciences and Arts (MSA), Egypt, New Cairo Higher Institute of Management Sciences and Computer, New Cairo, Egypt

Abstract:

As per Hall *et al*., (2002), well-planned sessions, interactive teaching methods and appropriate assessment could encourage a deep approach to learning. Moreover, problem-based learning in the form of real-life case study exercises also promotes deep learning.

The purpose of this study is to change the learning environment in an introductory course of Principles of Marketing (MKT 201), so as to foster a deep and productive approach to learning rather than mere surface learning. This change in environment is achieved through presenting two teaching/learning strategies:

1. Pointing out learning outcomes (LOs) of each session to the students at the beginning of each lecture while making sure they understand them;
2. Consistent use of in-class real-life exercises in the form of case studies to check that students have digested the main concepts and are able to apply them.

This study measures the impact of this change in learning environment on students' overall achievement (results). This study was conducted on a cohort of students in semester fall 2016 and the grades (results) of the students of this cohort are compared against the grades (results) of two previous cohorts in the same course (Principles of Marketing) at October University for Modern Sciences and Arts (MSA) Egypt.

Keywords:

- learning environment
- deep approach to learning versus surface approach to learning
- outcome-based approach in teaching, learning and assessment
- problem-based learning (PBL)
- experiential learning (EL)
- least significant differences (LSD)/multiple comparisons

Introduction

Marketing educators have always been encouraged to reflect on the methods that are employed to educate marketing students.

The understanding and application of the concepts of the marketing discipline are of vital importance to marketing graduates. Yet, at the younger levels, when students are just being introduced to the main concepts in a Principles of Marketing module, the concepts are numerous and could be confusing if we don't both alert them to what it is that we want them to learn and provide them with sufficient applications/activities for them to check their own learning and assure themselves that they have indeed digested the concepts. In other words, when students focus upon specific learning outcomes and when the activities and exercises are designed to fit those learning outcomes, students learn well.

This study aims to present two simple teaching strategies employed in teaching an introductory Principles of Marketing module and to show the impact of using both these strategies on changing the learning environment – and thus on positively influencing the final overall grade of the students. This grade comprises students' performance in a coursework application team project (requiring cognitive and application skills) and in mid-term and final exams (each including a variety of questions as mini cases that also require application skills); it therefore fully reflects how well each student has performed against the learning outcomes of the whole module.

A logical assumption has been made here that students who achieved higher grades are the ones who took a deeper approach to learning – viz. characterised by interest in the subject and an intention to understand what is studied. Such students seek to create meaning and thus interpret knowledge in the light of previous experiences; they therefore tend to achieve better retention and, consequently, such deeper skills as critical thinking. In contrast, a surface approach to learning derives from rote memorisation, poor understanding and low retention (Marton and Saljo, 1976; Ramsden, 1992, Biggs, 1999, and Entwistle,1987, cited in Atherton, 2003).

According to Atherton (*op.cit*.), a student may use both approaches but not with the same task. For example, students may learn by memorising, but in an organised way, with consequently productive effect. According to Biggs (*op.cit*.), students do not adopt deep or surface learning because they have respectively deep or surface personalities, but because the learning *environment* triggers their approach to learning.

Deep learning is discussed in the work of Marton and Saljo (*op.cit*.), as cited in Bacon and Stewart (2006). Marton and Saljo regard deep learning as happening when students work hard to comprehend the concepts and are highly engaged in finding meaning; they relate meaning to previous experiences and go beyond the surface learning of rote memorisation; they are more likely to score better in assignments, tests and exams that measure comprehension by means of case studies and projects, not just questions that ask students to repeat what they have learned.

Moreover, Ausubel (2000) adds that, if learners attach new concepts to previous relevant knowledge already possessed, this would make the concepts more meaningful and the level of retention higher, as emphasised by Neisser (1984), who stated that concepts tied to previous experiences are more "resistant to forgetting".

Bacon and Stewart (*op.cit*.) also state that knowledge tested more than once during the course is at a deeper level of learning and thus more likely to be retained. This could, for example, be achieved through in-class formative assessments, to ensure that students distinguish one concept in marketing from similar concepts, so as to avoid confusion – "a stable trace" (Ausubel, *op.cit*.). Halpern and Hakel (2003) similarly state that repeated exposure to concepts creates deeper understanding.

Hall *et al.,* (2002) argue that well-designed sessions, interactive teaching methods and appropriate assessment could encourage a deep approach and suggest that problem-based learning, in the form of real-life exercises, promotes deep learning.

The purpose of this study is to show the impact of the changing of learning environment so as to promote a deep and productive approach to learning, as compared to surface learning. This change in environment is achieved by presenting two teaching/learning techniques which are:

1. Pointing out to students, at the beginning of each lecture, the session's learning outcomes (LOs), while making sure they understand them; thus, learning outcomes are made immediately transparent to learners;

2. Intensive use in class of real-life exercises, in the form of case-studies, to check that students have digested the main concepts and are able to apply them.

This study subsequently measures the impact of this change in learning environment on students' overall results.

Literature review

A. Outcomes-based approach:

Outcomes-based approaches to any form of lesson planning, course planning or curriculum development are promoted by quality-assurance bodies and higher-education providers: instructors, lecturers and programme leaders are expected to outline their sessions and their curriculum in this format.

Moon (2002) defined a LO as a statement of what a learner is expected to know, understand and be able to do at the end of a period of learning – which could be a session, a term, a course or a programme – and how that learning is to be demonstrated in the assessment.

LOs help students to understand what is expected of them, to identify their own targets and to work systematically towards demonstrating them. LOs are now an essential element of curriculum documentation, to enable external examiners and other evaluators of new or existing courses or programmes to judge their quality (Biggs and Tang, 2011).

Not that LO approach to learning design is without criticism: in fact, many writers have the notion that the misuse of LO can lead to distortion and harm to education (Hussey and Smith, 2002; Biggs and Tang, 2011).

The main theoretical underpinning of a LO approach is ‘constructive alignment’, which is about: making sure that both teaching and feedback to students work smoothly to help student learning in relation to LOs; so designing assessment that successful students can demonstrate their ability to meet the LOs.

Constructive alignment is based on constructivist theory, in which learners actively construct their knowledge and the lecturer creates and builds a learning environment where learning activities fit well with the LO; thus, students are motivated to take a deep learning approach and better achieve the learning outcomes, leading to better grades in both exams and application projects.

When students are aware of the LOs of each session, they are focused upon what is expected of them. If, additionally, the in-class assessment exercises fit well with the teaching and LOs, the resulting environment will allow for deep learning and consequently ensure better results in marketing courses.

B. Hybrid problem-based learning:

Problem-based learning (PBL) is built on the premise that using realistic problems and real-life scenarios as exercises offers opportunities to widen students’ understanding and challenges them to solve these problems; they thus develop their problem-solving skills, as required of university graduates in general, but especially so of graduates of business schools.

Vernon and Blake (1993) argue that PBL is better than traditional teaching at improving long-term retention of knowledge. Major and Palmer (2001), furthermore, emphasize that PBL increases both library use and class attendance and encourages a deeper approach to learning.

PBL lies under the wider umbrella of the constructivist theory of learning. In his research, Lebow (1993) ‘identified, amongst other positive features, collaboration, personal autonomy and reflective engagement of students in learning as key benefits of the constructivist approach. Constructive learning theory has its roots in experiential approaches to learning, based mainly on the work of Dewey.

Experiential learning (EL), according to Hmelo-Silver (2004), is built mainly around investigation and the solving of problems; by such means, students become more active learners because they are placed in real-life situations where they construct knowledge and develop strategies for facing and solving problems.

EL is a growing trend in marketing education and it does help to engage students in the learning process. EL could be considered as an effective pedagogy for teaching the broad body of marketing principles and concepts. The use of EL in marketing courses has been discussed in such articles as those by Schwartz and Fontenot (2007) and Linrud and Hall (1999).

Furthermore, Gremler *et al*. (2000) state that EL exercises can be used in service marketing courses which tend to facilitate the integration of course concepts and build critical-thinking and problem-solving skills, together with such other teamwork-enhancing skills as communication

and listening. In addition, EL assignments further engage students in active learning, thereby encouraging them to take more responsible roles and to contribute more actively to their education.

Brennan (2014) also adds that EL methods have become more and more attractive to marketing education instructors, who use them widely, being convinced of the logic of applying practical case studies and real-life experience to what is a very practical field.

Another reason for the growing trend of applying EL to marketing education is that it enhances employability skills, graduate attributes now expected by most universities in Egypt, and so responds to the requirements of their students (customers). However, according to Brennan (2014), although applying EL to marketing education is generally beneficial, its methodology should be used thoughtfully and not totally freely.

Thus, to encourage deep learning (and simultaneously engage students and expose them to real-life problems), marketing educators should create an appropriate learning environment – one that seeks to incorporate a wider range of classroom teaching strategies to stimulate deep learning, including face-to-face lecturing and activities / open-ended exercises using 'real-life' topics that require integration and manipulation of information and so build the required problem-solving skills.

To create this required learning environment, the nearest pedagogical approach is to adopt the 'hybrid PBL' which is not a strict PBL but a more flexible approach, as outlined by Besant *et al,* (2013).The hybrid PBL offers students a variety of teaching/learning techniques and a mixed range of in-class approaches: new information can be provided by lectures and seminars, but these have to be supported by, and regularly interspersed with, in-class activities and case studies derived from real marketing problems; they must certainly include a group-based assignment to encourage students to apply their constructed knowledge.

Methodology

On completion of the Post Graduate Certificate for Higher Education (PG Cert) the lecturer who is also the researcher (the author) decided, before the start of the fall semester (semester 61) of the academic year 2016/2017, to re-prepare and re-engineer the module of Principles of Marketing , so as to change the learning environment and encourage a deep approach to learning by applying two strategies:

1. To point out clearly to the students the LOs of each session.
2. To build in-class activities with real-life case studies to suit each session's LOs.

The grades of 310 students of the fall semester (semester 61) of the academic year (2016/2017), in which the lecturer re-designed the learning environment of the students, were compared to the grades of the students of two previous cohorts (semester 58 and 59).

The following frequency table reports the grades of marketing students in course MKT (201) in semesters 58, 59 and 61 and the relative frequency of each class of grades:

Table 1: Frequency table of the grades of the students in three semesters 58, 59 and 61(MSA university).

Classes	Semester 58		Semester 59		Semester 61	
	frequency	Relative frequency	frequency	Relative frequency	frequency	Relative frequency
Less than 50	20	0.071	11	0.081	15	0.048
50upto53	11	0.039	7	0.052	10	0.032
53upto56	5	0.018	2	0.015	6	0.019
56upto60	22	0.078	11	0.081	10	0.033
60upto65	25	0.089	16	0.119	15	0.048
65upto70	36	0.128	7	0.052	17	0.055
70upto75	26	0.092	17	0.126	26	0.084
75upto80	41	0.145	17	0.126	37	0.119
80upto85	28	0.099	15	0.111	47	0.152
85upto90	27	0.096	13	0.096	39	0.126
90or more	41	0.145	19	0.141	88	0.284
Total	282	1.00	135	1	310	1

(Statistics of grades of students in course MKT 201 MSA University in three semesters.)

In this research, the researcher who is also the lecturer tested the following hypotheses:

H_0: there is no statistically significant difference among the mean values of the students' grades in the three semesters (fall 2015 '58', spring 2016 '59' and fall 2016 '61').

In other words, there is no impact of changing the learning environment through the use of the new teaching strategies on the mean values of the students' grades in the three semesters (fall 2015 '58', spring 2016 '59' and fall 2016 '61').

against:

H_1: there is an impact of changing the learning environment through the use of the new teaching strategies on the mean values of the students' grades in the three semesters (fall 2015 '58', spring 2016 '59' and fall 2016 '61').

Let μ_{58}, μ_{59}, μ_{61} represent the mean values of the students' grades in the three semesters (fall 2015, spring 2016 and fall 2016).

Thus H_0: $\mu_{58} = \mu_{59} = \mu_{61}$

against H_1: The mean grades are not all equal.

The researcher employed the analysis of variance technique (ANOVA) to test the above-mentioned hypotheses to indicate whether or not there is a statistically-significant impact of changing the learning environment of the students on the grades of the students. However, before applying the ANOVA, the researcher applied the test of Homogeneity.

The researcher firstly applied the test of Homogeneity of variances on the students' grades of three semesters, which is a condition that is required to apply ANOVA and that the results are correct.

Results, Analysis and Discussion

Table 2: Descriptive statistics of grades of marketing students in a course MKT (201) (MSA University)

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
semester (58) Fall 2015	282	71.7642	17.90893	1.06646	69.6649	73.8635	25.00	95.00
semester (59) Spring 2016	135	71.0000	18.68963	1.60855	67.8186	74.1814	25.00	95.00
semester (61) Fall 2016	310	78.3371	17.31238	.98328	76.4023	80.2719	25.00	95.00
Total	727	74.4250	18.10092	.67133	73.1071	75.7430	25.00	95.00

(Results of the analysis using SPSS)

1. From the above table, it can be seen that the mean grade value (in the semester where the new approach was applied) is 78.3371, which is more than the two previous semesters – semesters 58 (fall 2015) 71.7642 and 59 (spring 2016) 71.0000.

2. The above table also shows the estimation of the true mean value in each semester by constructing a confidence interval (lower and upper limit) of the average of grades with probability of 95%.

3. Using the ANOVA to test significance in the differences among the three mean values of the three semesters 58, 59 and 61.

H_0: $\mu_{58} = \mu_{59} = \mu_{61}$

against

H_1: The mean grades are not all equal.

where:

- H_1 actually means that when the lecturer changed the learning environment (changing the strategy by clearly stating to the learners the LOs of each session and using engaging in-class activities that fitted with the LOs), this led to a deeper approach in learning, as reflected in student achievement and grades.
- H_o actually means there is no impact of changing the learning environment on the achievements of the students.

The ANOVA will test this, and either accept H_0 or H_1 is accepted.

Homogeneity test:

Before applying the ANOVA, the test of homogeneity of variances has to be conducted, which is an essential condition to ensure that the ANOVA test gives correct results, and this has been done by using Levene statistic (SPSS). In the homogeneity test, the variances have to be equal.

H_0: the variances are equal (i.e. there is no significance difference between variances)

H_1: the variances are not equal (i.e. there is at least one which is not equal)

Table 3: Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
0.810	2	724	0.445

(Results of research analysis using SPSS)

From the above table, P-value equals 0.445 > 0.05

Therefore H_0, is accepted, so it is accepted that there is homogeneity in variances of the grades in the three semesters and thus the ANOVA can be safely used.

Table 4: The ANOVA test

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8324.573	2	4162.286	13.128	.000
Within Groups	229544.592	724	317.051		
Total	237869.164	726			

(Results of this research analysis using SPSS)

From the ANOVA table, the P-value of related F statistic = 0.00 which is less than 0.05.

Then H_0 can be refused with 5% level of significance; this indicates that there is a significant difference between the grades of the students across the semesters.

4. A significant difference having been detected between the grades of the students across the semesters, the researcher compared the grades of each two semesters together, using a multiple comparison* table applying Fisher's Least Significant Differences (LSD), as per Williams and Abdi (2010).

Table 5 : Multiple comparisons

(I) factor	(J) factor	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
semester (58)	semester (59)	0.76418	1.86355	0.682	-2.8944	4.4228
	semester (61)	-6.57291*	1.46528	0.000	-9.4496	-3.6962
semester (59)	semester (58)	-.76418	1.86355	0.682	-4.4228	2.8944
	semester (61)	-7.33710*	1.83610	0.000	-10.9418	-3.7324
semester (61)	semester (58)	6.57291*	1.46528	0.000	3.6962	9.4496
	semester (59)	7.33710*	1.83610	0.000	3.7324	10.9418

*. The mean difference is significant at the 0.05 level.

(Results of the research analysis using SPSS)

By using LSD method:

First, in a comparison of the grades of semesters 58 and 59,

$H_0: \mu_{58} = \mu_{59}$

$H_1: \mu_{58} \neq \mu_{59}$

From the above table, H_0 is accepted and thus there is no significant difference between the grades of the two semesters 58 and 59 as P-value = 0.76418 > 0.05.

Second, in a comparison of the grades of semesters 61 and 58,

$H_0: \mu_{61} \leq \mu_{58}$

$H_1: \mu_{61} > \mu_{58}$

from the results in the table of multiple comparison.

Therefore H_1 is accepted, where $H_1: \mu_{61} > \mu_{58}$ as the P - value = 0.0 < 0.05.

H_0 (null hypothesis) is refused with level of significance 5% and it is accepted that $\mu_{61} > \mu_{58}$.

Third, in a comparison of the grades of semesters 61 and 59,

$H_0: \mu_{61} \leq \mu_{59}$

$H_1: \mu_{61} > \mu_{59}$

from the table of multiple comparison.

P – value = 0.00 < 0.05. Thus, H_0 is refused with 5% level of significance and it is accepted that $\mu_{61} > \mu_{59}$.

To sum up:

From the above, we can indicate that in semesters 58 and 59 there was no significant difference in grades, as within these two semesters we had not applied the new teaching strategies which would change the learning environment. Yet the grades of students in semester 61 (in which we started to change the learning environment to encourage deep learning characterized by better understanding of concepts and higher retention of knowledge) are higher than those of the previous cohorts in both exams and projects.

Fourth, from Table 1, it can be seen that the percentage of students who achieved distinction level in semester 58 represented 24.1% of the students, as compared to 23.7% of the students gaining distinctions in semester 59.

However, in semester 61, the percentage of distinctions (above 85 out of 100) represented about 41%. Thus, the new approach did improve the percentage of students who gained distinction.

To be sure, this was tested by a Z test (test of the differences between two sample proportions).

The percentage of distinctions in semester 58 = 0.241

The percentage of distinctions in semester 59 = 0.237

The percentage of distinction in semester 61= 0. 41

A. (Z test of the differences between π_{58} and π_{59})

H_0: $\pi_{58} = \pi_{59}$ against,

H_1: $\pi_{58} \neq \pi_{59}$

H_0 is accepted that is there is no significance difference between π_{58} and π_{59} because the computed Z is within the acceptance region of H_0 (± 1.96)*.

$$*\hat{\pi} = \frac{282\ x\ 0.241 + 135\ x\ 0.237}{282+135} = 0.24$$

$$*Z = \frac{0.241-0.237}{\sqrt{(0.24)(0.67)\left(\frac{1}{282}+\frac{1}{135}\right)}} = 0.002$$

B. (Z test of the differences between π_{58} and π_{61})

H_0: $\pi_{61} \leq \pi_{58}$ against,

H_1: : $\pi_{61} > \pi_{58}$

The null hypothesis is refused with 5%level of significance and thus it is accepted that

$\pi_{61} > \pi_{58}$ because the computed Z is out of the acceptance region of H_0 (> 1.645). (One tail.)**

C. (Z test of the difference between π_{59} and π_{61})

H_0: $\pi_{61} \leq \pi_{59}$ against,

H_1: $\pi_{61} > \pi_{59}$

The null hypothesis is refused with 5% level of significance and thus it is accepted that $\pi_{61} > \pi_{59}$ because the computed Z is out of the acceptance region of H_0 (> 1.645). (One tail.)***

$$**\hat{\pi} = \frac{310\ x\ 0.41+282\ x\ 0.241}{310+282} = 0.329$$

$$**Z = \frac{0.41-0.241}{\sqrt{(0.329)(0.67)\left(\frac{1}{310}+\frac{1}{282}\right)}} = 2.7$$

$$***\hat{\pi} = \frac{310\ x\ 0.41+135\ x\ 0.237}{310+135} = 0.358$$

$$***Z = \frac{0.41-0.237}{\sqrt{(0.358)(0.642)\left(\frac{1}{310}+\frac{1}{135}\right)}} = 3.4$$

I.e. in semester 61 (in which the new approach was applied), the percentage of distinction grades is significantly higher than the previous two semesters.

Moreover, there is no significant difference between the percentages of distinction in semesters 58 and 59, which proves that the new approach did lead to this improvement in the percentage of students who achieved distinction; it also indicates that changing the learning environment led to a deeper approach to learning by the students, as indicated by better understanding and enhancement in problem-solving skills, the cognitive skills reflected by better grades.

Conclusion

To conclude on a personal note, my experience of the above application suggests that marketing lecturers, through changing the learners' environment by altering their teaching strategies, could bring about the desired deeper learning which leads to better results.

It is of the utmost importance to note here that the strategies used in this study to help foster a deeper learning approach might not be particularly innovative in UK higher education institutions (HEIs) or even at postgraduate level in some Egyptian HEIs, but these strategies have not been the focus of lecturers in the field of marketing in many Egyptian *undergraduate* HEIs. This focus

came about as a result of the enrolment of higher education staff (instructors of my institution, MSA) in the Postgraduate Certificate in Higher Education offered by the University of Greenwich. This qualification is becoming a staff development requirement at MSA University. Being one of the first cohort of lecturers who successfully completed the Higher Education PGCert has encouraged me to take a more critical approach to personal teaching strategies and to take more time to reflect on lesson plans and review how teaching/learning strategies actually serve the learning outcomes of various marketing modules. Moreover, it has offered me the chance to read deeply into various learning theories and relate them to my own field, as well as to pursue investigation into related pedagogical literature. Finally, my experience has confirmed me in the belief that revising previously conventional teaching strategies to a hybrid PBL approach is more effective, encouraging a deeper approach to learning characterized by deeper understanding of concepts, better retention of knowledge and improved problem-solving skills. I'm convinced that these PBL activities also allow instructors to test concepts more than once, in different ways and with different scenarios, all resulting in higher retention, as required in introductory modules with basic concepts.

Furthermore, these in-class activities enhance student engagement, another feature of a deeper learning environment and fundamental to increased student acquisition of distinction-level grades.

Future development

The building of a multivariate model to measure the impact on student achievement of each suggested independent variable is a logical next step from having confirmed the positive benefits of changing the learning environment to one which encourages deeper learning; it should help to maximize those benefits for the students.

Moreover, future research could study the significance of the model, using such an advanced statistical technique as structural equation modeling (path analysis) or another multivariate technique. This would also require building a measuring tool or administering a questionnaire to ask the students themselves about the various variables suggested to have an impact on creating an environment that encourages a deep approach to learning.

Reference list

Atherton, J.S. (2003) Learning and Teaching: Deep and Surface Learning. Available at: https://www.tandfonline.com/doi/abs/10.1080/02615470601118571 (Accessed 25, September 2016)

Ausubel, D. (2000) *The acquisition and retention of knowledge: A cognitive view.* Norwell, MA: Kluwer Academic Publishers.

https://books.google.com.eg/books?hl=en&lr=&id=wfckBAAAQBAJ&oi=fnd&pg=PR9&dq=Ausubel,+D.+(2000)The+acquisition+and+retention+of+knowledge:+A+cognitive+view.+Norwell,+MA:

+Kluwer+Academic+Publishers.+&ots=m9ZEdtWWFU&sig=bikOWlSvr_rBV5vpMp5C3Wkd0D4&redir_esc=y#v=onepage&q&f=false (Accessed 25, September 2016)

Bacon, D. and Stewart, K. (2006) *Journal of Marketing Education*, 26(3), 181-192. Pro Quest Social Sciences Premium Collection. Available at: http://www.uky.edu/~kdbrad2/EPE773R/StudentPapers/ConsumerBehavior.pdf (Accessed 25, September 2016)

Besant, S.,Balley, P.,Rrobinson, Z.,Tomkinson, R., Ormerod, R.M. and Boast, R. (2013) *Problem -based learning: a case study of sustainability education. A toolkit for university lecturers.* HEA, Universities of Keele, Manchester, Staffordshire.

https://www.researchgate.net/publication/264082416_ProblemBased_Learning_A_Case_Study_of_Sustainability_Education (Accessed 25, September 2016)

Biggs, J. and Tang, C. (2011) *Teaching for Quality Learning at University*. 4th Ed. Berkshire: Open University Text, 9-14. Available online: https://www.google.com/search?sourceid=navclient&aq=&oq=Biggs%2c+J.+and+Tang%2c+C.+%282011%29+Teaching+for+Quality+Learning+at+University.+4th+Ed.+Berkshire%3a+Open+University+Text%2c+9-14&ie=UTF-8&rlz=1T4PLXB_enEG672EG673&q=Biggs%2c+J.+and+Tang%2c+C.+%282011%29+Teaching+for+Quality+Learning+at+University.+4th+Ed.+Berkshire%3a+Open+University+Text%2c+9-14&gs_l=hp....0.0.0.404.....0. (Accessed 25, September 2016)

Biggs, J. (1999) 'What the Student Does: teaching for enhanced learning. *Higher Education Research and Development*, 18(1), 57-75. Available at: https://www.tandfonline.com/doi/abs/10.1080/0729436990180105 (Accessed 25, September 2016)

Brennan, R. (2014) Reflecting on experiential learning in marketing education. *The Marketing Review*, 14(1), 97-108. Available at https://www.ingentaconnect.com/content/westburn/tmr/2014/00000014/00000001/art00006 (Accessed 25, September 2016)

Entwistle, N., Skinner, D., Entwistle, D. and Orr, S. (2000) Conceptions and Beliefs about Good Teaching: An Integration of Contrasting Research Areas *Higher Education research & Development,* 19 (1), 5-26. Available online: https://www.tandfonline.com/doi/abs/10.1080/07294360050020444 (Accessed 25, September 2016)

Gremler, D. Hoffman, K., Keaveney, S. and Wright, L. (2000) Experiential Learning Exercises in Services Marketing Courses. *Journal of Marketing Education*, 22(1), 35-44. Available at : http://journals.sagepub.com/doi/10.1177/0273475300221005 (Accessed 25, September 2016)

Hall, M., Ramsay, A. and Raven, J. (2002) Changing the learning environment to promote deep learning approaches in first year accounting students. Available at https://www.tandfonline.com/doi/abs/10.1080/0963928042000306837 (Accessed 25, September 2016)

Halpern, D. and Hakel, M. (2003) Applying the science of learning of the university and beyond. *Change*, 35(4), 36-41. Available at: https://www.tandfonline.com/doi/abs/10.1080/00091380309604109 (Accessed 25, September 2016)

Hussey, T. and Smith, P. (2002) 'The Trouble with Learning Outcomes. *Active Learning in Higher Education*, 3(3) 220-233. Sage. Available at: http://journals.sagepub.com/doi/abs/10.1177/1469787402003003003 (Accessed 25, September 2016)

Lebow, D. (1993) Constructivist Values for Instructional Systems Design: Five Principles toward a New Mindset. *Educational Technology Research and Development*, 41(3), 4-16. Available at: Content/uploads/2011/12/lebow-1993-constructivist-values.pdf. https://link.springer.com/content/pdf/10.1007%2FBF02297354.pdf (Accessed 20, November 2016)

Linrud, J. and M.C. Hall (1999) Integrating the Business Practitioner into Marketing Coursework. *Marketing Education Review*, 9(2),15-22. Available at : https://www.tandfonline.com/doi/abs/10.1080/10528008.1999.11488670?journalCode=mmer20 (Accessed 20, September 2016).

Major, C. and Palmer, B. (2001) Assessing the effectiveness of problem-based learning in higher education: lessons from the literature. *Academic Exchange Quarterly*, 5(1), 4. Available at: http://www.rapidintellect.com/AEQweb/mop4spr01.htm (Accessed 25, September 2016).

Marton, F. andSaljo, R. (1976) On qualitative differences in learning: 1- Outcome and process. *British Journal of Educational Psychology*, 46, 4-11. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.2044-8279.1976.tb02304.x (Accessed 25, September 2016).

Moon, J. (2009) *Achieving success through academic assertiveness real life strategies for today's students*. Location: Routledge Available at: https://www.taylorfrancis.com/books/9781135852559 (Accessed 25, September 2016).

Neisser, U. (1984) Interpreting Harry Bahrick's discovery: What confers immunity against forgetting? *Journal of Experimental Psychology-General*, 113, 32-35. Available at: http://psycnet.apa.org/doiLanding?doi=10.1037%2F0096-3445.113.1.32 (Accessed 25, September 2016)

Ramsden, P. (1992) *Learning to teach in higher education*. London: Routledge. Available at: https://books.google.com.eg/books?hl=en&lr=&id=fQ7eAAAAQBAJ&oi=fnd&pg=PA187&dq=Ramsden,+P.+(1992)+Learning+to+teach+in+higher+education.+London:+Routledge&ots=YQxy2LEpZ&sig=LcZpBjKmc_abiyJjKYBl1hCAyeg&redir_esc=y#v=onepage&q=Ramsden%2C%20P.%20(1992)%20Learning%20to%20teach%20in%20higher%20education.%20London%3A%20Routledge&f=false (Accessed 20, September 2016).

Schwartz, J. and Fontenot, R. (2007) Recreating the Principles of Marketing Group Project: A Case Study in Service Learning. *Journal for Advancement of Marketing Education – Volume 11, Winter 2007*, 11-18.Available at: http://www.mmaglobal.org/publications/JAME/JAME-Issues/JAME-2007-Vol11-Issue1/JAME-2007-Vol11-Issue1-Schwartz-Fontenot-pp11-18.pdf (Accessed 20, September 2016.)

Vernon, D. and Blake, R. (1993) Does Problem-Based Learning Work? A meta-analysis of evaluative research. *Academic Medicine*, 68,7. Available at: https://insights.ovid.com/crossref?an=00001888-199307000-00015 (Accessed 25, September 2016)

Williams,L.and Abdi,H.(2010) Fisher's Least Significant Difference (LSD)Test.In: Neil Salkind (ed.),*Encyclopedia of Research Design*. Thousand Oaks, CA:Sage. Available at: http://www.utd.edu/~Herve/abdi-LSD2010-pretty.pdf (Accessed 20, September 2016)