The Relationship between Lecturer Feedback about Academic Performance and Academic Progress of Students

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Abstract

The aim of the study is to investigate the relationships between the lecturer feedback about academic performance and academic progress of students, as well as the influence of lecturer feedback in academic progress. The mixed methods research is the approach used in the study. The cluster random sample of respondents, the structured questionnaires, and semi-structured interviews were selected to be used in the study. The main conclusion of the research is that academic progress of students has been explained strongly by lecturer feedback about academic performance.

Keywords: lecturer feedback, academic performance, academic progress

Introduction & literature review

Lecturer feedback about academic performance is supposed to be the important variable that the academic progress of students. The aim of the study is to investigate the relationships between the lecturer feedback about academic performance and academic progress of students, as well as the influence of lecturer feedback about academic performance in the academic progress of students. The *research questions* include: (1) Is there a significant difference in the mean students' academic progress of students scores for males and females? (2) Is there a relationship between lecturer feedback about academic performance academic progress of students? Does academic progress of students increase with lecturer feedback? (4) How much of the variance in the academic progress of students scores can be explained by the lecturer feedback?

Conceptual framework

Progressivism viewed the school as a miniature democratic society (Dewey, 1934). Constructivism treats the individual as actively involved in thinking and learning (Howe and Berv, 2000). In constructivism, learners participate in generating understanding (Brooks & Brooks 1993). Progressivism and constructivism theories were used to conceptualize a research framework for this study. The framework was developed from an extensive review of existing evidence through Sage, and EBSCO about lecturer feedback and academic progress of students. Figure 1, summarizing the framework resulting from the review, proposes a set of relationships among two constructs; lecturer feedback as independent variable influence academic progress of students as the dependent variable.

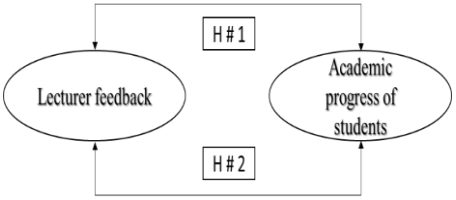

Figure 1: Conceptual framework

There are many variables related to lecturer feedback that enhance academic progress of students. The negative expectations, student emotion, challenges from students and lack of control (Hartney, 2007), and the resources that lecturers and students have to accomplish this, the active role that students play (Tyagunova and Greiffenhagen, 2017) were related to feedback tutorials. The individualized feedback is effective in improving student engagement behavior (Xu, 2010), and student satisfaction and learning (Mandal, 2018); but Gibbs and Taylor (2016) found that there was no influence in learning, nor in student, satisfaction explained by individualized instructor feedback. McCarthy (2017) found that enhancing students work is related to online and in-class formative assessment feedback models; meanwhile, Stanton (1979) found that student feedback, lecturer-student-advisor co-operation, and improved teaching techniques offer one possible way of improving the standard of tertiary teaching.

The relationships between lecturer feedback and academic progress of students involve many other teaching and learning variables. Hansen and Mendzheritskaya (2017) found that the interplay of cultural-educational and situational contexts can affect the way students respond to the emotions a university lecturer displays, and those emotions can shape students' learning behavior. Flowerdew and Miller (1992) indicate that students' perceptions of the lecture experience, their problems, and the strategies they use to try to overcome these problems are related to motivating students to study. Blair, Curtis, and Goodwin (2013) indicate that academics regularly complain that students do not engage with feedback by citing uncollected coursework, students repeatedly protest about the timeliness and quality of feedback, citing illegible, overly critical and a lack of verbal feedback. Team-based learning approach improved oral communication and creative thinking skills more than the lecture students (Huggins and Stamatel, 2015); and there is a clear preference for returning lecturer supervisions approach, mostly because of reduced stress (Ussher and Carss, 2014). Mousavi, Mares, and Stonham (2015) concluded that by deploying the appropriate data acquisition mechanisms at appropriate intervals, the teaching and knowledge delivery process can be adopted to achieve the desired learning objectives.

The type of lecturer feedback that the academic progress of students varies from one author to another. Morris and Chikwa (2016) established that the type of feedback received did not impact students' grades in the subsequent assignment. In addition, while students were broadly positive about audio feedback, they indicated a strong preference for written feedback in future assignments. From the other point of view, Pokorny and Pickford (2010) suggest that written feedback is often not the most effective tool for helping students to improve their learning. Marking and providing feedback face-to-face compound staff and student perspectives (Chalmers, Mowat and Chapman, 2018); participation in a detailed review of feedback with the supervisor greatly increased the perceived impact of that feedback on current assignments (O'siochru, 2011). But, Ali, Ahmed, and Rose (2017) found that the only significant predictor of students' relationship with feedback variable was the year of study of the course. Blair (2017) provide a mixed picture, whereby academic workload and content are in line with students' expectations about engagement, assessment, and feedback; meanwhile Myllymaki (2012) found that the 'feed-forward', self- managed learning and personalized guidance framework enhance the student experience and aid understanding of the complex processes associated with providing written assessment feedback. Soares and Lopes (2017) found a positive impact of lecturer authentic leadership and psychological safety on the academic performance of students, but Penny and Coe (2004) indicated that the various approaches to the consultation are not equally effective for students achievements.

The content of lecturer feedback seemed to be important according to different researchers. Adams and McNab (2013) indicate that teachers in the arts and humanities should focus on ensuring that students understand goals and standards, particularly by giving feedback often and in time for the application to other learning activities and assignments. Pitts (2005) indicates that challenges in developing feedback practice apply even where changes sought are far from radical, and conclusions are drawn which suggest ways forward for practice and research in giving feedback. Mutch (2003) identified a conversational form of feedback with a focus on 'implied development' and placed in the context of Bernstein's notion of an 'invisible pedagogy'. Such a focus may disadvantage students and the importance of reflection on feedback in the context of knowledge. Hulme and Forshaw (2009) suggest that written feedback is not ideal and that the two-way dialogue intended is not always effective. Burton, Ma, and Grayson (2017) found that students who attended live lectures rated the course and its components higher than students who only viewed the video or used both methods. From the other point of view, Dong, Hwang, and Shadiev (2017) showed that students' willingness to engage via the technology was because they found it difficult to remember or understand the lecture content. Yuan and Kim (2015) found that technologies can be used to enhance the effectiveness of feedback in online courses and that effective feedback design was constructed to maximize the affordances of each technology that foster feedback dialogues, help to bring feedback from multiple sources, and encourage students to follow up with feedback. Demirbilek (2015) suggest that students benefited while engaging in the

peer feedback process on both Wiki and Facebook and that the incorporation of Wiki and Facebook as a peer feedback tool improved critical thinking skills and improvement of material produced.

The other variables of curriculum, teaching, and learning seemed to be related to lecturer feedback that from the other side influence the academic progress of students. Orr and Bloxham (2013) suggest that lecturers in the study employed three macro conceptions of quality to support the judgment process, the demonstration of significant learning over time, the demonstration of effective studentship and the presentation of meaningful art/design work. Ginns and Barrie (2009) found the suitability of the survey for gathering confidential student feedback on lecturing effectiveness, and Smith and Wight (1988) found that students were enthusiastic in their assessment of the Friedman's (1987) immediate feedback and believed that it facilitated their learning. Evans (2013) suggests that the concept of the feedback landscape, informed by sociocultural and socio-critical perspectives, is developed and presented as a valuable framework for moving the research agenda into assessment feedback in higher education forward. Huxham (2010) found that different cues produce different notes, and lecturers should consider the effects of their lecturing cues on the notes their students will record. Academics should satisfy students' needs for feedback, not least the inclusion of questions about feedback (Jones and Gorra, 2013); and student ratings of the instructor's control of classroom correlated positively with their achievements (Braskamp, Caulley, and Costin, 1979). Durham, Russell and Van Horne (2017) indicated that the revised curriculum affected students' engagement in the course positively, contributing to students' learning outcomes. Gallo and Hillsborough (2009) suggest that although many students may prefer intensive courses or compressed schedules that minimize the time they spend on campus, these scheduling options may not be optimal for learning. As a conclusion of literature review, the relationships between lecturer feedback about academic performance and academic progress of students are important. Therefore, it is hypothesized that:

H # 1: There is a positive linear relationship between lecturer feedback about academic performance and academic progress of students

H# 2: Academic progress of students have been explained by lecturer feedback about academic performance

Methodology

Method

The mixed approach is the method used in the study, compounded by quantitative and qualitative instruments and techniques. Lecturer feedback about academic performance is an independent quantitative variable, and academic progress of students is dependent quantitative continuous variable.

Instruments

The structured questionnaire was used to collect the primary quantitative data of independent and dependent variables from students. Semi-structured interviews were used to collect the primary qualitative data from lecturers. Structured questionnaires are based on (Sage 2017; OECD 2017), and are adapted, piloted and applied by the researcher. Semi-structured interviews are designed, piloted and applied by the researcher.

Participants

The cluster random sample of students (N= 214), as shown in the table of descriptive statistics, and a convenient lecturer's sample (N= 13) were selected to be used in the study. From the cluster random sample of students, there are 150 females (70.1 percent) and 64 males (29.9 percent), and from the convenient lecturer's sample, there are 9 females (69.2 percent) and 4 males (30.8 percent).

Procedure

An independent-samples t-test was conducted to compare the students' academic success scores for females and males. Linear multiple regression was used to assess the skills of one control measure to predict the academic progress of students levels by lecturer feedback about academic performance. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, with no violations noted.

Results and discussion

Descriptive analysis

Lecturer feedback about academic performance'

Table 1: Lecturer feedback about academic performance' frequencies

Lecturer feedback about academic performance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Never	73	34.1	34.1	34.1
	2 Occasionally	108	50.5	50.5	84.6
	3 Neutral	19	8.9	8.9	93.5
	5 Very often	14	6.5	6.5	100.0
	Total	214	100.0	100.0	

As shown in table 1, 34.1% of students never percept lecturer feedback; 50.5% of students occasionally; and 6.5% very often, meanwhile 8.9% are neutral. Referring descriptive statistics, 214 respondents ranging in levels from 1 to 5, with a mean of 1.94 and standard deviation of 1.01. This result means that approximately half of the students perceived lecturer feedback about academic performance. This value may be considered as a lack of lecturer feedback, and lecturers themselves should reflect and improve it. Lecturer feedback may support students, and as an important variable may influence the academic progress of students.

Academic progress of students

Table 2: Academic progress of students' frequences

Academic progress of students

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Very little	14	6.5	6.5	6.5
	2 Little	39	18.2	18.2	24.8
	3 Some	20	9.3	9.3	34.1
	4 Quite a bit	97	45.3	45.3	79.4
	5 Very much	44	20.6	20.6	100.0
	Total	214	100.0	100.0	

As shown in table 2, 24.7% of students percept very little or little academic progress; 54.6% of students some or quite a bit; and 20.6% very much. Referring descriptive statistics, 214 respondents ranging in levels from 1 to 5, with a mean of 3.55 and standard deviation of 1.19. This result means that approximately more than half of the students are made academic progress.

This value may be considered a low level of academic progress, and lecturers themselves should reflect on this value in order to find out the causes and to influence them. Lecturers reflection and work may support academic progress of students.

Inferential statistics

Table 3: Independent-samples t-test outputs

Group Statistics

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Academic progress of students	1 Female	150	3.65	1.154	.094
	2 Male	64	3.33	1.261	.158

As shown in table 3, there was no significant difference in academic progress of students scores for females (*M* = 4.65, *SD* = 1.154) and males (*M* = 3.33, *SD* = 1.261), and *t* (214) = 1.798, *p* = .074, two-tailed). The magnitude of the differences in the means (mean difference = .319, 95% *CI*: -.031 to .668) was small (eta squared = .015). This indicates there are not big differences between females and male students relating to academic progress. Meanwhile, the mean differences for females compared to males indicate that female students achieve greater academic progress than males.

Test of hypothesis # 1

Table 4: Pearson correlation outputs between lecturer feedback about academic performance, and academic progress of students

Correlations

		Lecturer feedback about academic performance	Academic progress of students
Lecturer feedback about academic performance	Pearson Correlation	1	-.609**
	Sig. (2-tailed)		.000
	Sum of Squares and Cross-products	217.327	-156.383
	Covariance	1.020	-.734
	N	214	214
Academic progress of students	Pearson Correlation	-.609**	1
	Sig. (2-tailed)	.000	
	Sum of Squares and Cross-products	-156.383	302.935
	Covariance	-.734	1.422
	N	214	214

**. Correlation is significant at the 0.01 level (2-tailed).

As shown in Table 4, there is a high negative correlation between lecturer feedback about academic performance and academic progress of students variables, r = -.609, n = 214, p < .005, with high levels of lecturer feedback associated with low levels of academic progress. The result was not consistent with next following reported works, (Gibbs and Taylor, 2016; Stanton, 1979; Braskamp, Caulley and Costin, 1979), who argued that there is a significant positive relationship between lecturer feedback and academic progress of students. The result was consistent with following reported works (Hartney, 2007; Tyagunova and Greiffenhagen, 2017; McCarthy, 2017), who argued that there is not a significant positive relationship between lecturer feedback and academic progress of students. In conclusion *hypothesis # 1: There is a positive linear correlation between individual study work and students' academic success*, is been rejected. Therefore, lecturer feedback about academic performance does not influence the academic progress of students at all, even lecturer feedback worsen academic progress surprisingly.

Test of hypothesis # 2

Table 5: Regression outputs between lecturer feedback about academic performance, and academic progress of students

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.609[a]	.371	.368	.948	.371	125.292	1	212	.000

a. Predictors: (Constant), Lecturer feedback about academic performance

As shown in Table 5, total variance of academic progress of students levels explained by lecturer feedback about academic performance (the model) is 37.1%, *F* (1, 125.292), *p* < .005, the other variance may be explained by other variables. In the model, lecturer feedback: *beta* = -.609; p < .005). This indicates that lecturer feedback about the academic performance influence strongly academic progress of students. The result was consistent with previously reported works, who argued

that lecturer feedback influences academic progress of students (Xu, 2010; Flowerdew and Miller, 1992; Ussher and Carss, 2014; O'siochru, 2011; Soares and Lopes, 2017; Ginns and Barrie, 2009; Smith and Wight, 1988). In conclusion *hypothesis # 2: Academic progress of students has been explained by lecturer feedback about academic performance*, is been supported. Therefore, lecturer feedback about academic performance influence strongly, but negatively (Pearson Correlation values) academic progress of students.

Qualitative results

The results of the qualitative analysis are based on outputs of semi-structured interviews constructed to interview lecturers. The majority of lecturers (77%) stated that in general there are no differences between females and male students relating to academic progress The 65% of lecturers stated they support students during the teaching sessions and beyond them, but their interest is low. The most of lecturers (69%) stated that academic progress of students is not at the required standards. The majority of respondents (79%) stated that the lecturer feedback about the academic performance influence strongly academic progress of students. Therefore, in conclusion, qualitative results support quantitative results.

Conclusions and implications

Several limitations of the study should be acknowledged as part of conclusions. First, the measurement of lecturer feedback and academic progress of students variables is been made based on self- reported instruments. Second, the results of the research may generalize as a case of European University of Tirana, Albania. The aim of the study was to investigate the relationships between the lecturer feedback about academic performance and academic progress of students, as well as the influence of lecturer feedback in academic progress. The prior assumption was that lecturer feedback influence academic progress of students.

The results show that there are no differences between females and male students relating to academic progress. The study shows, that approximately half of the students perceived lecturer feedback about academic performance. The study found that approximately more than half of the students are made academic progress. It is found that there is a high negative correlation between lecturer feedback about academic performance and academic progress of students variables, with high levels of lecturer feedback associated with low levels of academic progress. It is found that total variance of academic success of students levels explained by lecturer feedback is relatively a high percentage. This result indicates that lecturer feedback about the academic performance influence strongly academic progress of students. Therefore, faculties and departments, as well as lecturers themselves should reflect on kind of feedback they use in order to support more the students to achieve their academic progress.

The results of the study, supported by other researchers about the influence of lecturer feedback on the academic progress of students have important implications for future research. Such research should investigate the influence of lecturer feedback on the academic progress of students in similar populations. Future research should also investigate the influence of other variables on the academic progress of students. Results of this study also have important implications for practice. The important programs should be designed to develop and to support lecturers for kind of feedback they should use in order to influence positively academic progress because it is confirmed by this study that lecturer feedback influence strongly academic progress of students. Overall the findings of this study enhanced theoretical and practical understanding as lecturer feedback is an important variable that influences the academic progress of students.

References

[1] Adams, J., McNab, N. (2013) Understanding arts and humanities students' experiences of assessment and feedback. *Arts and Humanities in Higher Education*. Volume: 12 issue: 1, page(s): 36-52.
[2] Ali, N., Ahmed, L., Rose, S. (2017) Identifying predictors of students' perception of and engagement with assessment feedback. *Active Learning in Higher Education*.
[3] Blair, A. (2017) Understanding first-year students' transition to university: A pilot study with implications for student engagement, assessment, and feedback. *Politics*. Volume: 37 issue: 2, page(s): 215-228.
[4] Blair, A., Curtis, S., Goodwin, M. (2013) What Feedback do Students Want?. *Politics*. Volume: 33 issue: 1, page(s): 66-79.

[5] Braskamp, A. L., Caulley, D., Costin, F. (1979) Student Ratings and Instructor Self-ratings and Their Relationship to Student Achievement. *American Educational Research Journal*. Volume: 16 issue: 3, page(s): 295-306.
[6] Brooks, G. J., Brooks, G. M. (1993). *The case for constructivist classrooms*. Alexandria, VA: ASCD, 1993.
[7] Burton, B. W., Ma, P. T., Grayson, S. M. (2017) The Relationship Between Method of Viewing Lectures, Course Ratings, and Course Timing. *Journal of Medical Education and Curricular Development*. Volume: 4.
[8] Chalmers, C., Mowat, E., Chapman, M. (2018) Marking and providing feedback face-to-face: Staff and student perspectives. *Active Learning in Higher Education*. Volume: 19 issue: 1, page(s): 35-45.
[9] Demirbilek, M. (2015) Social media, and peer feedback: What do students really think about using Wiki and Facebook as platforms for peer feedback?. *Active Learning in Higher Education*. Volume: 16 issue: 3, page(s): 211-224.
[10] Dewey, J. (1934). Need for a philosophy of education. *New era in home and school*. November 1934, pp.212.
[11] Dong, J. J., Hwang, Y. W., Shadiev, R. (2017). *Active Learning in Higher Education*. Volume: 18 issue: 2, page(s): 157-172.
[12] Durham, D. F., Russell, E. J., Van Horne, S. (2017) Assessing Student Engagement: A Collaborative Curriculum for Large Lecture Discussion Sections. *Journalism & Mass Communication. Educator*.
[13] Evans, C. (2013) Making Sense of Assessment Feedback in Higher Education. *Review of Educational Research*. Volume: 83 issue: 1, page(s): 70-120.
[14] Flowerdew, J., Miller, L. (1992) Student Perceptions, Problems and Strategies in Second Language Lecture Comprehension. *RELC Journal*. Volume: 23 issue: 2, page(s): 60-80.
[15] Gallo, A. M., Hillsborough, O. M. (2009) Examining the Relationship Between Class Scheduling and Student Achievement in College Algebra. *Community College Review.* Volume 36 Number 4 April 2009 299-325. http://ccreview.sagepub.com hosted at
[16] Gibbs, C. J., Taylor, D. J. (2016) Comparing student self-assessment to individualized instructor feedback. *Active Learning in Higher Education*. Volume: 17 issue: 2, page(s): 111-123.
[17] Ginns, P., Barrie, S. (2009) Developing and testing student-focused teaching evaluation survey for university instructors. *Psychological Reports*, 2009, 104, 1019-1032.
[18] Hansen, M., Mendzheritskaya, J. (2017) How University Lecturers' Display of Emotion Affects Students' Emotions, Failure Attributions, and Behavioral Tendencies in Germany, Russia, and the United States. *Journal of Cross-Cultural Psychology*. Volume: 48 issue: 5, page(s): 734-753.
[19] Hartney, E. (2007) Strategies for the management of lecturer stress in feedback tutorials. *Active learning in higher education*. Vol 8(1): 79–96.
[20] Howe, R. K., Berv, J. (2000). Constructing constructivism, Epistemological and pedagogical, in D. C. Phillips, ed. *Constructivism in Education.* Ninety-ninth Yearbook of the National Society for the study of Education, Part I. Chicago: University of Chicago Press, 2000, pp. 19-40.
[21] Huggins, M. C., Stamatel, P. J. (2015) An Exploratory Study Comparing the Effectiveness of Lecturing versus Team-based Learning. *Teaching Sociology*. Volume: 43 issue: 3, page(s): 227-235.
[22] Hulme, J., Forshaw, M. (2009) Effectiveness of feedback provision for undergraduate psychology students. *Psychology Learning and Teaching* 8(1), 34–38.
[23] Huxham, M. (2010) The medium makes the message: Effects of cues on students' lecture notes. *Active Learning in Higher Education* 11(3) 179–188.
[24] Jones, O., Gorra, A. (2013) Assessment feedback only on demand: Supporting the few not supplying the many. *Active Learning in Higher Education.* Volume: 14 issue: 2, page(s): 149-161.
[25] Mandal, K. N. (2018) Importance of student feedback in improving mechanical engineering courses. *International Journal of Mechanical Engineering Education*.
[26] McCarthy, J. (2017) Enhancing feedback in higher education: Students' attitudes towards online and in-class formative assessment feedback models. *Active Learning in Higher Education*. Volume: 18 issue: 2, page(s): 127-141.
[27] Morris, C., Chikwa, G. (2016) Audio versus written feedback: Exploring learners' preference and the impact of feedback format on students' academic performance. *Active Learning in Higher Education*. Volume: 17 issue: 2, page(s): 125-137.

[28] Mousavi, A., Mares, C., Stonham, J. T. (2015) Continuous feedback loop for adaptive teaching and learning process using student surveys. *International Journal of Mechanical Engineering Education*. Volume: 43 issue: 4, page(s): 247-264.
[29] Mutch, A. (2003) Exploring the practice of feedback to students. *Active learning in higher education.* Vol 4(1): 24–38 [1469-7874 (200303) 4:1;24–38;030858].
[30] Myllymaki, S. (2012) Cooperative learning in lectures of an advanced electrical engineering course. *International Journal of Electrical Engineering Education*. Volume 49, Number 2 (April 2012).
[31] O'siochru, C. (2011) Using Staff-Student Reviews of Past Feedback to Increase the Impact of that Feedback on Current Assignments. *Psychology Learning and Teaching*. Volume 10 Number 2 2011 www.wwwords.co.uk/PLAT 118
[32] Orr, S., Bloxham, S. (2013). *Arts and Humanities in Higher Education*. Volume: 12 issue: 2-3, page(s): 234-253.
[33] Penny, R. A., Coe, R. (2004) Effectiveness of Consultation on Student Ratings Feedback: A Meta-Analysis. *Review of Educational Research*. Summer 2004, Vol. 74, No. 2, pp. 215–253.
[34] Pitts, E. S. (2005) Testing, testing . . . How do students use written feedback?. Active learning in higher education. Vol 6(3): 218–229.
[35] Pokorny, H., Pickford, P. (2010) Complexity, cues, and relationships: Student perceptions of feedback. *Active Learning in Higher Education* 11(1) 21–30.
[36] Rae, M. A., Cochrane, K. D., (2008) Listening to students How to make written assessment feedback useful. *Active learning in higher education*. Vol 9(3): 217–230.
[37] Smith, A. R., Wight, R. (1988) Student Evaluation of Friedman's Immediate Feedback, No Return Test Procedure for Introductory Psychology. *Teaching of Psychology*. Volume: 15 issue: 4, page(s): 209-210.
[38] Soares, E. A., Lopes, P. M. (2017) Are your students safe to learn? The role of lecturer's authentic leadership in the creation of psychologically safe environments and their impact on academic performance. *Active Learning in Higher Education*.
[39] Stanton, H. E. (1979) The Transformed Lecturer: A Case Study in Consultancy. *Australian Journal of Education*. Volume: 23 issue: 1, page(s): 58-63.
[40] Tyagunova, T., Greiffenhagen, C. (2017) Closing seminars and lectures: The work that lecturers and students do. *Discourse Studies*. Volume: 19 issue: 3, page(s): 314-340.
[41] Ussher, B., Carss, W. (2014) Strengthening practicum conversations: Enhancing professional learning and development through returning lecturer supervisions. *Australian Journal of Education*. Volume: 58 issue: 3, page(s): 248-261.
[42] Xu, Y. (2010) Examining the effects of digital feedback on student engagement and achievement. *Journal of educational computing research*. Vol. 43(3) 275-291, 2010.
[43] Yuan, J., Kim, M. C. (2015). *Journal of Educational Computing Research*. Volume: 52 issue: 3, page(s): 408-434.