IMPORTANT LEARNING DIMENSIONS INFLUENCING UNDERGRADUATE STUDENTS LEARNING AND ACADEMIC ACHIEVEMENT IN HIGHER EDUCATION

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ABSTRACT
The main aim of this study was to determine the opinions of the undergraduate students and faculty members on factors that affect student learning and academic achievement. The sub aims of this study were to:

1) Develop a mean rank ordering of the 23 dimensions affecting learning, for both the students and faculty, and determine the similarities and differences between the two populations.
2) Determine whether the differences between student and faculty opinion on the dimensions were statistically significant.
3) Determine that what faculty can do help undergraduate students' learning.
4) Propose some suggestions for Turkish Higher Education Council (YÖK), faculty of education, faculty members and further research and project on the effective teaching and learning in higher education, and the further academic planning.

To determine some of the important learning dimensions influencing academic performance within the classroom environment a questionnaire as a survey of 23 items was applied to 168 undergraduate students and 45 faculty members at the Department of Primary Education of Faculty of Education of Canakkale Onsekiz Mart University (Turkey) during the fall 2003 semester.

The statistical techniques having been used in this study were the following:
a) Frequence and percent;
b) Mean score and arithmetic mean;
c) "t" test for the difference of the means;
d) One-way analysis of variance;
e) Kruskal-Wallis procedure on the difference of the medians;
f) Non-parametric statistical method; and
g) Test-retest method.

The results showed that in 10 instructional dimensions there was a statistically significant difference between two populations. The positive t value indicated that the mean score for the students was higher than the mean score for the faculty member. This was true for 6 of the 10 dimensions. But both gave low importance to dimensions such as the hour of day class meet, required or selective lectures, textbook, course supplements and faculty members' concern for students as individuals.

KEYWORDS: academic achievement; higher education; student learning; faculty member; learning dimensions.

INTRODUCTION

Teaching in higher education is a very complicated and detailed subject.Good teaching encourages high quality student learning**.** One of the key principle of effective teaching in higher education is the concern and respect for student learning.Learning style, learning dimensions and academic belief systems as significant factors contributing to academic achievement.

The quality of student learning in higher education should be improved and can be improved.How can it best be improved?. The answer is nearer to home :it lies in the connection betwwen students' learning of particular content and quality of our teaching of that content. Through listening to what students have said about their learning, we have observed how real this connection is. Good teaching and good learning are linked through

students 'experiences of what we do.It follows that we can not teach beter unless we are able to see what we are doing from their point of view' (Ramsden,1999).

Learning dimensions and academic belief systems as significant factors contributing to academic achievement. Anyone can only improve the quality of higher education if he/she study its effects on students and look at the experience through their and their lecturers' eyes. So ,in order to determine the essential factors affecting student learning and academic achievement,we should not only learn the opinions of the faculty members but also we should learn the opinions of the undergraduate students .Futhermore,the opinions of faculty members and undergraduate students may be different (or similar)on the dimensions affecting student learning and academic achievement.

THE SAMPLE OF RESEARCH(FACULTY OF EDUCATION OF CANAKKALE ONSEKIZ MART UNIVERSITY)

As a developing country Turkey has expanded its higher-education system in hopes of building its own bridge to economic prosperity. Turkey also has established many new universities. From 1992 to 1994, the government founded 25 new universities, mostly in outlying provinces. Many were formed by merging existing institutions or upgrading postsecondary vocational and professional schools. Higher education is defined as all post-secondary programs with a duration of at least two years. The system consists of universities (53 state and 19 private) and non-university institutions of higher education (police and military academies and colleges).

Each university consists of faculties and four-year schools, offering bachelor's level programs, the latter with a vocational emphasis, and two-year vocational schools offering pre-bachelor's (associate's) level programs of a strictly vocational nature. Anadolu University in Eskisehir offers two- and four-year programs through distance education. There are presently 387 bachelor's and 196 pre-bachelor's level programs operating in universities

The "Faculty of Education", which was previously attached to Trakya (Thrace) University, became part of Canakkale Onsekiz Mart University when it was established in the 1992-1993 academic year. It is the largest faculty in the university and trains teachers for the Ministry of Education. The Department of Primary Education, which is the largest department of faculty, training teachers to work in elementary schools, covers all lessons taught at primary school and prepares students for their profession through teaching practice in the final four semesters. Graduates can become teachers in schools attached to the Ministry of Education, private schools and private coaching establishments. But there are important problems such as the insufficiencies of educational environments, classes and the quantity and quality of faculty members in the Department of Primary Education of Faculty of Education of Canakkale Onsekiz Mart University (Turkey).The sample of this study was this department.

RELATED RESEARCHES

In this section, at first, the related researches will be introduced and evaluated, then, the importance of the study will be described;

Ramsden (1992,96-103) in his book Learning to Teach in Higher Education explained the following six key principles of effective teaching in higher education;

1) Interest and explanation,
2) Concern and respect for student and student learning,
3) Appropriate assessment and feedback,
4) Clear goals and intellectual challenge,
5) Independence, control, and active engagement and,
6) Learning from students.

Ramsden presented a cohorent and even inspirational model for developing the quality of teaching and learning in higher education.This book addressed the problems of how best to evaluate and improve the standart of teaching in higher education in a climate of accountability and appraisal.

A book Rethinking University Teaching (Laurillard,1993) as a whole is a master class in higher education and how to apply technology to it.In this book an important view of learning is presented which has significant implications for both teaching and the use of technology in higher education This study promotes organizational and technological change in higher education in a rare mixture of vision and practicality and argues elegantly on a sound basis on the research into student learning.

Cassidy (2000) identified both learning style and academic belief systems as significant factors contributing to academic achievement. He evaluated the efficacy of teaching and learning in higher education by investigating the relationship between student assessment of their own academic achievement. Results of his study showed that perceived proficiency increased after completing the taught modules and that perceived proficiency was positively correlated with academic performance.

A study "Chinese Conceptions of Effective Teaching in Hong Kong: Towards Culturally Sensitive Evaluation of Teaching" was made by Pratt in 1999. This study had two purposes: (1) to inform the process of evaluating teaching in higher education in Hong Kong; and ,(2) to contribute to the research on the cross-cultural application of models of teaching effectiveness. The study began with an open-ended survey of students and faculty from six different departments, spread over four Hong Kong universities. Questionnaires were distributed to 405 students and 585 faculty staff. The departments were: Chinese language and literature, accounting, engineering, law, physics and public and social administration. Responses were received from 98 per cent (n=397) of the students and 14 per cent (n=82) faculty. The study provides more evidence that conceptions of teaching, learning, and knowing are deeply rooted in specific cultural antecedents and social structures. It also affirms that the entire process of evaluation of teaching must be recognized as a cultural and value-laden interpretation of all that we observe.

Dennis et al. (1999) reviewed the dimensions of students' perceptions of teaching effectiveness. They used the confirmatory factor analysis procedures to asses the fit of the original solution for student's perceptions of teaching effectiveness questionnaire to a more recent sample of more than 7.000 university classes. The analyses provided a clear interpretation of six first-order and two second-order dimensions of instructional quality that were useful across a board range of university courses.

Creamer(2003)suggested the research projects that would extend the knowledge base about the use of The Council for the Advancement of Standards in Higher Education (CAS) standards and guidelines in useful ways.He described a rationale behind the processes and methods used in professional development programmes and considers what we can learn, from this combined experience, about how to support the professional development of teachers in higher education. Although the focus of the programmes is on initial training for teachers, many of the processes in use are equally valid for continuing professional development

Sheehan and Duprey (1999) reviewed the literature on student course evaluations and collected many sample scales and items. On the basis of a content analysis of these scales and items and a review of the exiting literature, they developed a 27-item Likert scale. The purpose of their study was to identify the characteristics of effective university teachers. This study investigated the interrelationships between items on teaching rating scales with a view to identifying those items that predict effective instruction at the university level. The data reveal five items that predicted 69% of the variance in a criterion measure of teaching effectiveness.

Samson et al. (1987) reviewed the effects of teacher questioning levels on student achievement; the relationship between type or quality of questioning and student achievement. They examined the impact of higher cognitive questioning strategies on learning measures and compared between the results of cognitive questioning strategies and the early reviews.

Eraut (1994) points to the need for three main sources for the learning of a professional: publication, ie access to knowledge and debate, practical experience and the people. He also points out the importance of the links between the three sources. He suggests that a framework for promoting and facilitating professional learning must take into account: (1) an appropriate combination of learning settings (on the job, near the job, home, library, course etc.); (2) time for study, consultation and reflection; (3) the availability of suitable learning resources; (4) people who are prepared (i.e., both willing and able) to give appropriate support and (5) the learner's own capacity to learn and to take advantage of the opportunities available.Furthermore, he suggests that for teachers in higher education learning is the subject of the profession as well as the method.

Blackwell (2003)urges schools of education to shift their emphasis to the knowledge base about student learning, and she provides seven benchmarks for programs that will produce high-quality teachers who understand how students learn.These benchmarks were the following: 1) Knowledge and understanding based on previous experience; 2) Usable content knowledge; 3) Transfer of learning/the learning context.; 4) Strategic thinking; 5) Motivation and affect; 6) Development and individual differences; 7) Standards and assessment.

Hancock, Bray and Nason (2002) investigated the interactive and differential effects of professors' instructional methods and university students' conceptual levels on students' achievement and motivation in a course

designed to teach computer technologies.Matching high-conceptual-level persons with student-centered instruction and low-conceptual-level learners with teacher-centered instruction enhanced students' achievement and motivation in the classroom. In addition, an unpredicted main effect for type of instruction was discovered with respect to motivation-regardless of conceptual level, students exposed to student-centered instruction demonstrated greater motivation than did students exposed to teacher-centered instruction. These findings have ramifications for the design and implementation of computer technology courses and deserve further research.

O'Toole, Spinelli and Wetzel (2000) administered a 23 question instrument to 155 undergraduate business students and 40 business faculty members at Virginia Commonwealth University during the fall 1998 semester. The purpose of their study was to determine the similarities and differences in attitudes of the two populations on factors that influence student learning. The results showed that two groups had similar opinions about the major factors that affect learning. Professors and students both felt that the professor provided a major input in the learning process of students. The important learning dimensions included the delivery of material, which translates into (a) presentation clarity, (b) enthusiasm for teaching, and (c) fairness and quality of the exams.

A study(Sander et.al,2000) used a specially designed questionnaire to explore undergraduate students' expectations of and preferences in teaching, learning and assessment. A convenience sample of 395 first-year university undergraduates at the start of their university life was used. They were enrolled on a Medical, Business Studies or Psychology degree course at one of three British universities. Overall, the similarities in expectations and preferences between the three groups were greater than the differences. Specifically, the students expected to be taught by formal and interactive lectures but preferred to be taught by interactive lectures and group-based activities. Their least favoured learning methods were formal lecture, role-play and student presentations. Coursework assessment preference was for essays, research projects and problems/exercises. Although there was an overall preference slightly in favour of coursework assessment rather than examinations, this was not consistent across all three centres.

Lizzio , Wilson ,and Simons(2002) investigated the relationship between university students' perceptions of their academic environment, their approaches to study, and academic outcomes was at both university and faculty levels. The responses of a large, cross-disciplinary sample of undergraduate students were analysed using higher order path and regression analyses, and the results confirmed students' perceptions as influencing both 'hard' (academic achievement) and 'soft' (satisfaction, development of key skills) learning outcomes, both directly and mediated through their approaches to study. Perceptions of heavy workload and inappropriate assessment influenced students towards surface, and perceptions of good teaching towards deep, approaches to study. Students' perceptions of their current learning environment were a stronger predictor of learning outcomes at university than prior achievement at school. Protocols are proposed to guide more fine-grained analysis of students' perceptions.

Higgins , Hartley , and Skelton(2002)reported the initial findings of a 3-year research project investigating the meaning and impact of assessment feedback for students in higher education. Adopting aspects of a constructivist theory of learning, it was seen that formative assessment feedback was essential to encourage the kind of 'deep' learning desired by tutors. There were a number of barriers to the utility of feedback outside the sphere of control of individual students, including those relating to the quality, quantity and language of comments. But the students in the study seemed to read and value their tutors' comments. Their perceptions of feedback did not indicate that they are simply instrumental 'consumers' of education, driven solely by the extrinsic motivation of the mark and as such desire feedback which simply provided them with 'correct answers'. Rather, the situation was more complex. While recognising the importance of grades, many of the students in the study adopted a more 'conscientious' approach. They were motivated intrinsically and seek feedback which would help them to engage with their subject in a 'deep' way. Implications of the findings for theory and practice were discussed.

Bren et, al.(2001) reported three related studies which investigated how undergraduates used and thought about information and communication technologies (ICT) in the context of learning at university. Data were obtained via questionnaires, computer diary records and focus group discussions. The studies were intended to help universities decide how to incorporate ICT into student learning, how the cost of equipment should be shared between students and institutions, and how university provision should be organised to best fit student needs, attitudes and perceptions. Presentation of the results from the studies was followed by a discussion, which attempted to draw out the practical implications of the evaluation evidence for university policy-makers.

Lea ,Stephenson,and Troy(2003) investigated higher education students' perceptions of and attitudes to student-centred learning. Two studies were conducted, employing the complementary methods of qualitative and

quantitative data collection and analysis. The first study involved focus groups while the second involved an Internet questionnaire. Results showed that students generally held very positive views of student-centred learning. However, they were unsure as to whether current resources were adequate to support the effective implementation and maintenance of such an approach. Implications of these findings are discussed with respect to educational research and practice.

EVALUATION OF THE LITERATURE

In related literature there is a few study researching the similarities and differences in attitudes of undergraduate students and faculty members on factors that influence student learning. Generally, quantitative and descriptive research methods and different surveys were used in the literature and data were analyzed through the prepared questionnaire.It can be said that these methods are profit for subjects and aims of the studies.

The main ideas of the studies in the literature show that faculty member provides a major input in the learning experience and academic achievement of students.But ,here,we should take into consideration that a faculty member is only provider of the major input,but,he/she is not a major input .Because the major input in the teaching and learning process is the student and,so ,all professional teachers must have a good understanding of how student learning happens and and they must understand how to create usable knowledge.

As the main ideas in the literature we think that in higher education making student learning possible' places much more responsibility with the teacher.It implies that the teacher must know something about student learning,and about what makes it possible.Student learning is not just about acquiring high level knowledge How students learn content knowledge and how that knowledge becomes usable are fundamental issues for any teacher.Faculty members need to comprehend how students come to understand, which means knowing how the brain works and how students make sense of disconnected facts to create the patterns called knowledge and they need to know more than just their subject and how individuals experience the subject.Furthermore,they need to well know and apply the educational and instructional technology of his/her course.Although the use of the educational and instructional technologies in the learning and teaching processes is very important problem and topic from the point of view of effective learning and teaching in higher education,we see that in the literature the number of the studies on this topic are more little than the other topics**.**But**,**here,the several important questions are the following:1)Although there is no sufficient evidence in the literature,is the dimension interested in the faculty member's knowledge of subject is independently sufficient for effective teaching in higher education ?;2) Is the student learning just about acquiring high level knowledge? ;3)What lessons for academic planning can we take away from these ideas in the literature?What changes in pedagogy should be adopted by faculty and higher education council?

The focus of the ideas in literature has been on faculty members and teaching rather than on undergraduate students and learning. Naturally,the opinions of faculty member ,who provides major input ,on the essential factors affecting student learning and academic achievement are very important.However,the main aim of teaching is to make student learning possible ,and good teaching encourages high quality student learning ;Consequently,to determine students' opinions on factors affecting their learning and academic achievements may be more important than faculty members' opinions.

Learning dimensions and academic belief systems as significant factors contributing to academic achievement. As above mentioned, a few study (O'Toole, Spinelli and Wetzel; 2000) have been done on the opinions and the similarities and differences between the opinions of the undergraduate students and faculty members on factors that affect student learning and academic achievement. Anyone can only improve the quality of higher education if he/she study its effects on students and look at the experience through their and their lecturers' eyes. So, in order to determine the essential factors affecting student learning and academic achievement, we should not only learn the opinions of the faculty members but also we should learn the opinions of the undergraduate students. Futhermore, the opinions of faculty members and undergraduate students may be different (or similar) on the dimensions affecting student learning and academic achievement.

AIM OF THE STUDY

The main aim of this study was to determine the opinions of the undergraduate students and faculty members on factors that affect student learning and academic achievement.

The sub aims of this study were to:

1) Develop a mean rank ordering of the 23 dimensions affecting learning, for both the students and faculty, and determine the similarities and differences between the two populations.

2) Determine whether the differences between student and faculty opinion on the dimensions were statistically significant.
3) Determine that what councils, faculties ,and faculty members can do help undergraduate students' learning.
4) Propose some suggestions for Turkish Higher Education Council(YOK) and,faculties of education,faculty members and further research and project on the the effective teaching and learning in higher education ,and the further academic planning .

METHODOLOGY
SAMPLE AND GATHERING OF DATA
To determine some of the important learning dimensions influencing academic performance within the classroom environment, a survey instrument was administreted to undergraduate of Primary Education at Canakkale Onsekiz Mart University during the fall semester of 2002. We benefited from the studies in related literature to constitute the survey items of this study;According to the results of the studies in the literature the most important learning dimensions that influenced student learning and academic achievement were the dimensions concerned in faculty members,so,the 11 of 23 survey items were constructed with the items(dimensions)concerned in faculty members.

This survey instrument was similar to that used in a previous study O'Toole, Spinelli, and Wetzel (2000). O'Toole, Spinelli, and Wetzel (2000) administered a survey instrument, which defined 23 instructional dimensions, to undergraduate students and faculty in the School of Business at Virginia Commonwealth University during the fall semester of 1998. The aim of their study was to determine some of the important factors influencing academic performance within the classroom environment. Content validity is the only type of validity for which the evidence is logical rather than statistical and it is difficult to seperate content validity from other types of validity (Kaplan&Saccuzzo, 1989). To determine the surveys' validity we used the technique of content-related validity and according to the opinions of the experts, we attempted to determine whether the survey has been constructed adequately.

Test-retest reliability is relatively easy to evaluate (Kaplan &Saccuzzo, 1989). We used test-retest method to determine the reliability of the survey.It was, carefully, selected and evaluated the time interval between survey's sessions and the reliability of the survey was estimated to be r =0.76 for undergraduate students but the reliability of the survey which was administered to the faculty members was estimated to be r=0.81.Namely, the reliability coefficient of the survey of faculty members was higher than the survey of undergraduate students.

The survey of 168 students included students in Department of Primary Education are required courses for the undergraduate degree in primary education teaching.All classes of this Department had four section and the survey of 168 students included students in all sections of Department. Of the 168, 25% were first classes, 25% were second classes, 25% were third classes, and 25% were fourth classes. The average age of the sample was 22.4 years.

The same instrument was also given to 83 faculty members of Department of Primary Education. Of the 83, 6 were full professors, 2 were associate professors, 21 were assistant professors and 54 were teaching assistants. 45 of the 83 faculty members completed the survey. Of the 45, 3 full professors, 2 associate professors, 12 assistant professors and 28 teaching assistants.

The questions in the survey can be broken down into two parts; The first part includes dimensions over which the professor and lecturer have control. These include questions 1 through 5, 10, 11, 12, 14, 16, 17, 18 and 21. The second part of survey includes the issues that the professor and lecturer have no control over or can control only indirectly. These include questions 6 through 9, 13, 15, 20, 22 and 23.In the survey, a mean score of 4 or higher indicated that a particular factor was either rated very important or extremely important for academic achievements.

ANALYSIS OF DATA
The statistical techniques used in this study were the following:Content-related validity;Test-retest reliability;Frequence and percent;Mean score and arithmetical mean; "t" test ; One-way analysis of variance and Kruskal-Wallis test.

In the study to determine the survey validity it was used the content-related validity,which is the only type of validity for which the evidence is logical rather than statistical (Kaplan and Saccuzzo,1989).In order to determine the reliability of the survey it was used test-retest reliability ,which was relatively easy to evaluate (Kaplan and Saccuzzo,1989). The mean and median scores were computed for each dimension, and a rank

ordering was obtained. The rankings were based upon the mean score for each of the questions.To determine the significance of the difference of means of two groups, it was used some parametric tests such as t-test; one-way analysis of variance; and non-parametric test such as Kruskal-Wallis test.

FINDINGS

To determine the opinions and the dimensions that are ranked of high importance and low importance by the students in Table 1 and by the faculty in Table 2 we present the dimension in rank order by the magnitude of the mean score. To obtain an overall evaluation, the scores were summed across all 23 dimensions for both faculty and students. The maximum total was 120 and minimum total was 24. In our study, the mean total for the faculty was 84.5 and for the students, it was 95.

The mean and median scores were computed for each dimension, and a rank ordering was obtained. The rankings were based upon the mean score for each of the questions. A mean score of 4 or higher indicated that a particular factor was either rated very important or extremely important for academic achievement.

Table 1: Important Learning Dimensions and Mean Scores for Undergraduate Students
(* =dimensions which are statistically equivalent to top dimension)

	LEARNING DIMENSIONS FOR STUDENTS	MEAN SCORE
1.	Faculty member's fairness/quality of exams	4.556*
2.	Faculty member's presentation clarity	4.449*
3.	Faculty member's communication skills	4.301*
4.	Faculty member's knowledge of subject	4.293*
5.	Course's intellectual challenge	4.268*
6.	Clarity of course objectives	4.253*
7.	Faculty member's stimulation of interest	4.189*
8.	Faculty member's encouragement of discussion	3.907
9.	Size of the class	3.875
10.	Faculty member's availability and helpfulness	3.746
11.	Faculty member's course organization	3.427
12.	Relevance/importance of subject	3.403
13.	Importance of course supplements	3.394
14.	Faculty member's enthusiasm for teaching	3.382
15.	Faculty member's concern for class progress	3.369
16.	Faculty member's sense of humor	3.247
17.	Importance of textbook	3.100
18.	Attitude of classmates toward learning	3.091
19.	Whether it is required or elective	3.088
20.	Faculty member's concern for students as individuals	3.002
21.	Hour of day class meet	2.848
22.	Attendance policy	2.796
23	Speed/feedback of exams	2.717

Table 2: Important Learning Dimensions and Mean Scores for Faculty Members
(* =dimensions which are statitically equivalent to top dimension)

	LEARNING DIMENSIONS FOR FACULTY MEMBERS	MEAN SCORE
1.	Faculty member's knowledge of subject	4.302*
2.	Faculty member's communication skills	4.298*
3.	Size of the class	4.294*
4.	Faculty member's presentation clarity	4.290*
5.	Faculty member's fairness/quality of exams	4.106*
6.	Faculty member's stimulation of interest	4.063*
7.	Faculty member's enthusiasm for teaching	3.965
8.	Course's intellectual challenge	3.612
9.	Faculty member's course organization	3.516
10.	Faculty member's encouragement of discussion	3.498
11.	Attendance policy	3.452
12.	Clarity of course objectives	3.367
13.	Relevance/importance of subject	3.345
14.	Speed/feedback of exams	3.313
15.	Importance of course supplements	3.274
16.	Importance of textbook	3.125
17.	Faculty member's concern for students as individuals	3.051
18.	Faculty member's sense of humor	2.988
19.	Whether it is required or elective	2.967
20.	Faculty member's concern for class progress	2.896
21.	Faculty member's availability and helpfulness	2.555
22.	Attitude of classmates toward learning	2.496
23	Hour of day class meet	2.333

Students ranked the fairness/quality of the exam first and the faculty members ranked this dimension fifth. The first dimension of high importance for the faculty member was the faculty member's knowledge of subject but the students ranked this dimension fourth.The response to each of the 23 dimensions was scaled from 1 to 5 . We used the nonparametric statistical techniques such as the Kruskal-Wallis (K-W) and t-test. The difference of means t- test and the K-W procedure were performed for 23 dimensions.

The dimensions on which there were no discernible differences and there were statistically significant differences between students and faculty member are listed in Table 3 and Table 4.We listed the dimensions on which there were no discernible differences between the students and faculty member in mean responses in Table 3. Of the 23 dimensions, there were 13 in which there was no significant difference between the mean score of the two populations.

Table 3: 13 Dimensions on Which There Was No Discrenible Differences Between the Students and Faculty Member

LEARNING DIMENSIONS	t	P
Faculty member's fairness/quality of exams	-0.52	0.49
Faculty member's communication skills	+0.62	0.82
Faculty member's presentation clarity	+1.43	0.11
Faculty member's stimulation of interest	+1.08	0.24
Faculty member's course organization	-0.63	0.59
Faculty member's encouragement of discussion	-0.16	0.84
Relevance/importance of subject	+0.42	0.65
Importance of course supplements	-0.13	0.93
Importance of textbook	+1.07	0.36
Faculty member's concern for students as individuals	+1.29	0.18
Faculty member's sense of humor	+0.09	0.85
Whether it is required or elective	-1.69	0.15
Faculty member's concern for class progress	-0.65	0.33

In Table 4, it was listed the dimensions in which there was a statistically significant difference between students and faculty members.The results showed that in 10 instructional dimensions there was a statistically significant difference between two populations. The positive t value indicated that the mean score for the students was higher than the mean score for the faculty member.This was true for 6 of the 10 dimensions. These dimensions were the following:

a)Faculty member's fairness/quality of exams
b)Course's intellectual change
c)Clarity of course objectives
d)Faculty members' availability and helpfulness
e)Attitude of classmates toward learning
f)Hour of day class meets

Table 4:10 Dimensions on Which There Was a Statistically Significant Difference Between the Students and Faculty Members

LEARNING DIMENSIONS	t	P
Size of the class	-5.42	0.00
Faculty member's fairness/quality of exams	+4.17	0.00
Faculty member's enthusiasm for teaching	-4.83	0.00
Course's intellectual challenge	+3.62	0.00
Attendance policy	-4.09	0.00
Clarity of course objectives	+3.05	0.00
Speed/feedback of exams	-5.19	0.00
Faculty member's availability and helpfulness	+3.65	0.00
Attitude of classmates toward learning	+3.88	0.00
Hour of day class meet	+2.74	0.01

Two of these 6 dimensions are interested in the characteristics of faculty member, that is, in these dimensions students indicate that the faculty members are the important components of the learning process an other two dimensions are interested in course. One dimension is interested in attitude of classmates toward learning and one dimension is interested in hour of day class meets.

On 6 of the items, students scored the dimensions as very important to extremely important. But the faculty member considered them important or very important. On 4 of the items, the mean score for the faculty member was higher than the mean score for the students. These dimensions were the following:

a)Size of the class
b)Faculty member's enthusiasm for teaching
c)Attendance policy
d)Speed/feedback of exams

DISCUSSION

This study demonstrated that both the undergraduate students and faculty members felt that faculty member provided a major input in the learning and teaching processes.Namely,the undergraduate students and faculty members agreed on most factors supposed important to student learning and this result is expected, and furthermore, is generally consistent with the results of other studies in related literature.

But, the first dimension selected and ranked as most important by the students ,which was the faculty member's fairness/quality of exams**,**is an interesting result for us and this result may raises several interesting questions;first,Why they firstly ranked this dimension?;Do not the undergraduate students trust in the objectivity and quality of the examinations?,If so why?;Are not the faculty members fair in the processes of evaluation and assesment processes?

According to the results of our survey students also rated course's intellectual change and clarity of course objectives higher in importance for academic achievement than the faculty members did. Course's intellectual change is directly related to the qualification of the faculty member. This may raise the interpretation, that, for students the qualification of the faculty member may be important as the fairness, availability and helpfulness.According to the results of our survey students also rated course's intellectual change and clarity of course objectives higher in importance for academic achievement than the faculty members did. Course's intellectual change is directly related to the qualification of the faculty member. This may raise the interpretation, that, for students the qualification of the faculty member may be important as the fairness, availability and helpfulness.As above mentioned the quality of the faculty members is very important to improve academic achievement.

This study showed that faculty member provided a major input in the student learning and academic achievement.This result may raises several important questions;first,how teacher preparation programs and professional development oppurtunities should be designed?.

One of the 4 dimensions is concerned with faculty member, that is, from the faculty members' viewpoint the findings suggest that a faculty member should be enthusiastic for teaching. One of the 4 dimensions is interested in speed and frequency of exams. Faculty members saw the speed/frequency of exams as more important and significant to the academic achievement and learning process than the students did. But the students ranked the fairness/quality of exams first (see Table 1), that is, for faculty members the speed/frequency but for students the quality of exams was more important**.** The results showed that the two groups' opinion about the instrument of the assessment and evaluation were not same. The students think that the quality of exams is more important than the speed/frequency of exams, so,this results may raise the question:Why did not the faculty members consider the quality of exams more important?

When we look at the top five dimensions**,** we see, except for the dimension of size of the class, four of the top five dimensions were the same for both groups. Faculty members included the size of the class in their top five, but students ranked this dimension ninth. If we take note of some important problems such as the insufficiencies of educational environments, classes and the quantity and quality of faculty members in Department of Primary Education of Canakkale Faculty of Education **,** it can be said that this finding is very normal.

For the last five dimensions of low importance,the results showed that two of the last five dimensions were the same for both groups; these dimensions were whether it is required or elective and hour of day class meets, and these were factors that the faculty members have little control over. A comparison of O'Toole, Spinelli and

Wetzel's (2000) results with this study show an unusual coherency. For example except for the course's intellectual challenge, the four dimensions selected as most important by the students were ranked in the top 5 by O'Tooole, Spinelli and Wetzel. In our study the first dimension selected as most important by the students was the faculty member's fairness/quality of exams. But in the above mentioned study, the first dimension selected as most important by the students was the professor's knowledge of subject

A comparison of O'Toole, Spinelli and Wetzel's (2000) results with this study does not show not a consistency with the dimensions on which students and faculty members agreed and disagreed. In that study of the 23 dimensions there were 12 in which there was no significant difference between the mean score of the two populations, but in our study there were 13 in which there was no significant difference between the mean score of the two populations.In above mentioned study ,positive t value indicated that the mean score for the students was higher than the mean score for the faculty. This was true for 10 of the 11 dimensions,but, in our study this was true for 6 of the 10 dimensions.

We think that one of the interesting results of the survey is the item concerning to the faculty member's concern for students as individuals.Although this is a very important dimension and moreover one of the six key principles of effective higher education(Ramsden,1992),the faculty members ranked this dimension 17th and students ranked it 20th.This results may raise several questions :Why the students selected this dimension of low importance?Why the faculty member's concern is not important for them?

The main aim of this study was to determine the opinions of the undergraduate students and faculty members on factors that affect student learning and academic achievement. This study demonstrated that both the undergraduate students and faculty members felt that faculty member provided a major input in the undergraduate student learning and academic achievement.Furthermore the related literature and our study show that the faculty has an important role to promote effective teaching and learning and academic achievement and to improve the quality of undergraduate student experience.

SUGGESTIONS

According to the results of this study, to provide the effective teaching and learning in higher education, and the further academic planning the following suggestions, for higher education council, faculty of education, faculty members and further research and project,may be proposed:

1. **Suggestions for Higher Education Council**

1.1. The Higher Education Council should accelerate its studies on the accreditation system to insure the quality and standards of the universities and establish design standarts.

1.2. The Council should promote funding of research in student learning and effective teaching in higher education.

1.3. Students should choose from a richer array of education and training opportunities and they should be transferred from institution to institution with less bureaucratic interference and loss of academic credit.

2. Suggestions for Faculty of Education

2.1. Faculty should take into consideration the results of our study for further academic planning.

2.2. Faculty should ,periodically,prepare the in-service courses on the subjects such as education and instruction technology; adult education; effective teaching and learning in higher education; teaching strategies for effective higher education;the evaluation and assesment in higher education;and communication skills.If we take into consideration the student views on the important lerning dimensions in higher education,the courses concerning with the assessment and evaluation in higher education shold be considered more important than other subjects.

2.3. Faculty should prepare inservice training programs that will produce professional and high-quality faculty members who understand how students learn and academics must take the responsibility for what and how their students learn.

2.4. Faculty should take into consideration that the quality of educational programs and services is linked directly to the quality of professionals themselves.

2.5. Faculty's budget must be increased to provide good institutional,educational and technological support for its students.

2.6. Faculty should take into consideration that the quality of educational programs and services is linked directly to the quality of professionals themselves and so,faculty administration should consider more important for manpower planning than other planning elements .

3. Suggestions for Faculty Members

3.1 A faculty member must be an effective teacher of the subject of knowledge,but, he/she should know that student learning is not just about acquiring high level knowledge how students learn content knowledge and how that knowledge becomes usable are fundamental issues for he/she.

3.2. Faculty members must have a good understanding of how learning happens, and the implications for learning of their actions in the role of a teacher.

3.3. Faculty members must learn to create a synthesis between their knowledge of the discipline and their knowledge of how students learn and they must take responsibility for what and how their students learn.

3.4. Faculty members should take into consideration that quality of assessment procedures is one of the key features of good and effective teaching and giving appropriate assessment and feedback to students one of the key principles of effective teaching in higher education.So,they should use valid assesment methods and give the highest quality feedback on student work.

3.5. Faculty members do not forget that unless they and their students delight in what they are doing,there can be no excellent teaching in higher education

3.6. Faculty members should effectively use of educational and instructional technology in the teaching processes in higher education

3.7. Faculty members should concern and respect for students and student learning.

4. Suggestions for Further Research and Project

4.1. The number of studies about the important learning dimensions that influence student learning and academic achievement in higher education are insufficient in the literature. A lot of further research needs to be done about this topic.

4.2. Further research might also include that the usage and effect of the education technology and instructional technology in the teaching and learning in higher education.

4.3. The projects should be prepared and supported that would extend the knowledge base about the higher education standarts and accredation system.

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