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Analysis Of The Students' Judgments On The Quality Of Teaching Received: Case Of Chemistry Students At The Faculty Of Sciences Ben M'sik.

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Abstract

As part of helping students to find motivation during their university career, we took the initiative to analyze judgments and appreciations made by students on the usefulness of studies and the quality of teaching received and their impact on university motivation: case of chemistry students at the Faculty of Sciences Ben M'sik. 302 chemistry students of different levels from the first year to the Master participated in this survey; they are between 18 and 28 years. The analysis of the results shows that student motivation does not appear the same way in the faculty; this degradation of motivation is due to different factors, among them, the wrong definition of the characteristics of teaching process, the teachers are not interested enough to motivate their students, without forgetting the problems of lack of competition between students, overcrowding and working conditions.

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1. Introduction and problematic :

Promote a better study success and incite to a great university perseverance are two major preoccupations of higher education. Failures and university abandonment are effectively very costly for the student himself, for the higher education system and for the society to. However, success in studies is a complex phenomenon that involves a large number of factors some of which depend of student, other from teachers, and others from the institution. This research is situated in the large context of helping to success, but its intention is limited to the study of affective

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variable belonging to the student, it's a university motivation.

In general, as behaviourists have defined motivation, is a set of biological and psychological mechanisms that allow the triggering of action in its orientation, intensity and persistence. In the learning context, it is a dynamic state based on the perception that a learner can have of himself and his environment that pushes him to a choice of activity, to engage in it and persevere in accomplishing in order to arrive to the goals (Viau 1994).

Other definitions: "Motivation is usually defined as the action of forces, conscious or unconscious that determines behaviour." Houssaye (1993); "Create working conditions that allow students to pass from his impotence acquired to a quality engagement in the activities proposed to him» Bernard Andre (1998).

The failure and abandonment often recognized as consequences of overcrowding and democratization of the university, have however other reasons for existence (Langevin 1996; Wouters and De Ketele 1993; Romainville 2000).

The anterior profile of education (failure, success, results ...), the doubt surrounding the student's orientation are among the reasons for failure in higher education. These are however not the only causes of failure and abandonment, they are also reflected by stress and anxiety as well as the conditions of university life.

As emphasized Romainville (2000) in this regard: Force to focus on the only certification criteria, we don't forget to observe in detail what the student has learned, the meaning and pertinence of its achievements and the degree of mobilizability of knowledge he has accumulated during his studies.

As part of helping students to find motivation during their university career, we took the initiative to analyze judgments and appreciations made by students about the usefulness of studies and the quality of teaching received and their impact on university motivation for chemistry students at the Faculty of Sciences Ben M'sik.

2. Method:

2.1. Participants:

A large group of 302 chemistry students from the faculty of Science Ben M'sik participated in this study including 193 girls and 109 boys with an age range from 18 to 28 years, and a mean of 21, 5 years, distributed according to the levels from S2 to the Master.

Tab1: Distribution by gender

	2 nd Semester (S2)	4 th Semester (S4)	6 th Semester (S6)	Master	Total	Age (mean)
Female	40	73	46	34	193	21,45
Male	33	32	31	13	109	21,68
Total	73	105	77	47	302	21,56

2.2. Measures

Our questionnaire is composed of 61 questions divided into eleven themes is distributed to students in order to fill it. In this paper we will take a special interest to the third theme (Study and teaching). To answer the questionnaire it is sufficient most of the time, to check the box that corresponds to the corresponding situation to the student.

2.3. Procedure:

The survey was conducted in May 2014 and we collected 302 completed questionnaires of the 350 copies distributed. The questionnaires were distributed to students at the end of a course. A period of 10 minutes was devoted to the presentation of the questionnaire, its goals and how to respond. Then, the following 30 minutes were

allowed for students to complete the questionnaire. The questionnaires were collected immediately by the experimenter.

2.4. Analysis:

After the data collection, we used SPSS 20 software for data processing and analysis. Our interest in this study is focused on providing useful information on how students judge their studies, both in regard to the teachings they are taught that certain characteristics of their discipline or some of their study conditions, particularly of social or relational order. Here we propose to account for these "judgments" pronounced on studies in four main viewpoints.

2.4.1. Usefulness of studies:

Tab 2: Response to the question "The studies are useful for me to" ... (scale from: 0 = not important to 6 = very important). The means of responses.

	S2	S4	S6	Master	Female	Male	Total
Ensure me a good revenues	3.45	3.03	3.52	3.55	3.56	2.89	3.33
Attain a high social position	4.48	4.02	4.60	4.19	4.4	4.13	4.30
Cultivate and enrich my personal thought	5.28	5.24	4.76	4.89	5.13	4.93	5.07
Learn more about chosen field	4.93	5.19	4.72	4.71	5.03	4.75	4.93
Receive a good disciplinary training	5.06	4.98	4.73	4.90	4.98	4.78	4.93
Become a person with a large general culture	5.11	5.17	4.61	4.91	5.16	4.60	4.97
Can better help others later	5.37	5.13	4.60	4.67	5	4.87	4.97
Contribute to the improvement of the society	5.10	4.78	4.56	4.40	4.78	4.61	4.73
Push as much as possible the entry in working life	4.05	2.88	3.57	3.32	3.29	3.62	3.41
Develop my capacity for expression	5.12	4.38	4.40	4.60	4.61	4.54	4.59
Get self confidence	4.48	4.65	4.78	4.65	4.57	4.77	4.64
Making friends	3.22	3.33	3.69	2.64	3.16	3.47	3.26
Acquire knowledge to make	4.87	4.88	4.60	4.53	4.77	4.73	4.74
Acquire knowledge of their rights	4.82	4.41	4.27	4.30	4.5	4.42	4.46
Acquire a sense of duties	5.23	4.65	4.40	4.5	4.64	4.83	4.69
Learn how to reason	5.16	5.04	4.95	4.86	4.95	5.15	5.01
Better understand the society	5.27	4.3	4.50	4.55	4.69	4.53	4.61
Materially support my family	5.35	4.81	4.69	5	4.84	5.14	4.93

The first pertinent question that was asked in this axis was: Studies are useful to me because ... 18 answers are suggested and students respond according to their situations on a scale ranging from (0 = not important to 6 = very important). Chemistry students at the faculty have a fairly traditional view of the usefulness of studies, mainly because they see this utility first in the acquisition of a cultural and personal enrichment then in learning how to reason and in third position there are two components that describe the usefulness of studies for students: Becoming a person with a large general culture and to better help others later.

The acquisition of knowledge about the field of study, receiving a good disciplinary training and material support of the family is in fourth place for students of chemistry in our faculty.

For this vision of the usefulness of studies based on a classic university model, students add a fifth component, which is that the acquisition of knowledge to make. The assurance of a good revenues and making friends are classified according to the students as latest utilities of studies in the faculty.

The students of the first year (S2) have the special feature to value, significantly more than all other students, the vast majority of utilities already presented, especially the pedagogical utilities and the utilities that have social goals. These are the most motivated students and more optimistic about the usefulness of university studies. As against the

Masters students who are the most pessimistic and most unmotivated because they see the usefulness of university studies summarized just for the assurance of good revenues.

The analysis of the variation in the understanding of the usefulness of studies by gender indicates that girls give significantly more than boys, a personal development function to university studies. Thus, they attribute higher utility scores than boys to the dimensions "become a person with a large general culture," "cultivate and enrich my personal thought," "learn more about chosen field", "can best help others later, "" receive a good disciplinary training", " contribute to the improvement of the society, "" acquire knowledge to make ", " better understand the society", " develop my capacity for expression, "" acquire knowledge of their rights" , " attain high social position "and" ensure me a good revenues. "However the boys value most the others dimensions.

2.4.2. Judgments and appreciations made on some characteristics or dimensions of the teaching process:

Tab 3: Response to the question "In your opinion, to what extent, in your establishment your main discipline is characterized by: ..." (Scale from 0 = never to 6 = always). The means of responses.

	S2	S4	S6	Master	Total
Strong requirements	2.96	3.36	3.17	3.68	3.28
Well-structured studies	3.83	2.62	3.10	2.8	3.05
A clear understanding of what is expected for exams	2.82	2.10	2.42	2.33	2.39
Relations with research in teaching	3.77	2.98	3.17	2.86	3.19
A good preparation for a profession	3.98	3.57	3.22	3	3.46
The acquisition of transversal skills	4.05	3.50	3.45	3.04	3.53
Oriented studies towards the international	3.76	3.03	3.16	2.61	3.16
The use of information technologies and communication in teaching	3.81	2.94	3.69	2.93	3.33

Except the requirements that are perceived higher among students of the Master, S2 students are significantly above the others levels. They see studies as more structured, well clear knowledge of what is expected for exams, the relation teaching- research as more established, studies prepare adequately students for a profession, they help the acquisition of many transversal skills, they are the studies more oriented towards the international and the use of information technologies and communication in teaching is very important at the faculty. As against the students at the master are the students who devalue the most the vast majority of these characteristics of the teaching process. Little impact of gender is observed on these appreciations.

2.4.3. Judgments about some important aspects of teaching and course offerings:

Tab 4: Response to the question "Your study conditions are marked by ..." (Scale from 0 = never to 6 = always). The means of responses.

	S2	S4	S6	Master	Female	Male	Total
Competition between students	3.34	3.72	3.70	3.86	3.92	3.17	3.65
Good relationships students / teacher	3.53	3.07	3.81	3.76	3.45	3.57	3.49
Disadvantage striking students	3.49	3.83	3.30	3.13	3.5	3.54	3.5
Overcrowding of courses and seminars	3.44	4.49	3.46	3.13	3.77	3.71	3.76
The necessity of an intense work for the studies	4.86	5.41	4.46	5	5.11	4.69	4.97

The study conditions are marked principally by the necessity to work intensely for studies, by overcrowding of courses and by competition between students. And the means obtained by "good relationships student / teacher," and "a disadvantage striking students" are the most inferior.

The averages obtained by the "necessity to work intensely for the studies" are conform to what was indicated in the perception or not of the strong requirements in faculty, for them, the requirements of the discipline are average (3.28) but we must satisfy them with an important job and really with too high intensity (4.97).

These perceptions are under the influence of gender for 2 items: girls see that there is more competition between students; and affirm more willingly the necessity to work intensely for the studies (mean 5.11 vs 4.69 for boys). On the other side the boys make good relationships with their teachers than girls.

2.4.4. Judgments made about some teaching situations encountered:

Tab 5: Response to the question "The following affirmations do they apply to teaching situations that you were confronted during your studies?"(Scale from 0 = never to 6 = always).The means of responses.

	S2	S4	S6	Master	Total
During the last semester, some courses were canceled	1.74	2.91	3.25	2.31	2.60
If necessary, the teaching staff advises me	2.86	2.53	2.48	2.22	2.55
I have the impression that teachers have well prepared their courses	3.44	2.60	2.85	2.75	2.90
The exams results were explained to me by an understandable manner	2.31	2.17	1.89	1.97	2.10
Comments and suggestions of the students are taken into account by teachers	2.76	2	1.89	1.81	2.13
In courses and seminars, teachers talk about their own research	1.84	1.54	2.20	2.22	1.90
My teachers help me for the realization of written work	2.18	1.49	2	1.56	1.81
Teachers arrive to cover the whole program	2.82	2.25	2.01	2.04	2.30
Teachers give practical examples of applications in their courses	3.18	2.45	2.63	2.65	2.71

Still on the subject of "studies and teaching", a question asked about certain teaching situations that the students had been confronting. Their answers show clearly how they perceive the work of teachers. They ranged from 0 (never) to 6 (always).The first proposed situation was clearly negative. For the cancellation of courses the average is 2.60 at the faculty, which means that the cancellation of courses is minimal and the program is often completed.

The situation is different between the levels where the situation of cancellation seems too frequent among students in (S6) and it seems extremely rare among students in (S2).

It would obviously know to what to attribute these differences (for example: fluctuations of professional conscientiousness? Or overload of activities and insufficient supervision rate?) Eight other proposed situations had positive aspects of the teaching activity.

In general, these positive situations seem more encountered among students of the first year (even if the grand mean is not sufficiently important 2, 67) where, in particular, students see their teachers prepare well the course in advance, they usually arrive to give examples of practical applications in the classroom, teachers often give advice when needed and they often succeed to cover the whole program. Students in S4 are classified after those of S2 for the valorization of the majority of these items.

Generally, the weakest points are:

- Helping for the realization of written work.
- In courses and seminars, teachers talk about their own research.
- Explanation of examination results in an understandable manner.
- And taking into account the suggestions and comments of students by their teachers.

According to levels for these 4 items (the lowest points) .The fate of the students of the license and the Master is the most unfavorable for two of them: the explanation of examination results and taking into account the suggestions and comments of students by their teachers.

For all the positive aspects, the most unfavorable situations are observed among girls. While the situations (relatively) considered as the most favorable are observed among boys.

3. Conclusion

The analysis of the results shows that student motivation does not appear the same way in the faculty; university students usually enter to the university with a strong motivation. However, it decreases over time.

Examination of these results shows that students of the first year affirm to have a high motivation to take their courses, while those in the master affirm less motivated. The gap between these student groups is statistically significant.

This degradation of motivation is due to several factors, among them the traditional teaching methods used by some teachers, the classical view of the students regarding the usefulness of the studies, the wrong definition of the characteristics of the process of teaching, teachers are not interested enough to motivate their students, without forgetting the problems of the insufficiency of competition between students, the problems of overcrowding and working conditions.

These different problems negatively impact student motivation, through against the inclusion of motivation during the process of learning positively influences the university success and the performance of learners.

These results correspond to one axis only (Study and teaching) from eleven other axes, that's why we point out that these findings are not definitive; future research in the PhD thesis will supply more enriched explanations.

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