

Evaluation of the Teaching Process at the Czech University of Life Sciences in Prague

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Introduction

Regarding the fact that university education is under strong social pressure and closely observed by the public, it is necessary for the university education quality to be demonstrable and visible, and the public should be made sure that it really exists and is provided for. The evaluation processes are one of the possible ways to ensure and assess the quality of the educational process.

The evaluation instruments are varied in various countries; we would like to mention one way of using them. In accordance to the long-term vision of the university and with respect to its membership in the prestigious Euroleague for Life Science (ELLS), the Czech University of Life Sciences (CULS) has introduced a system of quality assurance in education, based on similar principles that have been and will be used at member universities of ELLS.

CULS has had longstanding experience with evaluation procedures, their disadvantage being a certain fractionalism and methodological disunity at individual faculties and other parts. Owing to the fact that the instruments and ways of evaluating the teaching were heterogeneous at individual parts of the university, the CULS management authorized in 2006 the Institute of Education and Communication (IEC) to manage and realize methodologically *a unified way of evaluating the educational process at all parts of CULS (both faculties and institutes)*.

The characteristics of present unified system of evaluating the educational process at CULS

The current concept of evaluating the educational process is classified into 4 grades:

1. level – regards a teacher and his/her subject; the system is superintended by the department's management.
2. level - regards a faculty and its study programmes; the system is superintended by the faculty's management, mainly the vice-deans for pedagogical activities.
3. level – is superintended by the university management who has authorized the Institute of Education and Communication to organize and realize the evaluation research in the field of teaching process.
4. level - is realized irregularly by an external evaluation team of international experts who are invited by the university's management, or it is realized by the Accreditation Committee of the Ministry of Education of the Czech Republic, which works as an independent body assessing the quality of the realized accredited subjects at the university.

Our paper deals with the third level. At this level, we analyse one evaluation sphere by **finding out the teachers' and students' opinions of the educational process** in relation to particular subjects. Since 2006, IEC has been doing a pilot evaluation research of the teaching at CULS in Prague, which has become a routine process realised twice an

academic year. The basic method used is a **questionnaire for teachers and students** filled in at lectures and seminars. This is followed by an **analysis of the results and their interpretation** while attempting to deduce the causes of the ascertained situation.

For the survey, three types of questionnaire were prepared:

A) a questionnaire for teachers

B) a questionnaire for students at lectures

C) a questionnaire for students at seminars

The respondents can express their views of the questionnaire's items by means of a 6-grade classifying scale which enables a reasonably precise assessment of each educational parameter. *Grade 1* refers to *minimum level of assessment* (the smallest satisfaction of a respondent), *grade 6* expresses *maximum level of assessment* (the highest satisfaction). There is also a possibility of „*I can't assess it*“ for some items in the students' questionnaires and for all items in the teachers' questionnaire. It is methodologically important to use an even scale so that the respondent cannot choose the middle position and it is possible to deduce the tendencies. All questionnaires incorporate a part for free expression of ideas on the subject, the teacher's performance and the teaching conditions.

The questionnaires are presented in print to all students jointly at a lecture or a seminar after having agreed with the lecturer who fill them in as well. The printed form of the questionnaires is rather demanding in terms of technology and time, but the research results prove that such a method has a lot more realistic and apter results than using the electronic way of research. When filling in electronically, students could in their free time express to the same items, but perhaps under an emotional experience of an exam, or under other social influences. A relatively similar emotional situation of students, when the researcher uses the traditional printed form and can – if need be – explain unclear statements, significantly helps to objectify the results.

The total of teachers is set according to the university management so that a particular teacher is included into an evaluation research once a 3 or 4 years. Teachers from individual parts of CULS are chosen by the method of stochastic choice (in the ratio equivalent to the total of teachers at individual faculties or institutes of CULS).

The filled-in forms are scanned and numeric information is processed by the statistical programme of SPSS. The free expressed views are verbatim transcribed, examples of free views of both students and teachers are cited in the final report and all free views are stated in the result section of individual faculties under the names of particular teachers.

Currently, the **teacher's questionnaire** contains besides a simple characteristics of a respondent 17 items grouped in the following categories: assessing the manner of teaching process, the level of communication with students, assessing the teaching conditions, and the satisfaction with the students' results. In some of the categories, it is actually an auto evaluation which – when analysed – helps to assess the level of self-reflection of a particular teacher.

Students' questionnaires contain besides the basic characteristics of a respondent 17 items in lectures and 22 items in seminars.

The items are classified in the following sections:

- *students' opinions of the subject* (what is their view of its benefit for their professional and personal development, how well it fulfils their expectation etc.)
- *assessing the teaching conditions* (suitability of the teaching space, connection to practice, subject assurance by information resources etc.)
- *students' opinions of the teacher* (what is their view of him/her as a professional, intelligibility of his/her explanation, the way of communication with students etc.)

- if it is a seminar, they also express their view of *how well the seminar fulfils its function* (revising and practising the subject matter, understanding it, gaining skills by one's own activity etc.)
- the end of the questionnaire always offers a space for free expression to any part of the questionnaire or the teaching as a whole.

So far, the gained results of the research in a particular term/semester are processed into a **joint report** which presents and interprets total results of individual parts of CULS (faculties and institutes) and into a **partial report from individual parts of CULS** with particular results according to individual teachers included into the survey. The partial report always contains the teacher's questionnaire's results of a particular subject in which the research has been done side by side to questionnaires' results of students who were present at the lesson. The members of Rector's Board are always presented with the complex results of the evaluation research after each term. The joint report and results according to individual parts of CULS are handed over to the university management, faculty deans and to the institutes' directors. The deans of the faculties and vice-deans for teaching discuss the results at the corresponding level according to their discretion. The evaluation results regarding individual teachers are considered sensitive information and are dealt with in a corresponding ethical manner.

Some findings of the evaluation survey in the winter term of 2007/08

The research in winter term 2007/2008 included total of 61 teachers and 1180 students. 725 students' questionnaires regarded a lecture evaluation and 455 questionnaires regarded the seminar evaluation.

Students' opinions – results regarding the evaluation of lectures.

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Total average numerical value for all university was **4.45** (see above), which is a positive result because it is situated in the right part of the scale, that is above the average!

An important and **delightful finding**, statistically documented in all up-to-now realised surveys, is that students assess by **5.33 scale level the teachers as professionals in their field**. That reflects a high professional standard of teachers at all parts of CULS! While high professionalism of CULS teachers is indisputable, other items show unsteady results, such as the intelligibility of teaching, teachers' relationships to students and the possibility of students to express their opinions. The item qualifying the teacher's ability to *create a positive and friendly atmosphere* ranges from highest possible level of 6 (the best level of the evaluated attribute) to exceptional levels of 2.59. The levels of an important attribute for students „*the intelligibility of teaching*“ run from an excellent level 5.93 to 2.54 level.

The students also used the opportunity to express freely their opinions of the subject as well as the teaching conditions and the teacher.

Examples of some opinions are mentioned below (both positive and critical). It is a verbatim transcription from the questionnaires. These free views always refer to a particular subject and a particular teacher, therefore it is not possible to make any generalising conclusions.

Examples of students' views of the subjects:

„*The subject is interesting and in the present times also very beneficial for one's personal life!*“ „*The subject contributes very well to the content of my field!*“ „*The subject thematically overlaps with from last year.*“

Examples of students' views of the teaching conditions:

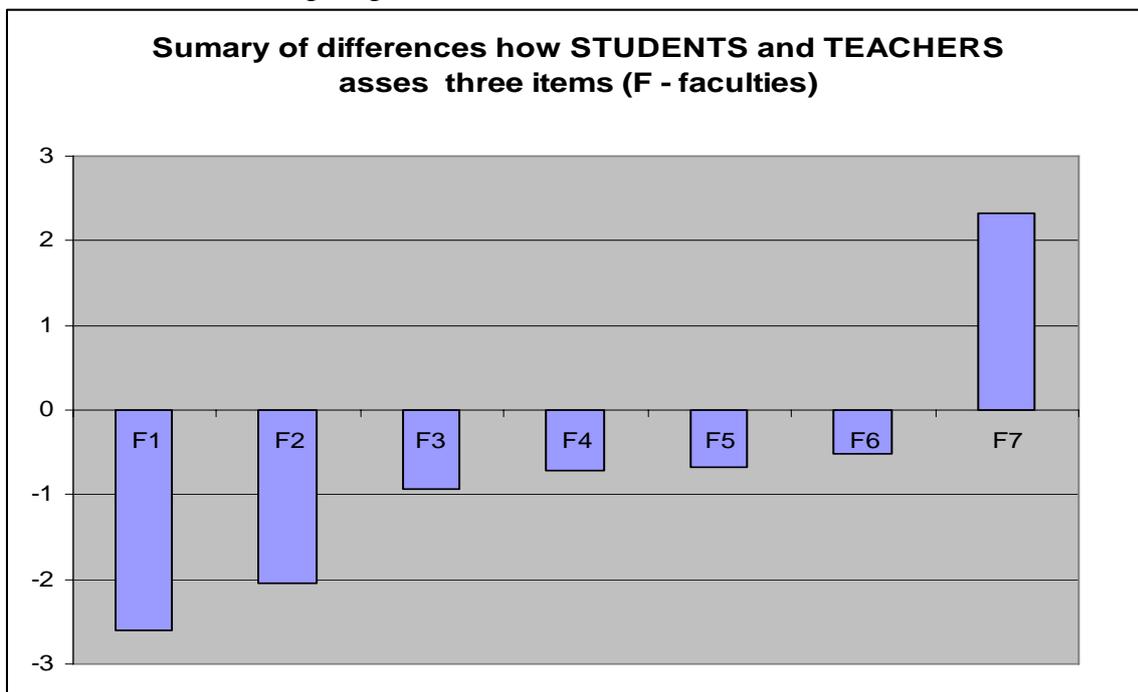
In this section there were hardly any comments; if any then mainly of critical nature because good teaching conditions didn't induce any free expression.

„Insufficient capacity, overcrowded classroom!“ *„Few new lecture notes ...“*

Examples of students' views of the teachers:

„Maximum satisfaction, I have no reservations.“ *„An excellent approach, excellent professionalism, perfect seminars with ...X“* *„Outstanding interconnection of theory with practice, perfect samples from practice, from real life.“* *„I would like to mention the strengths: creating a friendly atmosphere and giving us the opportunity to express one's own opinions and making us active during the lectures.“* *„Refrain from monotonous lecturing and from partly arrogant and condescending attitude.“* *„I don't like lectures of the teacher X...“*

Teachers in their questionnaires also expressed their views of similarly formulated items as students, so a comparison was possible in such items that related to a particular teaching aspect. Generally, it became apparent that teachers assess certain aspects (intelligibility of their teaching, the level of motivation and interestingness of teaching, students' opportunity to express their opinions) much more positively than the students. The differences are sometimes considerable. A total of differences between the numerical value gained from students and the value from teachers was made (students minus the teacher) with four, so called coupled items (that is items similarly formulated for students and teachers). The items used included the intelligibility of teaching, the motivation level, the communication level between students – teacher and students' opportunity to express their views. A negative total of differences was reached when teachers assessed the aspect by a higher value than the students. A positive total of differences was reached when the students assessed the aspect by a higher value than their teacher who assessed himself/herself „more strictly“ than his/her students. A sample of results is shown in the following diagram:



It is delightful to read that teachers consider students well prepared at exams, assessing them by 4.2 grades of the scale (above average). In free views, teachers tend to express positively towards the students, and there is a consensus between their views and students' views with respect to critical comments on the teaching conditions in several subjects.

Examples of teachers' free views are following:

„Attentive, motivated, appreciative students, pleasant atmosphere at lectures.“ „They are responsive, attentive, and cooperative.“ „I miss basic rules of polite behaviour.“ „Little interest in the subject.“ „Fewer students in a group.“ „Larger classrooms with adequate equipment, also making the students' groups smaller.“

Some conclusions

1. In the current phase of the evaluation survey, it has not been the purpose to rank individual faculties and institutes according to the results. The aim was to offer an overview of current opinions both of students and teachers of the educational process at CULS to the staff concerned and to corresponding members of the academic management. Also, the goal was to compare both important component of the teaching process (teachers – students). That is the basis for improving the educational process effectively.

2. So far, the evaluation research has statistically proved that in student's opinions, the teachers are of very good professional standard, they possess a high professional reputation. That can be considered an important strength of CULS.

3. In contrast to teachers' respected high professionalism, the students critically assess their ability to attract and motivate. It can be deduced that teachers should better analyse the ability of self reflection in that aspect, eventually should go on learning in that field.

4. A friendly and positive approach should be one of the essential attributes of a teacher; however, students miss that approach with some teachers.

5. Students often critically comment on the insufficiency of appropriate and available information resources for a taught subject; surprisingly, a certain dissatisfaction of a similar nature can be found with teachers. We believe that LMS Moodle could quickly and effectively help solve this protracted problem.

6. The absolute majority of teachers included into the evaluation this term are experienced teachers (more than 9 years of experience). Regarding the general level of their self-reflection in the field of university pedagogy knowledge, there is a space for developing the teaching competences of the teachers.

7. It is delightful that most teachers assess students' results at exams positively as well as their interest in the studies.

A conscientious and thoughtful manner of filling-in the questionnaires both by students and teachers in most cases proves that the used method and instruments provide relevant data and are functional. We believe that the results can help well to increase the teaching efficiency of the educational process thanks to the feedback provided by the evaluation research.

We suppose other evaluation instruments could be included, such as personal interviews both with students („focus group“) and teachers, the analysis of study results in certain subjects with regard to researched data from the questionnaires, finding out the opinions of individual study programmes both from students and teachers. Last but not least, the observation on lectures will be offered to teachers (if interested) with a follow-up analysis of his/her teaching, which in fact has already happened several times and the result has been received with thanks.