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ATTITUDES OF FUTURE TEACHERS TOWARDS EVALUATION OF UNIVERSITY COURSES

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Abstract: This paper is about evaluation of university courses which represents systematic monitoring and gathering of data pertaining to cognitive, experiential, and psychomotor, as well as biological, social and factors of self-actualisation, with the purpose of producing feedback on the effectiveness of the process of teaching. When evaluating university courses, it is possible to use different evaluation procedures which can contribute to the overall quality of teaching.

The author aims to determine whether students perceive the evaluation of university instruction in a positive way. Also, how much previous experience with evaluation (primary and secondary level) influences their attitude on the importance of evaluation as a part of university courses. Furthermore, the research also dealt with the degree of honesty in students' answers. Additionally, the intention was to find out whether evaluation should be thought out creatively.

The results of the research show that the students who participated in this study had very little experience with evaluation of teaching in their previous primary and secondary education, but that they want it to be implemented in university courses.

Keywords: didactics, university courses, summative evaluation, formative evaluation, future teachers.

Introduction

In our work we encounter the term evaluation on a daily basis. It is an unavoidable and important topic when discussing the process of education. Moreover, it is a didactic phenomenon which undergoes much criticism, but is also the source of considerable controversy for both didactics experts and educationists. When evaluating the educational process, it is necessary to specify the criteria according to which the instruction can be evaluated as successfully as possible. This didactic phenomenon is very specific in its complexity and for this reason various sources provide different definitions of the same term (sometimes presented as synonyms). Evaluation is derived from the French word évaluation which means to determine the value or estimate,

and similarly in English the term signifies an estimate or an appraisal. Likewise, the context of evaluating instruction assumes the appraisal or assessment of university instruction. This research does not consider evaluation whose main goal is the overall grade/score, but deals with evaluation as information which reveals much about the educational climate (social and emotional), communication between professors and students, as well as that between students (one-way communication, two-way communication, violent / nonviolent communication) and learning and teaching environment of university instruction (what the sorroundings and the organisation of classroom space are like within instruction).

Evaluation is often defined as the process of systematic gathering, analysis and interpreting of information with regards to the degree of realising the goals of education, in other words the goals of instruction. (Matijević & Radovanović, 2011) If the main goal of the university instruction is the development of a wholesome personality and the meeting of students' interests and needs, it is indeed important to consider the (un)pleasant aspects of students' instruction which can be successfully detected by means of evaluation. *Evaluation is, thus,* recognised as the third stage of the educational process which should encompass all subjects in the process of instruction, and its microstructure is composed of: monitoring, assessment and guidance. (Bognar & Matijević, 2002).

Commonly we speak of *internal* and *external* evaluation. If the evaluation takes place within the faculty (institution), it is considered internal, whereas, for example, the evaluation that is done by the University[1] or the Ministry[2] is labelled external. Furthermore, evaluation can be *formative* and *summative*. Accordingly, the cumulative grade which involves the overall participation and results of each individual student represents summative evaluation. Primary and secondary school teachers are not the only professionals who are required to monitor the work and progress of each student while at the same time providing optimal conditions in order for each student to achieve the best possible results. This is also the duty of university instructors and professors who by means of frequent feedback from students (evaluation sheets, puppets, role play, written reports, "microphone" exercises …) detect difficulties and attempt to help them overcome such obstacles. This is referred to as formative evaluation. It is my opinion that presently in Croatia and worldwide formative evaluation of students is not given enough attention, due to the fact that the final grade still primarily depends on students' test scores.

Croatian and international research increasingly deals with primary and secondary school evaluation of instruction, more so than the evaluation of

[1] Josip Juraj Strossmayer University of Osijek (hereinafter referred to as the University).
[2] Ministry of Science, Education and Sports of the Republic of Croatia (hereinafter referred to as the Ministry).

university instruction. *Accordingly, the importance of evaluation is discussed in the the work of Seiß (2001) which refers to over 40* instruments (or, in her words, methods of teaching) most of which have been used in the majority of schools in Saxony, and which were created in order to provide teachers with tools for the assessment of different aspects of their instruction. The manual presents a wide range of various types of evaluation methods: a) *Questionnaire on study behaviour before examination, b) Questionnaire on group behaviour after a project assignment, c) Questionnaire for students on self-evaluation of methodological competences*, *d) Questionnaire for students on self-evaluation of social competences, e) Questionnaire for students on self-evaluation of professional competences, f) Questionnaire for students on self-evaluation of work organisation*, *g) Questionnaire for students on self-evaluation of conflict resolution procedures*, *h) Questionnaire for students on self-evaluation of language skills*, *i) Questionnaire for students on problem analysis in the study process*, *j) Questionnaire for students on teacher evaluation*, *k) Questionnaire for students on assessing classroom atmosphere*, *l) Questionnaire for students who leave school*, *m) Questionnaire for parents*, *n) Questionnaire for teachers on working conditions*, *o) Questionnaire for teachers on classroom behaviour*. Listed are also examples of open interviews (as well as other methods) which can be used for evaluating university instruction as well.

Ermler and Kovar (1990) discuss qualitative evaluation as one of the approaches which might foster introducing change in the university instruction. Accordingly, the authors state that this assessment method contributes to the gathering and interpreting of data and at the same time includes all groups and individuals which are involved in a certain issue. As opposed to qualitative research, qualitative evaluation helps in situations which are characteristic of decision making by attempting to include all individuals and groups connected to an issue in all stages of data gathering and interpretation.

Models of qualitative assessment were used by Guba and Lincoln (1989) who suggest the implementation of the following nine steps: (1) identifying the problem (any individual or member of a group can identify a problem), (2) identifying a stakeholder (identifying all those who are connected to the issue or who might pose questions), (3) focusing on a statement; answer (creating alternative problem statements), (4) specifying the priorities regarding questions, concerns and problems (a group of representatives mutually discusses the questions posed in step three), (5) specifying the data and identifying the criteria (decide which documents are to be collected, choose criteria for data assessment), (6) gathering data (gathering data is not limited to one instrument, method or person/group, (7) presenting data and preparing the presentation timetable (each group prepares a timetable presenting the optimum solutions), (8) negotiating solutions (the group of

representatives jointly reaches a compromise solution) and (9) drafting a report or an action plan.

> *"Today's understanding of the concept of evaluation is more dynamic and it is based on the coherently developed goals of evaluation, in other words its implementation."* (Borić, Peko, 2005, 82)

The work of Cranton and Legge (1978) focused on the evaluation of university instruction, as a result of which they described and presented a practical and applicable evaluation model divided into four stages: (1) the preparatory phase which defines the purpose of the evaluation, (2) the planning phase specifying the individual phases of the evaluation process, (3) the self assessment of data gathering and evaluation processes, (4) macro evaluation, synthesis and overview of the results.

Evaluation indeed goes hand in hand with the permanent development of a teacher's competence, and in light of this a great importance is given to *self-evaluation* which is

> *"...observed in the context of the development of a teacher's professional competence indicated foremostly through the quality of education, in other words the quality of teaching and learning."*, (Klapan & Redžić, 2007, p. 463).

Therefore, self-evaluation should be perceived as a durable process in which various constructs, judgements and decisions are gathered, analysed and performed, by means of which an individual is made aware of their own qualities and flaws and is given the opportunity to create appropriate conditions for the development of a wholesome personality.

Research methodology

The survey included N=111 respondents, all of which were the future teachers in their fifth year of study at the Faculty of Teacher Education in Osijek. The instrument constructed for the purpose of this research was a questionnaire (Likert scale involving five-level items from 1 – Strongly agree to 5 – Strongly disagree) consisting of 18 statements. The research was conducted in January 2011 as a part of the university instruction within the topic "Evaluation". This chapter employs the quantitative data analysis for the purpose of supporting or rejecting the proposed hypotheses.

Goals and tasks

This study focuses on the analysis of university instruction and the goal of this research is to find out what the attitudes of future teachers are with regards to the evaluation of university instruction.

Tasks:
- To encourage evalution of university instruction
- To introduce students to different types of evaluation
- To introduce students to creative evaluation

Hypotheses

In accordance with the aforementioned goal of this research, here are the proposed hypotheses:
H1: Students perceive evaluation of university instruction in a positive way
H2: Prior experience (primary and secondary level) with evaluation of instruction may influence the students' attitude on the importance of evaluation in university instruction
H3: Evaluation should be thought out creatively
H4: During evaluation students are likely to report what their professors want to hear

Results and interpretation

Table 1. illustrates that students perceive evaluation of university instruction in a positive way (93,69%) and find it important to continue this practice (83,9%). An important information is obtained by means of the answer to the question whether students within university instruction got new ideas for evaluating their future teaching. The percentage of 86,5% is certainly encouraging because it confirms that success was achieved in enabling students to participate in different evaluation activities which will assist them in their future teaching (as examples). The presented data confirm the first hypothesis (H1: Students perceive evaluation of university instruction in a positive way).

To which degree do you agree with the following statements:	Strongly disagree		Disagree		Neutral		Agree		Strongly agree	
	f	%	f	%	f	%	f	%	f	%
I perceive evaluation in a positive way	/	/	2	**1,8**	5	**4,6**	35	**31,53**	69	**62,16**
Evaluation needs to be implemented in university instruction	1	**0,9**	3	**2,7**	14	**12,5**	36	**32,4**	57	**51,5**
I got new ideas for my own evaluation	1	**0,9**	7	**6,3**	7	**6,3**	47	**42,3**	49	**44,2**

Table 1. How students perceive evaluation

It is definitely important to question how honest the students are in their answers since it has been detected that the results of anonymous university surveys (evaluating the instruction of individual instructors/professors and their respective courses) which are successfully implemented by the University at the end of each academic year are much more unfavourable than those obtained by the instructors as feedback within their courses. What is impressive is the result that shows that 85,6% of the students during evaluation state what they really think, while 73,9% do not agree that during evaluation they write what their instructor wants to hear. This was also an eliminatory question which illustrated that up to 11,7% of the students responded to the same question in a different way, leading us to again question their honesty. Even though anonymity is guaranteed both during the university and individual course survey, there are significant differences between the two. These results cause us to reject the fourth hypothesis (H4: During evaluation students are likely to report what their professors want to hear), due to the fact that there is a large percentage (excluding the discrepancy of 11,7%) of the students who are reportedly honest in their evaluation.

In addition to honesty, equally important is the experience connected to evaluation during students' previous education. Surprisingly, 90,1% of the students have not encountered formative evaluation in primary, as well as secondary (89,1%) school, however, despite previous experience, the students

perceive that formative evaluation is important, and 96,4% of the students report that they will use it in their future teaching instruction. A fascinating fact is the difference of 1% which reveals that the students encountered formative evaluation of secondary school instruction on more occasions than that of primary school instruction. These data are an indicator of particular importance of providing future teachers with skills and knowledge to use formative evaluation in their teaching.

To which degree do you agree with the following statements:	**Strongly disagree**		**Disagree**		**Neutral**		**Agree**		**Strongly agree**	
	f	**%**	**f**	**%**	**f**	**%**	**f**	**%**	**f**	**%**
We evaluated our primary school instruction	55	**49,5**	45	**40,6**	7	**6,3**	4	**3,6**	/	/
We evaluated our secondary school instruction	61	**54,9**	38	**34,2**	7	**6,3**	5	**4,6**	/	/
I intend to use evaluation in my future instruction	/	/	2	**1,8**	2	**1,8**	36	**32,4**	71	**64**

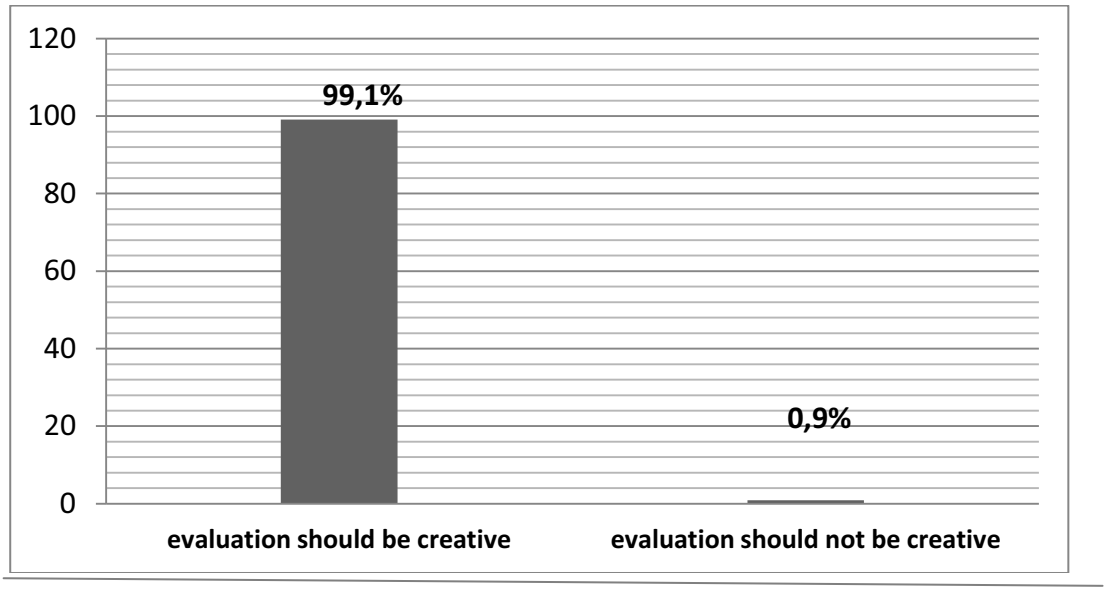
Table 2. Differences in estimates on using evaluation in primary and secondary school instruction and attitude towards evaluation

The acquired data point to the rejection of the second hypothesis (H2: Prior experience (primary and secondary level) with evaluation of instruction may influence their attitude on the importance of evaluation in university instruction) due to the fact that prior experience with(out) formative evaluation during former education does not bear influence on the students' attitudes towards the importance of evaluation in university instruction.

Evaluation in primary and secondary school is mostly implemented as summative evaluation which is characterised by the process of grading, sometimes including negative assessment, which is not the purpose of evaluation as a means of improving instruction. Grading is simply one aspect of evaluation, and a quite controversial one, because it is often the source of conflict and impaired relationships between teachers and students, is the cause of learning for the sole purpose of obtaining a higher grade and does not "celebrate learning" as any evaluation should.

Furthermore, it was researched in which way the students prefer to evaluate university instruction so that it is not done in a monotonous and

repetitive manner – by means of a survey. The results show that the students prefer to colour (91%), draw (73,9%), write (59,4%), motivate (40,5%) and act (29,7%). It is impressive that the students display a wide range of interest in university evaluation and consider it important that evaluation be thought out creatively (99,1%), which also represents the highest percentage of this research (graph 1.). This supports the third hypothesis (H3: Evaluation should be thought out creatively). Accordingly, this very high percentage represents the importance of creativity in university evaluation of instruction. The constatation is confirmed by the fact that the students think it necessary to use more types of evaluation within instruction (92,8%), and almost the equal percentage of the students assign importance to the appeal of the materials of which the evaluation is "made up", 91,9%.



Graph 1: Attitudes of students regarding the necessity for creativity in university evaluation

Discussion

Owing to the fact that evaluation is considered an important stage in the process of education, as university instructors we need to encourage it within the context of university teaching[3]. Both Croatian and international studies contain a number of examples on how to evaluate the process of instruction (Bognar, 2001; Seiβ, 2001), yet the amount of (un)published works dealing

[3] An example of the evaluation of university instruction can be viewed on the suggested Internet pages http://vimeo.com/7725884.

with this issue is still insufficient, which is a testimony to the inadequate interest in this exceptionally important topic.

> *"Evaluation of student activities and results should contribute to the development of a positive self-image and encourage students to plan their work and make decisions independently."* (Matijević & Radovanović, 2011, pp. 228-229).

It would be ideal to do evaluation at the end of each class, which helps us improve our own instruction time and again. Additionally, it is possible to perform evaluation at the end of the week, month, semester or at the end of each academic year.

"In this sense, the integration of theoretical analysis, development and evaluation of examples of instruction in educating teachers can represent an important factor in order to ensure the quality of the instruction implemented by future teachers." (Tulodziecki**,** 2008, p. 92).

An important fact is that future teachers want creative evaluation in university instruction (99,1%) which should be dealt with in the future. ***Formative evaluation*** represents the evaluation of a process, and can be used by university instructors in the following way:

a) *Participatory observation* – observing the activity of a group and/or an individual student. In doing so one can use different procedures which make the observation more precise and systematic

b) *Recording instruction* (audio, video) – the footage can later be analysed (both qualitatively and quantitatively) and used in order to assess the communication and atmosphere during instruction, but also for the purpose of becoming aware of certain positive and/or negative aspects which are normally not noticed or are not brought to our attention (buzzwords, high pitched or excessively quiet voice, tics… all of those represent interferences in the process of instruction – in other words, obstacles in the process of active listening)

c) *Systematic observation* (group, individual) – not only in order to perceive and assess the quality and the degree of interest of students connected to solving a problem, but to integrate into instruction elements which enrich it (thereby enriching us as well) and improve its quality, letting students know that we care about their interests and needs

d) *Critical friendship* – which most commonly appears in communities of learning and represents one aspect of formative evaluation whose aim is personal growth and development, as well as the improvement of the educational process

To make matters more interesting, students can evaluate the process of education using some of the following ideas: time chart, evaluation circle, microphone, puppets, satisfaction curve, success curve, smiley face, traffic

lights, emoticons, fairy tale characters, provocations, as well as other creative and interesting ideas (Bognar, 2012).

Summative evaluation represents evaluation of achievement, and here are some ideas concerning its implementation:
a) *map* (portfolio) – in which groups and/or individuals archive individual or group materials made in class, as well as at home, dealing with an interesting topic covered during instruction
b) *moodle* – offers the possibility of acitvating forums and discussions on a certain issue which allows one to monitor the participation of each student (and/or group) during an activity, a semester or the whole course
c) *individualised grading of students* – in accord with individual abilities (numerical and descriptive). In my instruction I often grade essays and seminar papers descriptively which lets students know more specifically what was "up to scratch", and what needs to be dealt with more intensely. Listed below are two examples of descriptive grading of student essays.

> *Dear Mr. G.,*
> *In your essay you dealt with answers to the question: "What is didactics?" and tried to describe it as a science with all its specifications. In the end you wrote a short review of your understanding of didactics as a science. I suggest that in the future you enhance the content of your paper with your ideas, comments, as well as (dis)agreements with the authors. When refering to Internet sources, it is necessary to include full bibliographical data, including dates of access for certain pages.*
> *Best regards!*

> *Dear Ms. A.,*
> *You wrote about the humanistic approach to education. While writing you used a great number of quotes (as many as 8) which most certainly lessens the quality of your essay, since this is not a seminar paper assignment, different in structure and demanding a considerable number of quotations, but an essay which demands more of your own ideas, reflections, criticism, yet also references to sources. If we excluded all the quotations that you used, your essay would fill a total of a page and a half. I suggest that in the future you pay attention to the technical layout of the text that you are writing (text allignment, quotes in italic).*
> *Kind regards!*

Conclusion

Formative evaluation brings about an array of different types of feedback (commonly for the student) identifying the areas which need to be worked on for the purpose of improvement by providing concrete suggestions. Formative evaluation represents an important foundation for changes whose aim is the development of quality of university instruction. Due to the fact that most of the students have never encountered evaluation during their primary education, it is the future teachers of primary education who could, by means of using evaluation as a part of their instruction, make a giant step towards systematic introduction, utilisation and creation of various evaluation procedures.

It is important that all evaluation procedures are simple to use, do not require much time (or too many didactic materials) and that all participants in the educational process can analyse them in a simple way and with a successful outcome. As the students themselves point out in their answers, it is important that university evaluation contain elements of creativity. Creativity liberates human potential and opens up new possibilities for work and cooperation between students and professors. In contemporary times, evaluation of university instruction certainly represents a great didactic challenge in the twenty first century.

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Stavovi budućih učitelja o evaluaciji sveučilišne nastave

Sažetak: Rad se bavi evaluacijom sveučilišne nastave koja predstavlja sustavno praćenje i prikupljanje informacija o spoznajnom, doživljajnom i psihomotornom aspektu jednako kao i biološkom, socijalnom i samo-aktualizacijskom u svrhu iznošenja povratne informacije o uspješnosti nastavnoga procesa. Praćenje je proces koji se odvija istovremeno s realizacijom pa ga je ponekad teško promatrati izdvojeno iz nastavnoga procesa. Pri evaluaciji sveučilišne nastave moguće je koristiti se različitim evaluacijskim postupcima koji mogu pridonijeti kvaliteti.

Istraživanjem se nastojalo utvrditi doživljavaju li studenti pozitivno evaluaciju sveučilišne nastave te koliko prethodna iskustva o evaluaciji (osnovnoškolskoj i srednjoškolskoj) imaju utjecaj na njihovo mišljenje o važnosti evaluacije u sveučilišnoj nastavi, a istraženo je i koliko su studenti iskreni u odgovorima. Osim navedenoga, nastojalo se istražiti treba li evaluacija biti kreativno osmišljena.

Za obradu podataka upotrijebljena je kvantitativna metodologija, čiji su rezultati prikazani tablično i grafički. Ispitivanjem je obuhvaćeno 111 ispitanika, budućih učitelja pete godine Učiteljskoga fakulteta u Osijeku.

Istraživanje je pokazalo da su se studenti s evaluacijom nastave rjeđe susretali u dosadašnjem osnovnoškolskom (90,1%) i srednjoškolskom (89,1%) obrazovanju. Značajan podatak proizlazi iz studentskih odgovora u kojima navode da je evaluaciju potrebno provoditi u sveučilišnoj nastavi (83,9%). Studenti su se u najvećem postotku (99,1%) izjasnili kako je potrebno evaluaciju sveučilišne nastave kreativno osmisliti.

Ključne riječi: didaktika, sveučilišna nastava, sumativna evaluacija, formativna evaluacija, budući učitelji.

Einstellungen der zukünftigen Lehrer zur Evaluation im Hochschulunterricht

Zusammenfassung: Die Studie befasst sich mit der Evaluation des Hochschulunterrichts, die systematische Beobachtung und Informationsbeschaffung über den kognitiven, erlebnisspezifischen und psychomotorischen Aspekt, wie auch über den biologischen, sozialen und selbstaktualisierten zum Zwecke des Feedbacks über den Erfolg des Unterrichtsprozesses darstellt. Die Beobachtung ist ein Prozess, der gleichzeitig mit der Realisation verläuft, so dass es manchmal schwierig ist, ihn getrennt vom Unterrichtsprozess zu betrachten. Bei der Evaluation des Hochschulunterrichts ist es möglich, verschiedene Evaluationsverfahren zu verwenden, die zur Erhöhung der Qualität beitragen können.

Die Studie versuchte zu ermitteln, ob die Studenten die Evaluation des Hochschulunterrichts positiv erleben und inwiefern frühere Erfahrungen über die Evaluation (in der Grundschule oder Mittelschule) ihre Meinung über die Bedeutung der Evaluation im Hochschulunterricht beeinflussen. Auch wurde erforscht, inwiefern die Studenten bei ihren Antworten ehrlich waren. Darüber hinaus versuchte man zu untersuchen, ob die Evaluation kreativ gestaltet werden soll.

Für die Datenverarbeitung wurde die quantitative Methodologie verwendet, deren Ergebnisse in Tabellen und Grafiken präsentiert wurden. Die Studie umfasste 111 Befragte, nämlich zukünftige Grundschullehrer des fünften Studienjahres an der Fakultät für Lehrerbildung in Osijek.

Die Untersuchung zeigte, dass die Studenten der Evaluation im Unterricht seltener in der früheren Grundschulbildung (90,1%) und Mittelschulbildung (89,1%) begegnet sind. Eine signifikante Information geht aus den Antworten der Studenten hervor, wo sie angeben, dass die Evaluation im Hochschulunterricht durchgeführt werden soll (83,9%). Die Studenten haben sich mit dem höchsten Prozentsatz (99,1%) dazu geäußert, dass die Evaluation im Hochschulunterricht kreativ gestaltet werden soll.

Schlüsselbegriffe: Didaktik, Hochschulunterricht, summative Evaluation, formative Evaluation, zukünftige Lehrer.