

The Impact of International Evaluation System Versus the National Grading on Student Motivation to Learn at the Russian Higher Institution

Andrienko A.S.

Southern Federal University
Institute of Management in Economic, Ecological and Social Systems
Taganrog, Russia
angelaandrienko22@gmail.com

Abstract—The article analyzes the influence of the implemented international evaluation system alongside the existing national one on student motivation to learn. The role of Western General Point Average and European Credit Transfer System are considered for the assessment of student results which are evaluated using different grading scales at Southern Federal University in Russia. The paper views the results of the research throughout the grading period of Computer Engineering, Electronic Engineering and Economic Major students of undergraduate, graduate and postgraduate educational levels. The purpose of the research was to define what kind of grading system at the university appears to be the most motivating from the student point of view and why the international grade system does not motivate students to get high point grades. The gained results were based on the carried out surveys, testing, classroom observations, interviews, and questionnaire consisted of closed and opened questions. The main factors influenced the student belief towards the choice of the most motivating grading system for learning were discussed. The importance of the usage of transfer systems in the global academic environment is underlined. The study included data gained from 145 students, taking into account the multileveled educational environment at Southern Federal University. Recommendations for enhancing the impact of the international evaluation system on student motivation to learn are provided.

Keywords—Grading system; Higher Education; student evaluation; motivation; General Point Average (GPA); European Credit Transfer System (ECTS); numerical and alphabetical grading.

I. INTRODUCTION

In the era of intense academic professionally-oriented collaboration between specialists in a multicultural environment the necessity to modify the evaluation system at Higher School in accordance with the international standards is undoubtedly significant. The borrowed international grading system is aimed to give the Russian Higher Institutions the opportunity not only to successfully interact in the process of student mobility but also to motivate future graduates to be competitive in the national and international labor markets. The implemented international grading has a numerical scoring

from 0 to 100 in accordance with European Credit Transfer System (ECTS), alphabetical scale (from A to F) as well as qualitative classification of grading (“excellent,” “very good,” “good,” “satisfactory,” “sufficient,” etc.) to properly evaluate and motivate students to enhance their academic achievements.

Touching upon the evaluation problem is of great importance to increase the level of motivation in learning [1, 2] at all educational levels: “undergraduate/specialist”, “graduate” and “postgraduate.” In this regard, a high quality of education is impossible without the development of a grading system for scoring the professional achievements of a future competent Higher School graduate [3]. Thus, the use of ECTS grading scale, proposed by the Bologna process [4], gives Russian universities an opportunity for transferring student academic results from national scale into European one to take part in international academic exchange.

It goes without saying that education without evaluation does not bring high results, especially when the student is not motivated enough to realize his/her self-education. Thus, Alina Carmen Bozon (2013) states that “education system, teaching process are undoubtedly under the value sign [5],” and Terence J. Crooks (1988), Amy Woytek (2005) and Taghi Jabbarifar (2009) James H. McMillan and Jessica Hearn (2008) underline the importance of classroom assessment and evaluation in enhancing student motivation and achievement in educational system [6-9,10,11].”

The final indicator of the student achievement in all countries is a document on education – a Diploma, which a university graduate seeks to obtain. There are no grades in the Russian and international format of the Diploma, but only the information about the graduation from the university as an achievement of an individual.

Student grades are contained in the Diploma Supplement (“Transcript”). In America, for example, Transcript shows all drops and warnings of a student. The Russian Higher School Diploma Supplement does not have the international numerical grading from 0 to 100 for Course units passed by a student with the equivalent in ECTS grading scale (from A to F) but has

only the qualitative classification expressed in terms of “excellent,” “good,” “satisfactory,” “Pass/No Pass” (“Credit/No Credit”).

The state of things when the Russian Diploma Supplement has only national grading leads to the fact that students are not motivated to receive high grades. The American Transcript, in contrast to the Russian Diploma Supplement, globally determines the graduates’ employment in a prestigious job. For instance, in the USA many significant companies in a labor market clearly indicate the General Point Average (GPA) to be hired (mainly employers request Higher School graduates to have GPA from 3.5 to 4). This is a high admission rating because in order to get a total grade point for the entire learning process equal to 3.5 GPA it is necessary to pass all subjects in all semesters with 90-100 point score that means “excellent.” At some universities in Russia, excellent grade starts from 85 points. In an American university 84 points correspond only to “B-.”

The above mentioned results are in a significant contradiction between the need to meet international educational standards for student achievement evaluation based on the ESTC system and the lack of conformity between the university, Education Board, and the state. This is resulted in the lack of the international Diploma Supplement format at the Russian Higher Institution with a numerical grading from 0 to 100.

Therefore, students at the Russian Higher Institution do not need to receive high numerical grading points according to the international grading system. Students are only motivated to receive a National Diploma Supplement where numerical grading is not indicated at all. That is why the important indicators of student evaluation, which are so carefully designed in the Course programs at Russian universities, are not shown in the Diploma Supplement. It contains only a qualitative evaluation of “excellent,” “good,” “satisfactory,” “unsatisfactory,” “Pass/No Pass” (“Credit/No Credit”). So, international point grading exists theoretically and autonomously in a university educational process because it does not have any confirmation in the form of the state education document in Russia.

But the university is not to blame for this because the efforts are not supported by the State Educational Standards and the State Educational Board. And the university itself cannot make structural and contextual changes to the national Diploma Supplement.

II. RESEARCH METHODOLOGY

Despite the introduction of ECTS during the Bologna process [3], most students at the Russian universities are still not aware of their grade point (especially the current one) calculated in accordance with the international evaluation standards and are not motivated to get a high grade score up to 100, especially if the assessment is done in the qualitative form of “Pass/ No Pass (fail)” or “Credit/No Credit”.

Although in a grade record sheet of an academic group students are put grades by a Professor from 0 to 100 for each semester, the exam is also perceived by most students only in a qualitative form “excellent”, “good”, “satisfactory,”

“unsatisfactory” which in national numerical equivalent equal to 5.0, 4.0, 3.0, 2.0 but is not substituted by alphabetical grading of A, B, C, D, E. A lot of students are not aware about their grades in a Course record sheet of an academic group and are not even motivated to know their points because the international grade point system does not influence their final qualitative evaluation.

At Russian university students usually do not have Course syllabus with Course objectives, grades, and other important aspects, which a Professor in a foreign university is obliged to provide before starting a Course.

This above-mentioned problem can be solved

- if students are given a Course Syllabus with assignment grades, Course content, and instructions (the lack of the accessible Course Syllabus can lead to the fact that students have no idea about their GPA as well as the content, goals, and objectives of the studied Course);
- if the international Diploma Supplement or Transcript is approved by the State Educational Board (this document will provide an opportunity for the employer to see the real level of graduate achievements in the process of hiring and the graduate will be able to be motivated to obtain a high-level GPA);
- if the use of virtual educational resources of the university [10] helps students to know their evaluation grade (students can see only their final grades but not their current evaluation through the university site).

The Research Problem consists in finding the ways to motivate the Russian Higher School students to receive high grades according to the ECTS numerical grading scale in the university educational process.

The Purpose of the Research is aimed at examining the influence of international numerical grading system versus national grading on student motivation to learn and finding out what factors influence the fact that national grading system at the Russian Higher School appears to be the most motivating for students while the international grade system does not motivate students to learn.

The Research Question: “Why do the Russian students have no desire to have high points in the international numerical grading score scale from 0 to 100 but lots of them are motivated to have national qualitative evaluation results such as “excellent,” “good,” “satisfactory,” “unsatisfactory,” “Pass/No Pass” (“Credit/No Credit”) based on a 4-point scale in the Diploma Supplement.

The methodology of the study was based on:

- the concept of evaluation and assessment in the educational environment (A. C. Bozon (2013), Taghi Jabbarifar (2009), James H. McMillan and Jessica Hearn (2008), Terence J. Crooks (1988), etc.);
- the concept of students’ motivation in learning John M. Swales (1971), Tom Hutchinson and Alan Waters

(1987), N. Naiman, M. Fröhlich, H. H Stern and A. Todesco (1978), etc.);

- the impact of classroom evaluation practices on students (Terence J. Crooks (1988), Zane Olin and H.K. Sullivan (2002), Gavin T.L. Brown and Lois R. Harris (2014), Roney A. McDaniel (2017), etc.).

The national education system has borrowed the foreign system of grading in the numerical range from 0 to 100 points. The range from 60-100 is considered to be passing at the university. At Southern Federal University the grade “excellent” corresponds to 85 points. In America, for example, this grade corresponds to “Good” (“B-”). The “Good” grade in SFedU (71-84 points) corresponds to the “C-” grade related to the American grading scale that is “Satisfactory” and “Passing.” It is important that in the foreign Diploma Supplement (Transcript) all students’ achievements, both positive and negative, are reflected. That means that all negative grades and attempts to pass and increase the GPA are indicated in this document. In the Russian Diploma Supplement student failures are not shown.

Below is given an example of the correspondence of the points at an American university, taking into account the GPA, and the coincidence of the received points to the alphabetical indicators (from A to F) (Table I).

The point weight of the American letter grading can be compared with the distribution of points in relation to the grades “excellent-5,” “good-4,” “satisfactory-3” at the Russian university (Table II). “Poor” grades in the Russian Diploma Supplement, unlike the American one, are not put.

TABLE I. THE CORRESPONDENCE OF NUMERICAL AND ALPHABETICAL POINTS TRANSFERRED IN GPA

Grade	Points	GPA
A +	= 98-100	4.30
A	= 93-97	4.00
A -	= 90-92	3.70
B +	= 87-89	3.30
B	= 83-86	3.00
B -	= 80-82	2.70
C +	= 77-79	2.30
C	= 73-76	2.00
C -	= 70-72	1.70
D	= 60-69	1.00
F	= 0-59	0.00

A lot of foreign universities have GPA calculator on their websites. It gives students the opportunity to correctly calculate the received grades. Compared to the grading at the Russian universities, the American scoring is much more accurate. If the GPA is less than 2,897, this grade is not rounded to 2, 90.

The calculator allows the student to calculate their final grade in the semester in the form of cumulative GPA.

At the Russian universities, there is no universal format for student academic work evaluation (the numerical grading can range from 0 to 8 or from 0 to 10, for example) (Table 2)). A lot of Professors at the Russian university use traditional national grading in a 5-point numerical scale in

class (from 5 to 2) alongside with the international numerical grading from 0 to 100, which is put in a Course record sheet.

Analyzing Table II data, we can see that 8 points correspond to the “excellent” grade; 7-6 points – “good”; 5-4 points – “satisfactory”; from 3 to 1 – “unsatisfactory.”

Fig.2 also shows the system of transferring grades in the Russian university into points and letters according to the European Credit Transfer System (ECTS) and the US GPA introduced in a lot of countries.

TABLE II. CORRESPONDENCE OF NATIONAL GRADING TO THE INTERNATIONAL EVOLUTION SYSTEM

National Numerical System	National Qualitative Grade	International Alphabetical (in the US)	ECTS/ Southern Federal University grades
5	Excellent	A / Excellent - (A+, A-) 98-100	100-90 (8)
5	Excellent	B / Good (B+, B-) 87-82	89-85 (7)
4	Good	C / Satisfactory (C+, C-) 77-72	71-84 (6)
3	Satisfactory	D / Passing 60-69	65-70 (5)
3	Poor	E / Failure	60-64 (4)
2-0	Very Poor	F / Failure WF / Withdrew Failing	49-59 (3) 15-19(2) 0-14 (0)

III. RESULTS

The research was conducted at Southern Federal University (SFedU) in Russia and involved 145 students of the Computer Engineering, Electronic Engineering, and Economic Departments: 53 freshmen, 55 sophomore students, 25 Master students, and 10 Ph.D. students responded to the given survey. The mean GPA of the students who took part in the survey was 3.17. All the participants were questioned via electronic mailing, through the university website, and interviewed in class. The participants were aged between 17 and 32 years, of the male and female gender. The gained results were based on the carried out surveys, testing, classroom observations, interviews, and questionnaire. The research was carried out during four academic semesters in 2018-2019 academic years.

In Fig. 1 we can consider the results of the survey which show that the international grading is not popular among students in the academic process.

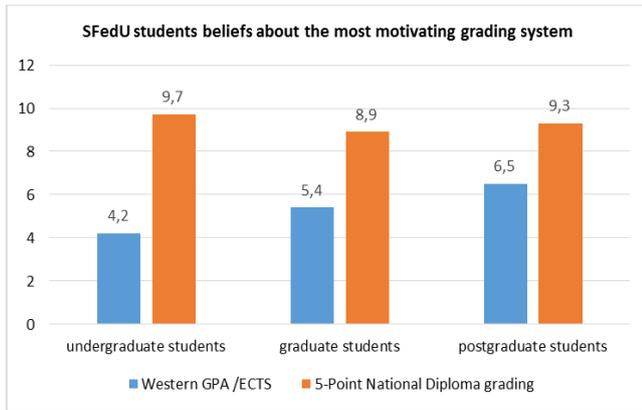


Fig. 1. SFedU students' beliefs about the most motivating grading system

We can state that there is a high percentage of negative attitudes towards the international grading system related to a lack of motivation among undergraduate and graduate students.

Postgraduate students' attitude related to the international grading is shown in Fig. 2. These students of Ph.D. education level entered SFedU from different Higher Institutions and they are not aware of the grading system at the university. The fact that postgraduate students are not dependent on Diploma Supplement grade like undergraduate and Master students is also should be taken into account.

The data in Fig. 3 prove that the Diploma Supplement of the international format is the most motivating factor to enhance the impact of the international grading system on the student motivation to learn.

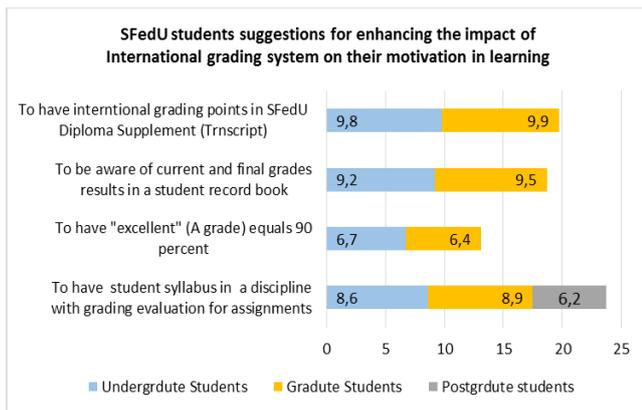


Fig. 2. SFedU students' suggestions for enhancing the impact of international grading system on their motivation to learn

The data in Fig. 3 show that the Diploma Supplement of the international format is the most motivating factor to enhance the impact of the international grading system on the motivation to learn. Student Syllabus and student record book also can be one of a high motivating factor. The most negative finding is that the students do not want to have "excellent" grade ("A" in alphabetical grading) because they can receive "excellent" grade, having only 85 points ("B").

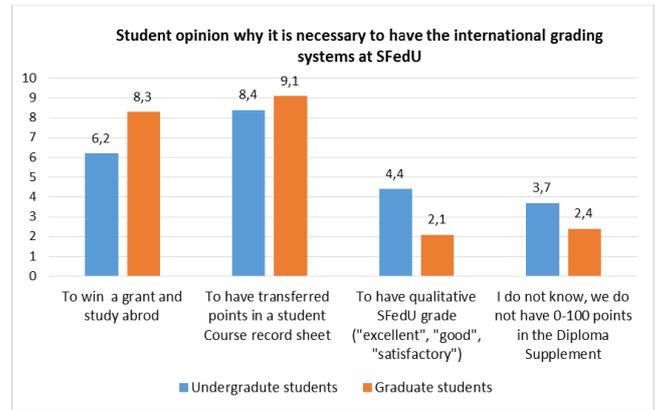


Fig. 3. Student opinion why it is necessary to have the international grading systems at SFedU

Analyzing the data of students' opinion given in Fig. 3 it is worth stating that most students perceive the grading system as an opportunity that not all students may have – it is to go to study at a foreign university if you win a grant. Under this condition the points received by students in the national grading system will be transferred in accordance with the international format. The student opinion about transferred points in a student Course record sheet is important but these points are not included in the Diploma Supplement which only contains the qualitative grades of "excellent," "good," "satisfactory," "unsatisfactory," "Pass/No Pass" ("Credit/No Credit").

IV. DISCUSSION

The findings showed that students do not have profound knowledge about the international grading system used at the university. The numerical grading international system exists separately from the national grading system at the university. That is why it is easier for students to receive 85 points to have an excellent grade and not to put great efforts to earn 90 or 100 points for the same grade, which results in "excellent" qualitative grade in the Diploma supplement.

The carried out survey showed that the international grading system does not motivate most of the students to receive high point grades in the process of their Course learning.

The format of the present paper does not allow to include the data, related to the gender of the participants. Also, it is worth discussing the data taken from the employers related to their opinion of the form, grading content and scores of the Diploma Supplement.

The author plans to develop materials for studying the opinion of teachers on the discussed issues as well as to proceed to analyze the given problem at different universities including the European, the American, and the Russian Higher Schools.

The alphabetical and numerical international grading systems appear to be vague and obscure ones for students at the Russian Higher School because these systems do not

influence the student achievements directly. The Diploma Supplement in Russia does not contain student records in ECTS; do not include negative grades to motivate students to learn.

V. CONCLUSION

The carried out research proved that since the international evaluation system has been introduced at Russian universities, the international Supplement (or Transcript) to the Russian Diploma is also required.

Based on the foregoing, it follows the disappointing conclusion that a small number of students need the alphabetical and numerical international grading to evaluate their academic achievements at the Russian university. The Russian Students are not motivated to have high grades according to the international systems. Lot of students associate the international grading only with a grant activity (an opportunity to participate in the DAAD, Erasmus or the Fulbright program, for example).

The problem under consideration can be solved by the creation of the Russian Diploma Supplement according to the international format and using the evolution in the form of the international grading which has been implemented and is currently being used at the Russian university.

The research can make a contribution to the process of student evaluation at Higher School to find ways to motivate students to enhance their evaluation results.

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