

INITIAL TRAINING AND CERTIFICATION FOR THE TEACHING PROFESSION, BETWEEN DESIDERATUM AND ACHIEVEMENT

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Abstract

From a theoretical perspective, this study synthetically presents the main paradigms/models for future teachers' training, which have been globally developed throughout the past decades, as well as the current teacher training model in Romania. On these grounds, the applicative ascertaining research that we have conducted had in view two main objectives: 1. The analysis of the performances obtained by future teachers during their initial training programme (at TTD, the Department of Teacher Training) and at certification exams; 2. The efficiency measurement for this programme accounts for a direct relation between the graduates' results and the didactic profession standards. The research findings confirm the research hypotheses and point at the performances obtained by subjects throughout their initial training program for the didactic profession, as well as during their certification exam. There is a significant positive correlation between the TTD graduation general average grade and the average grade obtained by students at the certification exam, based on their portfolio assessment. The correlation indices between the diverse variables taken into account reveal significant differences between the students' performances on the certification exam depending on the gender variable. There are also notable specialization-dependent variations in the general average grades obtained by students along the initial training program, as well as major differences (in 9 out of the 10 comparisons made) from one specialization to another, between the average grades obtained at the portfolio-based certification exam, in which the students in Letters obtained the best results.

Key words: initial training, professional competencies, teacher roles, training models, certification exam.

The trends in contemporary society development and the requirements for compliance with European social and educational policies entail a continuous effort of rationalization and foundation of the entire initial teacher training programme on academic quality standards (professional, ethical, epistemological).

Research and studies published in the last two decades have indicated some of the greatest challenges for such program: ensuring an optimum ratio of theoretical and practical training (Jeanne M. Allen, 2009, p 647), familiarizing students with educational research methodology, practicing and developing critical thinking and metacognitive skills. A series of limitations of initial training program for the teaching profession have appeared in the context of the initiation and development of the practical pedagogic training of students. In Romania, practical training holds a small share of the whole curriculum, being insufficient for training and developing the capacity of transferring theoretical specialized knowledge into practice, for developing the skills of using student-centered,

active learning techniques/methods and methods for assessing learning outcomes, etc. (Dumitriu, C. 2003, Șerbănescu, L., 2011). Relevant information on the percentage of practical training out of the entire teaching profession training in different European educational systems are provided by Eurydice database of the European Commission (2006): Austria (40%); Bulgaria (0,5%); Belgium (54%); Denmark (32%); Germany (57%, including the final qualification stage from school); France (25%); Finland (21%); Italy (33%); Lithuania (17%); Great Britain (40%); Norway (39%); Poland (14%); Portugal (33%); Romania (18%); Hungary (22%) (Șerbănescu, L., 2011, p. 23).

MATERIAL AND METHOD

The educator fulfills many functions and roles, differently presented in literature. Several "dominant" hypotheses have been advanced, depending on the importance attached to certain dimensions of the teaching profession.

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Anita E. Woolfolk focuses on the following roles of the teacher (as cited in Nicola I., 1996, pp. 474-475): expert in teaching and learning, motivating agent that triggers and maintains students' interest in learning activities, leader of the class of students, councilor that observes student behavior, guides and advises them; (role) model for students, reflective professional; class manager.

Over the past decades, research has emphasized the need for more effective teaching-learning models correlated with teacher training. The methodological premises for the development of the teacher training model have generated much controversy around the option for models centered on prescriptions and rules; models focusing on the personality of the future teacher; teaching-centered models that imply knowledge of teaching "anatomy" and active methods (B.O. Smith, J.B. Carroll, M. Edelstein, L.W. Anderson, J.H. Block, C. Rogers and others, cited Dunkin, 1988; Altet, 1996; M. Carbonneau and J. Cl. Héту, 1996, Ph. Perrenoud 1996).

In this context, it is relevant to mention *the teacher education paradigm based on competence and performance*, in which student progress depends on demonstrating the skills acquired. The innovation of the model consists in the fact that the student is not compared to another fellow, but his/her results are related to objectives formulated in advance. According to Dunkin (1988), there have been many papers and numerous articles published, organized debates, but almost no definitive research has led to substantiate or disprove the effectiveness of this model.

A second alternative for initial teacher training – a personalistic, "humanist" one – emphasizes that teaching should focus on student motivation, on their involvement and participation and, to a lesser extent, on content. The teacher helps students, provides learning techniques and advises them to solve problems. Within the model, control becomes more self-control, whereas authority is given to enhance student cooperation and co-participation in their education. Among the best known representatives of this model, we mention C. Rogers, W. Glaser, M. Lobrot.

From a historical perspective, M. Altet (1996) identified four different models for the teaching profession and, accordingly, the training models of educators:

- a. *magister teacher*, intellectual model of antiquity, a teacher who simply knows how to be a teacher and does not require specific training or research, because his charisma and rhetorical skills are sufficient;
- b. *technician teacher*, a model that emerged with the foundation of pedagogical schools. This

teacher is formed by imitative learning and relies on the practice of a teacher who transmits his teaching skills and "tricks";

c. *engineer/ technologist teacher* that relies on the contributions of human sciences: his/her training is conducted by academics, specialists in educational design;

d. *reflective professional practitioner* – able to analyze his own practices, solve problems, devise strategies to build up skills (Schön, D. A., 1994; 1996). Operating a selection, Lang (1996) performed a comparative analysis of twenty models, by re-grouping views on the teaching profession around six poles ("academic", "craft", "applied science/ technical", "personalist", "social actor/ critical", "professional") in order to support these types.

European countries have promoted two main models of initial training for the teaching career:

a. *the simultaneous model* (Belgium, Germany, Netherlands, Poland, Romania, Hungary), where students are allowed to take part in the qualification programme for the teaching profession in parallel with the bachelor degree programme;

b. *the consecutive model* (Bulgaria, France, Italy, Spain) involves attending and graduating from a specialized bachelor degree programme first and subsequently preparing for the teaching profession by postgraduate studies (Dumitriu, C., 2003, Serbanescu, L., 2011). Some countries use both models of teacher training.

Starting with 1996, the teacher training system in Romania was of the simultaneous type, being completed by graduating from Teacher Training Department (TTD). The attendance and completion of initial training programs at university level provide the necessary (professional, pedagogical and didactic) skills of future teachers and official certifications required for the performance of the qualified teaching profession.

As a result of the Bologna Process, initial teacher training programs for secondary schools were reorganized into two cycles (cf. OMECT 4343/2005, as amended by OMECT 4316/2008 and OMECTS 3158/2010):

a. 1st cycle (30 credits) integrated in the undergraduate programme allows graduates to teach in compulsory secondary education;

b. 2nd cycle (30 credits) may be followed after the completion of undergraduate studies, required for those who want to teach in post-compulsory education and higher education.

According to Law no.1/2011, initial training for obtaining a teaching job in the pre-university system implies the following stages:

- 1) initial, theoretical training, in specialized academic programs conducted by accredited faculties and departments in the field;
- 2) teaching master's degree programme lasting two years, organized exclusively as a full-time programme;
- 3) practical training during one school year, conducted in an educational establishment, under the supervision of a mentor teacher, after obtaining the bachelor and master in teaching degrees. The graduates of the master in teaching programme are awarded a master's degree certifying their acquired skills and entitling them to apply for a teaching position in school education.

It should be noted that the design, implementation and evaluation of initial and continuous training of teachers in secondary education is a competency-based approach conceived as a way of defining and acknowledging the training results. The system operates with two basic categories of skills: 1) *professional skills*, comprising cognitive skills and functional-actional competencies, 2) *transversal skills*, including role-specific competencies as well as personal and professional development skills.

The main research objectives:

O1 – the analysis of the performances obtained by future teachers during initial training programme (DPPD) and in certification exams;

O2 - the effectiveness measurement of this programme by comparing the results obtained by graduates to the teaching profession standards.

The first hypothesis: *we assume that there is a positive correlation between the results obtained by students in the initial training programme and the results at the certification exam.*

The second hypothesis: *there are significant differences between the general graduation means obtained by students in the TTD programme and their results at the certification exam, depending on the gender variable.*

The third hypothesis: *there are significant differences between the general graduation means obtained by students in the TTD programme, depending on the specialization variable.*

The fourth hypothesis: *there are significant differences between results of the results at the certification exam (portfolio mean), depending on the specialization variable.*

Participants. The research was conducted in 2012 on a sample of 211 participants, all graduates of Teacher Training Department (TTD). Considering the gender variable, 152 are female and 59 male. According to the specialization variable, 63 are graduates of the Faculty of Letters, 53 of the Faculty of Engineering, 35 of the Faculty of Movement, Sports and Health Sciences, 33 of

Faculty of Sciences and 27 of the Faculty of Economic Sciences.

To the purpose of conducting this research, the following methods and research techniques were used: psycho-pedagogical observation, conversation, analysis of school documents and student work products, interviews, statistical data processing techniques.

RESULTS AND DISCUSSIONS

Procedure. The performances achieved by each student in the TTD compulsory and optional disciplines, their average grades and the average obtained at the certification exam have been recorded in analytical tables, then subjected to statistical processing using SPSS program. The results are presented in Tables 1,2,3,4.

The certification exam organized by TTD at the end of the initial training programme was compliant with a methodology known by both students and trainers:

1. An oral presentation of their teaching portfolio including student work samples from each of the disciplines studied at TTD;
2. An interview based on the portfolio presented.

The teaching portfolio included student work products indicating the level of development of their professional (cognitive, metacognitive, methodological, logic, communicative and networking, psychosocial, evaluative, computer-related and technological) skills and transversal skills:

- ✓ homework (solved individually or in teams) based on applying pedagogical concepts in solving learning tasks;
- ✓ papers resulting from developing the capacity of analysis, argumentation and interpretation of educational texts and other teaching tasks;
- ✓ comparative analyses and thematic syntheses concerning various stages of ontogenetic development of the child;
- ✓ evidence of strategies for teaching-learning-assessment implemented in specific contexts;
- ✓ results of some pedagogical investigations, reports, essays, case studies;
- ✓ student observation sheets and pedagogical characterization sheets;
- ✓ lesson projects, questionnaires, checklists;

Data presentation and analysis:

The first hypothesis is confirmed due to the fact that table 1. *Correlations* indicates a significant positive correlation between the general

average mark of graduates of TTD program and the grade obtained at the certification exam

$$\text{average } r(209) = 0.472, p < 0.01.$$

Table 1

		Average grade	Portfolio average grade
TTD graduation general average grade	Pearson Correlation	1.000	.472**
	Sig. (2-tailed)		.000
	N	211.000	211
Portfolio average grade	Pearson Correlation	.472**	1.000
	Sig. (2-tailed)	.000	
	N	211	211.000

** . Correlation is significant at the 0.01 level (2-tailed).

The second hypothesis has been partially confirmed. Table 2. Independent Samples T Test presents the results in the t test of comparing averaged marks. We observe that $t(209) = 1.421, p = 0.157$, which means that there are no significant variations between the general average TTD graduation grade depending on the *gender variable*. The statistical data prove the existence of

significant variation between the average marks obtained at the portfolio-based certification exam, according to the variable of gender (see Table 2. Independent Samples T Test). We observe that $t(209) = -2.261, p = 0.025$, meaning that there are important differences between averages obtained by female students (8.90), compared with the ones obtained by male students (8.48).

Table 2

Results for the t test comparing averages at the TTD general average mark and certification exam average mark, depending on the gender variable

Variables	N	M	SD	t	df	p
General average mark/grade				-1.421	209	.157
Male gender	59	8.4840	.52060			
Female gender	152	8.6089	.59264			
Portfolio grade				-2.261	209	.025
Male gender	59	8.5085	1.30480			
Female gender	152	8.9013	1.05955			

The third hypothesis has also been partly validated. In analysing Table 3, the t test results comparing averages at the TTD general average mark and certification exam average mark, depending on the specialization variable, we can notice major differences between the averages of students in Letters, compared with MSHS students, $t(96) = 3.145, p = 0.002$; there are significant differences between the averages of students in Letters and the ones in Economic Sciences, $t(88) = 3.395, p = 0.001$; notable differences are registered between engineering students and MSHS students $t(86) = 2.075, p = 0.041$; the

averages of students in Engineering and students in Economic Sciences are also significantly different, $t(78) = 2.524, p = 0.014$; there are significant differences between the averages of MSHS students and the ones in Sciences, $t(66) = 2.131, p = 0.037$; students in Sciences and Economic Sciences also register differences in averages, $t(58) = 2.368, p = 0.021$. no significant differences are registered between the averages obtained in the initial training programme by students of Letters, compared with the students of Engineering, Letters and Sciences, Engineering and Sciences, MSHS and Economic Sciences.

Table 3

Results for the t test comparing averages at the TTD general average mark depending on specialization

Variables. TTD general average mark/grade	N	M	SD	t	df	p
LETTERS- ENGINEERING	63 53	8.7369 8.6036	.54411 .46776	1.400	114	0.164
LETTERS- MSHS (MOVEMENT, SPORTS AND HEALTH SCIENCES)	63 35	8.7369 8.3869	.54411 .49695	3.145	96	0.002
LETTERS - SCIENCES	63 33	8.7369 8.6691	.54411 .46776	0.562	94	0.575

LETTERS - ECONOMIC SCIENCES	63 27	8.7369 8.2622	.54411 .73780	3.395	88	0.001
ENGINEERING-MSHS (MOVEMENT, SPORTS AND HEALTH SCIENCES)	53 35	8.6036 8.3869	.46776 .49695	2.075	86	0.041
ENGINEERING- SCIENCES	53 33	8.6691 8.6691	.46776 .59343	0.569	84	0.571
ENGINEERING-ECONOMIC SCIENCES	53 27	8.6036 8.2622	.46776 .73780	2.524	78	0.014
MSHS (MOVEMENT, SPORTS AND HEALTH SCIENCES)-SCIENCES	35 33	8.3869 8.6691	.49695 .59343	2.131	66	0.037
MSHS (MOVEMENT, SPORTS AND HEALTH SCIENCES)- ECONOMIC SCIENCES	35 27	8.3869 8.2622	.49695 .73780	0.794	60	0.430
SCIENCES- ECONOMIC SCIENCES	33 27	8.6691 8.2622	.59343 .73780	2.368	58	0.021

The fourth hypothesis has also been validated in 9 out of the 10 situations submitted to comparison. Table 4 comprises the t test results comparing portfolio averages depending on the specialization variable and observes differences between the averages of students in Letters and Engineering, $t(114) = 9.354, p = 0.000$; students of Letters and MSHS students also register important differences in averaged marks, $t(96) = 5.270, p = 0.000$; students in Letters and Sciences are differentiated by their averages, $t(94) = 1.941, p = 0.055$; notable variations occur for students in Letters and Economic Sciences, $t(88) = 4.680, p =$

0.000 ; there are significant differences between the averages obtained by Engineering and MSHS students, $t(86) = -2.506, p = 0.014$; for students in Engineering and Sciences, the variance coefficients are $t(84) = -5.628, p = 0.000$; more differences in average marks are noticeable with students in Engineering and Economic Sciences, $t(78) = -2.864, p = 0.005$; students in Sciences and MSHS also register different results, $t(66) = -2.713, p = 0.008$; as for students in Sciences compared with the ones in Economic Sciences, their averages differed significantly, $t(58) = 2.275, p = 0.027$

Table 4

Results for the t test comparing averages at the certification exam-portfolio average grade, depending on specialization

Variables. Portfolio average grade	N	M	SD	t	df	p
LETTERS- ENGINEERING	63 53	9.5079 7.9057	0.64441 1.16461	9.354	114	.000
LETTERS- MSHS (MOVEMENT, SPORTS AND HEALTH SCIENCES)	63 35	9.5079 8.5429	0.64441 1.17180	5.270	96	.000
LETTERS - SCIENCES	63 33	9.5079 9.2121	0.64441 0.81997	1.941	94	.055
LETTERS - ECONOMIC SCIENCES	63 27	9.5079 8.6667	0.64441 1.03775	4.680	88	.000
ENGINEERING-MSHS (MOVEMENT, SPORTS AND HEALTH SCIENCES)	53 35	7.9057 8.5429	1.16461 1.17180	-2.506	86	.014
ENGINEERING- SCIENCES	53 33	7.9057 9.2121	1.16461 0.81997	-5.628	84	.000
ENGINEERING-ECONOMIC SCIENCES	53 27	7.9057 8.6667	1.16461 1.03775	-2.864	78	.005
MSHS (MOVEMENT, SPORTS AND HEALTH SCIENCES)-SCIENCES	35 33	8.5429 9.2121	1.17180 0.81997	-2.713	66	.008
MSHS (MOVEMENT, SPORTS AND HEALTH SCIENCES)- ECONOMIC SCIENCES	35 27	8.5429 8.6667	1.17180 1.03775	-.433	60	.666
SCIENCES- ECONOMIC SCIENCES	33 27	9.2121 8.6667	0.81997 1.03775	2.275	58	.027

CONCLUSIONS

The research findings confirm the research hypotheses and point at the performances obtained by subjects throughout their initial training programme for the didactic profession, as well as during their certification exam. There is a significant positive correlation between the TTD graduation general average grade and the average grade obtained by students at the certification exam, based on their portfolio assessment. The correlation indices between the diverse variables taken into account reveal significant differences between the students' performances on the certification exam depending on the gender variable. There are also notable specialization-dependent variations in the general average grades obtained by students along the initial training programme, as well as major differences (in 9 out of the 10 comparisons made) from one specialization to another, between the average grades obtained at the portfolio-based certification exam, in which the students in Letters obtained the best results.

The portfolio proved to be an integrated evaluative strategy which provides an accurate record of what the student actually *knows* and *knows how to do* during the training period and upon its completion. It also provides positive feed-back about student activity, about the teacher and even at the level of the training programme as a whole.

The graduates' performances on the certification exam reveal the fact that professional standards are largely met, illustrating the training and development level for the main competencies necessary for the didactic profession. Obviously, these results only have a predictive value and effective educational practice and classroom activity of future teachers will validate their competencies to an even larger extent.

ACKNOWLEDGMENTS

(This work is supported by CNCSIS–UEFISCSU, project number 834/2009 PNII – IDEI, code 496/2008: Operational Model for Developing the Competencies of the Beginning Teachers).

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