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BIG-FIVE and the problem of students’ orientation towards a didactic career

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Abstract

The necessity of the hereby study results from the fact that today, in Romania, the didactic profession/career is one of the least motivating for young graduates with Bachelor or Master studies. This situation generates serious questions regarding the value of the options, the significances and the quality of the preliminary evaluation of competences when entering the initial preparation/training system for a didactic career. As concerns the hereby situation, we take into consideration the theoretical and practical curriculum of the training programs for students - future teachers – in the field of education sciences, especially for pre-primary and primary education. From the methodological perspective, the research develops ideas and practices regarding the value of the useful character of one of the most interesting questionnaires, namely the BIG FIVE, a research instrument less frequently applied in educational research in Romania, on student patterns – future candidates for the didactic profession. The empirical investigation data will offer us a minimum set of criteria destined for the validation of the vocational potential and for the application of personality landmarks that make up the basic and cross professional competences integrated to the teacher’s status-roles. The approach perspective is a (neo) constructivist, functional one, correlative to other values obtained by using other applied psycho-pedagogical research techniques and instruments.

Keywords: Big Five questionnaires, didactic career, professional competences, educational research

1. Problem context

The problems of the students’ training as future candidates for the status of teachers become highly important ones, which even have priority on the agenda of national policies in the field of professionalization and qualification for the education and learning segment. From the European documents and from the data that came from various countries, as well as from Romania, an interesting picture is being shaped, the voices of experts falling between certain convergent limits. Hence the need for analysis, for a brief presentation of some occupational standards, of at
least some criteria that are specific to training / training standards associated to some criteria destined to exercising this social service, namely that of the teaching career.

Such an analysis requires not only the research of the theoretical contributions, but also of some potential efforts of practical improvement in the reference domain, which leads us to the need of re-ordering of the frame orientations and to the identification of the areas that can be improved.

The presentation horizon that follows, with a high level of recommended usefulness and use, is focused of the qualitative selection models, as well as training models, whose formative route, although it does not represent a target for our analyses, shall become a methodological reference we are to refer to in due time.

Consequently, we consider significant orientations:
(1) the empirical, vocational orientation, which requires no special training, diffusely crossing the long history of traditional schools and of the persons who became teachers, as a result of a personal decision, of the appointment by an authority acknowledged at community level or even accidentally.
(2) the semi-professional orientation, which considers the status of teachers to be defined as only a partially professional reflection, the personality, the studies and the training being non-systematic, even aleatory (Etzione, 1969).
(3). Professional orientation, which defines the status of the staff as being a service for the benefit of the community of students, parents and community, thus reflecting the capacity to carry out, autonomously and responsibly, didactic activities (intellectual, moral, dynamic, social), some of them having a routine character, others – a non-routine one, with a view to achieving the educational objectives in complex situations (Huberman, 1978; Burdoncle, 1991; Lemosse, 1989 a.o.).

The scientific-educational consequence is represented by the development of models and paradigms that aim at the building up of professional identity. In the synthetic history of the problem, the following are known:
• The free, self-fabricated model, based on vocational elements, on craftsmanship, on charisma, on the natural narrative or heuristic rhetoric.
• The model focused on prescriptions, on norms, on algorithms, semi-creative and sometimes creative (see Gagné).
• The model focused on the analysis and understanding of pedagogical situations, on the dynamics of the theory-educational practice relations.
• The model focused on processes, on didactic-formative endeavours, especially on the anatomy of teaching, learning and assessment. The model is structurally represented by sets of competences and roles, the teacher being dominated by the technologically-shaded standards, metaphorically expressed by the status of an engineer, of the process educational paradigm. Internationally, it is known under the acronym P/CTBE, namely competency-based teacher education. The core of the model is the competence-objective-performance triangulation, the finality of the system being the promotion of the students’ success when learning, through differentiated classes of competences (cognitive, practical-action-based, affective, psycho-social, attitudinal, values), research exploratory competences (Huston, 1980, 86-90).
• The model focused on basic characteristics of the personality of the future teacher, also called the humanist model. It has implications that are much more nuanced, the essential marks being defined by the presence of a wider range of psychological values / characteristics. It is worth mentioning some specific elements, some of them providing the human subject the identity common with that of other candidates’ integrated, however, in a community selected for the didactic profession. Among these, it is worth mentioning: experimenting conception, values, attitudes and even elements, accepted education/ training models, a reflective, critical and creative spirit, centres of formative interest, energizing resources, acknowledged formative roles, high values of self-control, of responsible community co-participation.
Summing up, we assert from the very beginning that this model represents the contributory core of the authors of the hereby material.

2. Beyond the appearance of immediate necessities

The logics of the hereby study results from the fact that today, in Romania, the didactic profession/career of those who aspire to such a status is one of the least motivating for young graduates with Bachelor or Master studies. This situation generates serious questions regarding the value of the options, the significances and the quality of the
preliminary evaluation of personalities and competences when entering the initial preparation/ training system for a didactic career. For the hereby case, we take into consideration not only the selective evaluation tests, the theoretical and practical curriculum of the students’ training syllabus in the field of education sciences, the future teachers for the pre-primary and primary education, but also in the perspective of the nomothetic (not ideothetic/ ideographic) educational psychology, characteristic for the model based on the use of some tests capable of identifying and building-up those aspects of personality of the professional of tomorrow, values integrated in the training of the future persons who are candidates for the teacher status.

Methodologically, the research develops ideas and practices regarding the value of the useful character of one of the most interesting questionnaires, namely the BIG FIVE, a research instrument less frequently applied in educational research in Romania, on student patterns – future candidates for the didactic profession. We synthesize some methodological landmarks of this instrument:

- It is a nomothetic methodological instrument for the study of personality, oriented towards mainly identifying common variables specific to a selected group of subjects who strived to become candidates for the future teaching career.
- The study, based on the factor analysis method, was oriented towards the identification of basic correlations of 50 personality features, relatively independent, which fall into five general features known under the name of BIG-FIVE.
- The empirical investigation data will offer us a minimum set of criteria destined for the validation of the vocational potential and for the application of personality landmarks of young aspirants to a teaching career, values that make up the basic and cross professional competences integrated to the teacher’s status-roles.
- The approach perspective is a (neo) constructivist, functional one, correlative to other values obtained by using other applied psycho-pedagogical research techniques and instruments in the field.

3. Theoretical presentation: instrument, method, items

The analysis we propose has in view the application of the personality pattern of young students, future teachers. The analysis model is one dominated by psycho-pedagogical landmarks, being thought of structurally in five factors: neuroticism, extraversion, openness to experience, agreeableness and conscientiousness. These represent, also from the perspective of our conception, a part of the most general dimensions, highlighting the features / characteristics of personality, identified both in current languages, and in the positive aptitude psychological questionnaires recommended in the relevant identification of the potential of the future effective teacher, especially in ensuring the predictive relevance in the job.

One of the major directions of educational research aims at the lexical side and starts with or by analysing the characteristic adjectives that are found in the base language or equivalent resulted from other international languages. Words like: nervous, energetic, original, familiarised, careful/attentive etc. developed in order to allow the subject to describe themselves and others. Thousands of such words can be found in the dictionary and the proposals of theoreticians who dealt with personality features – see Cattel (1946) and Norman (1963) – think that these lists of terms might be considered an enumeration of personality features that is never exhaustive.

As a result of some series of specialized research studies, five main factors, as we have already said, that should cover the structure of the base personality. The factors are defined, in this context, as groups of inter-correlated features.

By describing levels that represent the average where the groups in the sample we investigated are found, for each of the five factors, we can design a comprehensive sketch, which incorporates, among others, emotional, interpersonal, experience, attitudinal and motivational styles of the groups of subjects under discussion.

The correlations between items become a subject for the factor analysis that groups all items. The items that are best represented, namely those that have the highest correlations, can be presented as factors of positive prediction in the job and for potential increased performances.

4. Data analysis, comments, interpretations

This instrument was applied on a number of 90 students at the Faculty of Pedagogy and at the Faculty of Pedagogy of Primary and Preschool Education within the Petroleum-Gas University, Ploiești, out of 180 students.
Planning to achieve especially the predictive validity as asserted, focused on values that can guarantee the prediction of some characteristics that allow us to anticipate the analysis of university performance and, subsequently, professional performance (not a construction validity, competition and surface validity), we further present some of the results of the tests we carried out. Profiles are given, in reality, by the mean value of the results obtained by the student sample. (see fig. no. 1).

Table no. 1 The mean value of the results for the personality profile – students –

<table>
<thead>
<tr>
<th></th>
<th>Neuroticism (N)</th>
<th>Agreeableness (A)</th>
<th>Extraversion (E)</th>
<th>Openness (O)</th>
<th>Conscientiousness (C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>very high</td>
<td>117-192</td>
<td>151-192</td>
<td>139-192</td>
<td>138-192</td>
<td>151-192</td>
</tr>
<tr>
<td>high</td>
<td>96-116</td>
<td>137-150</td>
<td>121-138</td>
<td>121-137</td>
<td>133-150</td>
</tr>
<tr>
<td>average</td>
<td>72-95</td>
<td>121-136</td>
<td>101-120</td>
<td>102-120</td>
<td>113-132</td>
</tr>
<tr>
<td>low</td>
<td>50-71</td>
<td>107-120</td>
<td>82-100</td>
<td>85-101</td>
<td>96-112</td>
</tr>
<tr>
<td>Very low</td>
<td>0-49</td>
<td>0-106</td>
<td>0-81</td>
<td>0-84</td>
<td>0-95</td>
</tr>
<tr>
<td>Score obtained</td>
<td>94.7</td>
<td>117.51</td>
<td>118</td>
<td>112.95</td>
<td>147.9</td>
</tr>
</tbody>
</table>

NOTE: The value for each profile falls into 5 classes, as follows: very weak, weak, average, high, very high. For each class, there are maximum and minimum values established. Table no.1 specifies only the values that are found at the ends of the axis: very weak – very high.

Fig no. 1 The mean value of the results for the personality profile Big Five Questionnaire.
What is the outcome from the table and histogram?

The most penetrating domain of the personality scale of those oriented towards the didactic profession that contrasts with emotional stability is Neuroticism (N). Although clinicians distinguish between multiple types of emotional distress, from social phobia to depression and/or hostility, numerous studies have shown that the subjects who are likely to have any of these emotional moods live similar experiences as others’. The general trend to express negative emotions, such as: fear, sadness, anger, guilt and disgust represent the core of the N. domain. However, we mention that N. includes more than the susceptibility of psychological suffering. The subjects with high scores in the field of neuroticism are likely to have irrational ideas, a low capacity to control their impulses and to connect to stress faster than others. We may suggest that this would be a field of psychological analysis and de-conditioning. We consider, however, that it is worth mentioning the fact that the N scale of the questionnaire, like all the other scales of the instrument, measures a dimension of a normal personality. High scores can demonstrate the imminence of a risk of conduct for some types of personality with psychiatric problems. The N scale should not be seen as a measure of psychopathology. Thus, a high score on this field is possible, outside any risk of psychiatric derangement that can be diagnosed. Specialists also tackle the problem the other way round: not all psychiatric categories imply high scores on the N scale. For example, a subject can have a disordered personality, in the absence of a high score on this scale. Low-neurotic subjects are usually calm, tempered, relaxed and are capable of dealing with stressful educational situations, without necessarily becoming touchy. We can notice from the histogram that shows the personality profile, measured /detailed for the five factors of the students who are the future schoolmasters and educators, the following:

a) the average results of the 90 students for the N domain is 94.7. This result falls in the category of middle scores, thus placing the sample students in a normal dimension of manifestation of potential negative feelings and, consequently, the probability of an emotional behaviour without disorders;

As far as the Extraversion (E) domain is concerned, psychologists claim that sociability is one of, but not the only, major characteristic that makes up this domain. Furthermore, apart from the pleasure to be around children and the preferences for large groups, extraverts are also assertive, active and talkative. They prefer incitements and stimulation; they are unbeatable, energetic and optimistic. Usually, the people in the field of education might represent the prototype of extroverts. Although it is easy to express the characteristics of extroverts, it is more difficult to portray introverts. Introversion can be seen as a weak indication of extroversion rather than what can be assumed to be its reverse. Thus, we can say that introverts are rather reserved, detached than unfriendly, independent rather than supporters of crowds, they are rather shy than expansive. When they say that they prefer to be alone, they do not necessarily suffer of social anxiety. In essence, although they do not have the highly-exuberant spirit of extraverts, introverts are not unhappy or pessimistic, they do not avoid their fellow men and can be, for certain domains of education, excellent teachers.

From the histogram that presents the personality profile of the students under investigation, the pedagogical profile, from the detail analysis of the relations between the five basic factors, the following can be noticed:

- the average results of the 90 students for the Extraversion domain is 118.1. This result falls in the category of middle scores, thus placing the sample subjects in a normal dimension of manifestation of potential positive feelings and behavioural features of the type; sociability, support, friendship etc., desirable features for a future teacher;

The good scores obtained at this scale explains the availability of this category of students under observation to be open, sociable, friendly, dedicated to activities, assertive etc., in essence, with valences for a teaching profession.

The third dimension of personality taken into consideration is Openness to experience (the intellectual factor) (O). Unlike the other two dimensions – Neuroticism and Extraversion – this factor is much less known and more seldom analysed in educational context. The elements of this dimension – Openness to knowledge experiences - active imagination, aesthetic sensitivity, orientation towards inward (inner) feelings, preference for variety, intellectual curiosity, independence of judgement, receptive to new ideas, to new discoveries etc. have often played an important role in the theories about personality, but their coherent presence in a single wide and complete domain like education has little been examined and acknowledged. The O scale (openness to experiences) of the test is, probably, the most comprehensive measuring research in this vast domain, namely that of the students’ personality, future teachers.

It is worth mentioning the fact that, often, psychologists relate this dimension of personality to certain aspects of intelligence, such as, for example: divergent thinking which is at the base of creativity. The authors of this
instrument mention, however, that this scale is close to intelligence but it is not its equivalent. Their argument is connected to the fact that many very intelligent people are sometimes reserved, not always open to new things, to bold experiences, the same way as there are many people who are very open, but who are really limited as regards intellectual capacities.

The above-mentioned histogram (see fig. 1) that shows the personality profile, detailed for the five factors, of the students who are the future teachers for the pre-primary and primary education system, highlights the following:
- The average grade of the results obtained by the students who are future teachers for the pre-primary and primary education system, for the \( O \) domain \((openness to experience)\) is 112.9. This result indicates the fact that the scores fall between average to high, thus placing the sample subjects in a normal dimension as regards the capacity for openness and availability to multiple and original knowledge experiences.

Another dimension of personality that is present on the Big Five scale is \(A\) (Agreeability). It is, primarily, a dimension of the interpersonal tendencies, of the Empathy component. The results of our research are as follows:
- The average grades of the results obtained by the elementary teacher students for the \( A\) domain is 117.51. The result falls in the category of low scores. We can account it on the imperfection of the instrument, of the moment when it was applied and the very period of theoretical training, when elementary teacher students had not started the pedagogical practice stage. The relatively low score emphasizes the tendencies towards egocentrism and scepticism to the others’ intentions, their obvious orientation towards competition rather than towards cooperation. This is why the specialised intervention of mentors is required in the theoretical and practical training of the future elementary teachers, as well as the implication of the students in a training program of social-emotional intelligence and, consequently, the improvement of the social-emotional intelligence coefficient. On the other hand, we have to highlight the fact that the score places elementary teacher students on the upper limit between low results and average/normal ones which, eventually, brings out to light their capacity to fight for their own interests, the critical thinking, and scepticism represents a realistic starting premise for the production of some correct and accurate analyses as concerns their knowledge and application domain.

The last consideration taken into consideration in our analysis is \(C\) (Consciousness). The domain is described by specialists under the following terms: During their development, many subjects learn how to organise and manage their own wishes; at the same time, the inability to resist impulses and temptations is, in general, the sign of a high level of neuroticism with adults. The data obtained as a result of applying the test are as follows:
- The average of the answers given by the students in the sample under consideration falls in the high level category, situated in the interval 133/134-149/150. The average score was 147.9. The high score for this characteristic is associated, from our point of view, with the interest for academic and occupational achievements, with the will of achievement, availability for work and determination to achieve the proposed targets. Consciousness is an aspect that is integrated in what we call character. This high score indicates that the future teachers have all the premises to be considered people of trust, of character etc. We can describe the sample under consideration as already having the bases created for what is called “consciousness”, more exactly, as being present: (self) control, the active planning, organising and execution processes of the tasks.

The logics of such an investigation must also be given a practical – action-based answer. In other words, it is mandatory to develop a possible educational training program. We shall focus our efforts upon this type of endeavour in the following chapter.

5. For a potential training program of the social – emotional intelligence

5.1. Training - teaching patterns. Theoretical – explicative values

The methods we have applied during this intervention program falls, theoretically speaking, in the following teaching patterns (see I. Neacșu):
- **Patterns focused on information processing**
  In this respect, we have used:
  - the pattern of concept learning considering that they play a specially important role when approaching cognitive models;
  - the inductive thinking pattern which offered us appropriate collecting modalities, modalities of organising and manipulating information.
- **Person-focused patterns**
We started from the idea that the success of our endeavour is influenced by the modality in which the subjects understand to imply themselves personally and with responsibility in the educational act.

In this respect, we resorted to:

- **the non-directive teaching pattern**, which requires a change of roles for the teacher. Consequently, during the training hours we used the counsellor role, the organiser, role, the resource role in the situations required by the students etc.

- **the awareness-raising pattern**, based, throughout classes, on personal, aware training, on the real development of the personal self, on the stimulation of the personal reflection towards the others but also towards one’s own person etc.

### 5.2. Stimulating questions

In our attempt to develop a training exercise program of the social-emotional intelligence and an improvement program of the emotionality coefficient, contained by the general-didactic competence of the teacher, we start from the following questions/ issues:

- What does education mean/represent from the social and emotional perspective?
- How do we know which of the social and emotional competences are significant/ important for the increase of professional performances at the work place, but also for the social success and other successes they enter into contact with?
- Can we, each of us, become more competent from the social and/or emotional point of view?

On the grounds of the practiced analysis and reflection, we hereby present some answers we consider might be significant:

The social and emotional education refers to the skill, knowledge, belief and value teaching and learning/training process that will fundamentally represent the starting points in the building-up of the social and emotional competences. In this respect, our educational effort in the emotional and social domains means:

- to build up specific social-emotional skills/abilities to pupils/students;
- to create micro-experiments that shape families and to prepare the community to become more participative, more supportive, more interested, more responsible and more involved in the cultivation of these social-cultural abilities and conducts.

The interest for this field of knowledge, as well as the research carried out by specialists highlighted/ identified some social and/or emotional competences as being important for a healthy development of the educational actors. We refer to competences such as:

- being aware of ourselves, of the value of our personality, but also of others’;
- sorting out problems and taking decisions rationally, but also creatively, with flexibility that is related to the context;
- acknowledging and solving potential conflicts at intrapersonal level, as well as among subjects, among groups;
- cooperating, being rendered sensitive to solidarity actions with the others;
- communicating clearly and directly, without ambiguities;
- controlling our own impulses;
- acknowledging and appreciating diversity;
- developing the capacity to be motivated;
- developing and educating, in time, an effective system of friendship relations, of trust;
- adapting behavioural reactions to the given situation/ given context.

Obviously, there is not only one list of very important social skills that must be known and developed. Obviously, it is clear that learning to listen – yourself and others – is fundamental; but, actually, we may also say about the **empathy** and **reflection relations** that are equally important. It is also highly important to understand, for instance, the way in which problems are solved, the development of social friendship, cooperation relations etc. The answer to the question if each of us is capable of becoming more competent from the social and/or emotional point of view is absolutely positive. Normally, all children can learn to become (more) competent from the social and emotional point of view. However, there are (also) fundamental disorders or derangements of an exclusively biological nature, which are rare and sometimes extreme, which do not allow children to have the power/ capacity to know themselves and the people around them.
Usually, the emotion coefficient can be substantially improved by means of knowledge and specific training. In order to create emotional quality and to make learning more pleasant, more interesting and more attractive for pupils/students (attractive feelings stimulate learning) it is necessary that we should improve the abilities to monitor our own emotions, to be able to differentiate them, to use this information as a vector that guides our own thoughts and actions. We can learn emotional competences, says F. Wilks (2003), the same way we learnt how to read or to count. We have shown in the previous chapters what the social-emotional intelligence is and what their role is in obtaining performances in the didactic activity. We present in the following paragraphs a brief model of an emotional intelligence training program because, eventually, emotional competence means nothing but applied emotional intelligence. We are trying, timidly of course, to show how to become more competent from the emotional point of view in our activity with children in classroom, but also with ourselves.

5. 3. Description of program

The program is shaped under the form of a synthetic curricular module, designed to improve the students’ learning process, based on the identification of the emotional competences, on practising, developing and freely expressing emotions and affective moods that are most appropriate to the given situations/contexts.

The program is structures in two distinct parts:

I. Theoretical foundations:

- Concept delimitations: intelligence, social and emotional intelligence;
- The compositional structure/analysis of competence based on the social-emotional intelligence;
- The competence based on the social-emotional intelligence – a factor that generates significant differences in the professional and social performances.

II. Exercises for the development of personal and social competences, compositional elements of the social-emotional intelligence: SELF-CONSCIOUSNESS, SELF-MANAGEMENT, SOCIAL CONSCIOUSNESS, MANAGEMENT OF RELATIONS.

Priority objectives

- to understand and recognise the rational/logical and affective base of emotions;
- to work with causal elements or with the stimuli that trigger emotional tension moods;
- to surpass discomfort states (tiredness, stress, anger, depression etc.) by controlling emotions for a good interaction with students;
- to develop, by means of training, the personal competences (self-consciousness, self-management etc.) and the social competences (social consciousness, the management of relations) in order to obtain performances in the work with the students;

A. the development of personal competences, with focused orientation on the values:

(1). SELF-AWARENESS, synthetically expressed by:

- emotional self-awareness;
- objective self-evaluation;
- self-confidence;

(2). SELF-MANAGEMENT, with explicit frame values, such as:

- self-control;
- trust;
- conscientiousness;
- adaptability;
- directional achievements;
- initiative;

B. The development of the social competences. (referring to Others)

(1). SOCIAL CONSCIOUSNESS, defined by values such as:

- empathy;
- creativity;
- guidelines;
- organisational conscience;
(2). THE MANAGEMENT OF RELATIONS, which signifies:

- communication;
- dispute management;
- leadership;
- catalysts of change;
- systematic building-up of relations;
- teamwork and collaboration.

Preliminary conclusions. It is worth remembering not only the values resulted from the investigation, but also the research pattern, the prediction value of such categories of characteristics of personality in the selection and evaluation of potential candidates, the reconstruction of selection tests, the reflection of these landmarks and the above-mentioned patterns, as well as the development of some comparative studies in this field between study groups of other interested universities. Our group is open for and is waiting for reactions and proposals for future cooperation.

References:


