

## **The socio-cognitive conflict. development through social interaction**

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**Abstract:** The paper presents a quasi-experimental study achieved in the framework of the life-long education programs of the didactic staff in the Caras –Severin area. The instruments used were: the themes generating socio-cognitive conflict and the interactive methods based on the use of the conflict in learning. The themes proposed in the education incite to an exchange of ideas and opinions and the interactive methods based on the use of the conflict in learning can be applied in other continuing education programs, too.

**Keywords:** continuing education, interactive methods, socio-cognitive conflicts.

### **1. Introduction**

Continuing education can be defined as a set of activities and practices that require the involvement of teachers to enhance their knowledge, skill improvement, analysis and development of professional attitudes. (EURYDICE, p. 8-9). In Romania, the training system is managed by local authorities (providers of training programs) and national authorities (NCPTE), based on a system of fairness, organised and monitored by NCPTE. The success of a training course is determined by the training method. The method is a dominant and essential feature of teaching strategy, that is the selection of a particular appropriate action, based on the selection, formation and organisation in a rational order and a chronological overview of methods, educational media, appropriate means and forms of organisation.

The effort of modernising the methodology of life-long professional development is included within the frame of increasing the

level of activation and active and effective participation of teachers in their own training, i.e. the systematic use by trainers of interactive methods, based on triggering socio-cognitive conflict. Trainers need to identify the co-operative situations based on socio-cognitive conflict (Cerghit, 2008, p. 181).

The socio - cognitive conflict is seen by specialists as the main mechanism of individual cognitive progress: the interactions between individuals of different cognitive levels determine the acquisition of new cognitive tools in the context of influence and social change. Cognitive development is explained through the intervention of socio-relational factors. The measurable and observable intellectual progress is due to interactions in a social time and to a certain stimulating context. The work group effectiveness was proved by specialists in psychology of education - Johnson D.W. and Johnson R.T. – who have assigned an important role to the socio-cognitive conflict, promoting interactive methods. According to these specialists, the engaged participation of co-operative learning groups will inevitably lead to conflicts between the members’ ideas, opinions and conclusions (*on line*, 2009).

## 2. A quasi-experimental design

The study we wish to present in this paper was conducted on a sample of 256 members of the didactic staff in Reșița’s schools. The selected target group was part of a life-long development programme, and they are currently attending the course “Management and communication”, within the programme “Education and training”, organised by DPPD – „Eftimie Murgu” University Reșița. The study wanted to identify the impact of interactive methods on the continuous development courses, part of adult life-long education. The hypothesis of the study was that the systematic promotion by the trainers of the interactive methods (based on the détente of the socio-cognitive conflict) will lead to the improvement of the teaching-learning activity in the continuing education programmes of the didactic staff from the pre-university education system. The distribution of the sample was made in the following way: 212 women and 44 men. The didactic staff selected was represented by all official teachers and had they definitive degree obtained, table 1.

**Table 1**  
Distribution of the case study sample

Sex	No.	Medium age	Length of service
Women	212	Vm = 46 years	19 years
Men	44	Vm = 45 years	20 years

### 2.1. Instruments used

The following instruments were used:

a) conceiving the topics to be taught, a form of enunciation which generates socio-cognitive conflict:

- the psycho-pedagogy of communication - science or art?
- management or leadership?
- project manager – leader or co-ordinator?
- change or resistance to change?

b) the quasi-experimental strategy to apply the interactive methods in the continuing education of the didactic staff;

c) the questionnaire for the identification of changes and advances obtained after using the interactive methods;

d) the calculation of the correlation value, using SPSS (Statistical Package for the Social Sciences). The correlation report Bravais-Pearson (Pearson coefficient or simply “the correlation coefficient”) is a measuring method of the linear association intensity of two numerical variables. The correlation coefficient can take values between  $-1$  and  $+1$  that is, it satisfies the inequalities:  $-1 \leq r \leq 1$ .

### 2.2. Data presentation and interpretation

We calculated the correlation values between the frequency of using the interactive methods and the contribution of the used methodology and the advances obtained. In practice we consider that if:

$0 \leq r < 0,2$  there is no significant connection;

$0,2 \leq r < 0,5$  there is a weak connection;

$0,5 \leq r < 0,75$  there is a connection of average intensity;

$0,75 \leq r < 0,95$  there is a strong connection;

$0,95 \leq r \leq 1,00$  we can speak of a relatively determinist connection.

Actually, using the statistical data obtained by applying the questionnaires, the following conclusions come out:

(a) the existence of a strong connection ( $r = 0.892$ ) between the frequency of the interactive methods and the cognitive advance, **figure 2**:

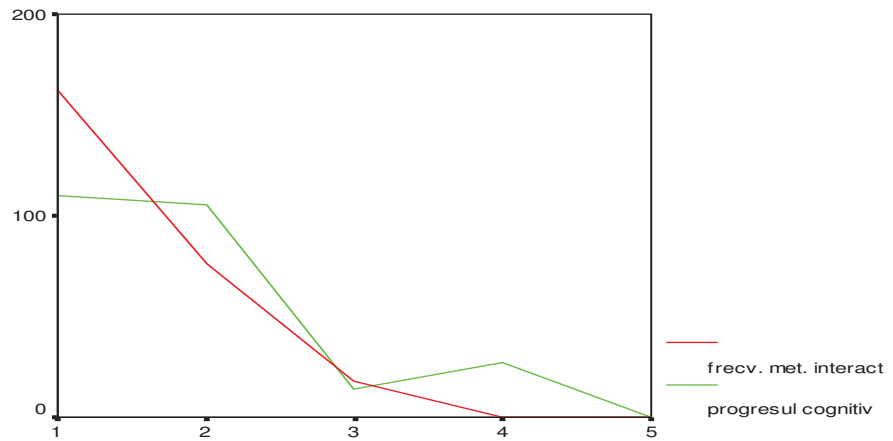


Fig. nr.2 Corelatia frecventa metodelor interactive - progresul cognitiv

(b) the existence of a relatively determinist-functional connection ( $r = 0.957$ ) between the frequency of the interactive methods and the social-attitude changes **figure 3**:

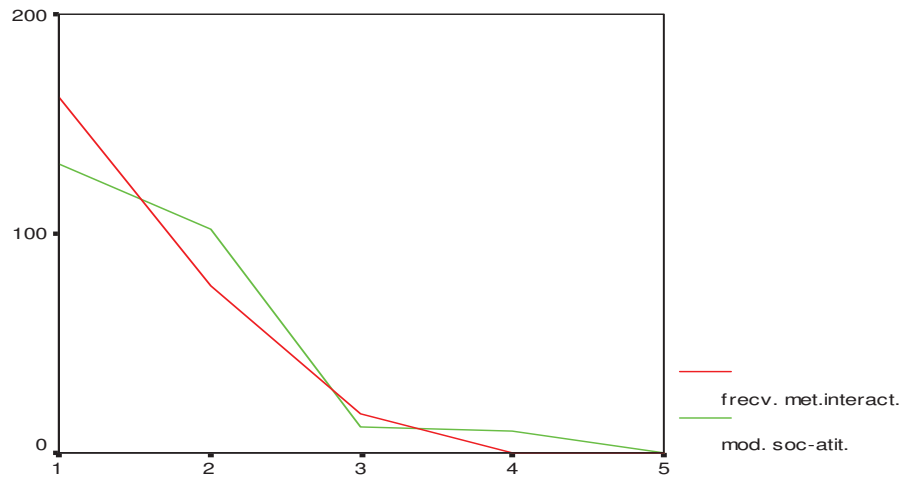


Fig.3 Corelatia frecv.met.interact-mod. soc.- atit.

(c) the existence of a relatively determinist-functional connection ( $r = 0.992$ ) between the frequency of the interactive methods and the development of the practical-applicative competences, **figure 4**:

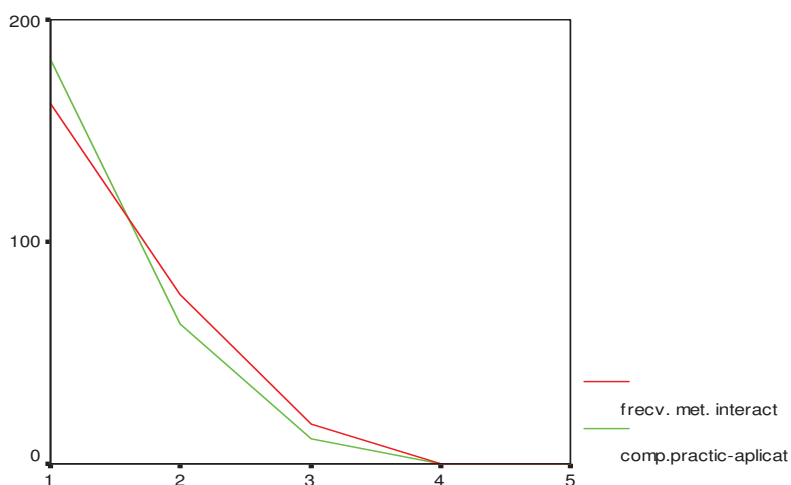


Fig.nr.4 Corelatia met.interact.- comp. practic-aplicative

### Conclusions and proposals

The frequent use of the interactive methods leads to cognitive advance of the teaching staff participating in the continuing education programs.

The participation in interactive activities leads to positive social-attitude changes of adult learners.

The exercise of using the interactive methods increases the practical-applicative character of the didactic staff's advance.

The balanced joining of the interactive modern with the traditional methods represents a decisive factor in the continuing education programs.

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