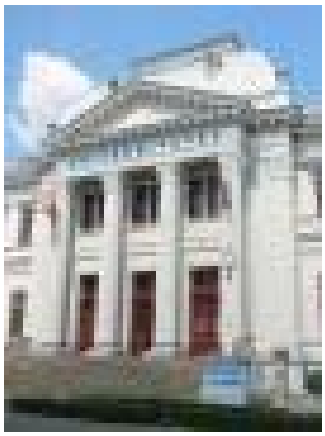
ANALELE UNIVERSITĂȚII DIN CRAIOVA
ANNALS OF THE UNIVERSITY OF CRAIOVA
ANNALES DE L'UNIVERSITÉ DE CRAIOVA



Series

PSYCHOLOGY
PEDAGOGY

AN - V, 2006, nr. 13 – 14

ANALELE UNIVERSITĂȚII DIN CRAIOVA
ANNALS OF THE UNIVERSITY OF CRAIOVA
ANNALES DE L'UNIVERSITÉ DE CRAIOVA
SERIES: PSYCHOLOGY, PEDAGOGY

BIANNUAL PUBLICATION, EDITED BY THE TEACHING STAFF TRAINING DEPARTMENT
YEAR V, 2006, NO.13-14

This volume was approved by CNCSIS code: 35
ISSN 1582 – 313X
UNIVERSITARIA PUBLISHING HOUSE, CRAIOVA

ADDRESS OF THE EDITORIAL OFFICE:
THE UNIVERSITY OF CRAIOVA
TEACHING STAFF TRAINING DEPARTMENT
13, Al. I. Cuza Street
Craiova, Dolj, Postal code 200585
Telephone (040)251416574 / 4203, (040)251422567
Web: http://cis01.central.ucv.ro/DPPD
E - mail: dppd@central.ucv.ro

S U M M A R Y

THEORETICAL APPROACHES – NEW INTERPRETATIONS

EDUCATIONAL PRACTICE – NEW INTERPRETATIONS AND PERSPECTIVES

RESEARCH LABORATORY

COMPUTER ASSISTED TEACHING AT PRESENT

THE HISTORY AND COMPARATIVE PEDAGOGY TEACHER TRAINING

BOOKS AND IDEAS

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

THEORETICAL APPROACHES – NEW INTERPRETATIONS

THE NEED FOR AN ADEQUATE METRICS FOR EDUCATIONAL SCIENCES

Professor Miron Ionescu, PhD
University Babeş-Bolyai, Cluj-Napoca

1. The approached issue

Founding pedagogy as a science, its scientific development and passing from fundamental science of education to educational sciences system leads to the creation of a modern vision regarding this science. We define today, pedagogy as a specific science to synthesize the education and we speak in consensus about pedagogy's unity as a science.

Pedagogy's dual state – *science and art* for education - is today unanimous recognised and valued in theoretical plan for theory and in educational practice. If our specialist's points of view were always concurrent regarding art state of education, science state of education was subject for controversies.

Founding pedagogy as science followed by the general range of sciences continuing general route for sciences development, determined by progressive accumulations for practical educational acquisitions and by elaborations, conceptualizations and generalisations realised also in theoretical plan. Further, *the pedagogy developed through offset*, in many disciplinary axes and more theoretical and practical disciplines studying permanent development for human personality.

This discipline is constituted today *in educational sciences system*, an open system made by sciences contributing to detailed and complex knowledge of educational phenomena in an intra, inter or trans disciplinary manner. Because we talk about an open system, we can always find branches and enumerate and classify the already defined branches; we know many branches, based on different criteria.

Specialists' systematic studies of educational sciences regarding pedagogy as science:

- Passing from pedagogic reflection realised in Antiquity to the institutionalisation of education proposed by Plato
- Creation process, to develop and consolidate classic empiric pedagogy, started in XV-XVI centuries, and ended in XIXth centuries,
- The tendencies to modernize the pedagogy were realised by pedagogic trends appeared at the end of XIX centuries until the beginning of XX centuries,
- Scientific development of pedagogy and its transformation from educational fundamental science to educational sciences system, due to pedagogic research development and other sciences too, the practical acquisitions from education field lead to create a vision on pedagogy as a whole, considered by the professor from Iasi, George Văideanu, as „specific science and education synthesis". So, the acquisitions from education theory and practice demonstrated contemporary pedagogy unity as science.

General preoccupation to create an educational science, a scientific pedagogy, had a main role in thinking priorities and educational practices both at macro and at micro level. So, pedagogy's evolution in time was extremely significant, passing from an unsure pedagogical thinking to an authentic scientific pedagogy, this emphasises objective knowledge of phenomena and educational processes which formulates truths, norms, rules, predictions. Nowadays, pedagogy has the following three dimensions correlated with *theoretic and descriptive sciences* – because it has the duty to treat the real thing, *normative science* – because it has the duty to deal with what should be the ideal and *action technique* – which has to deal with practical realisation. So pedagogy's tasks are: the descriptive task, the normative-prescriptive task and the practical task.

Pedagogy's dimensions and functions were made in a complex process to give it a scientific dimension, a special attention to assure the assignment of an adequate metrics for its study domain, of an adequate system to quantify and to measure educational aspects. In speciality literature, we make the distinction between the two actions considered sometimes superposed, but in a wrong manner (see T.Rotariu, 1994). So, *the quantification* at a theoretic and methodological level, represents the accentuation of quantitative aspect and of concrete forms of indications in which it manifests and can be perceived; *the measuring* is the operation which attaches different characteristics, facts, real numbers and so on; taking into consideration the level or the intensity of the evaluated aspect, measuring – numbering intensity expression of the given aspect. The quantifications and the measurement of educational aspects realised with the *support of mathematical and statistical device* are at the base of pedagogy metrics.

The science is dealing with aspects from *pedagogy measuring*: identifies quantifiable educational aspects, elaborates techniques, instruments and measuring scales, in order to appreciate the degree of precision and so on., for an objective

assessment of educational phenomena, named *pedagogical metrology* (in Greek language „metron" means „measure" and „logos" – „science"). „Didactic metrics" term was proposed with a similar sense. Some authors consider the term restrictive and a limitation of action field to didactics field only, in context in which, there are quantifiable aspects and the need for measuring in the case of all pedagogic sciences.

The didactic metrics can contribute to discover, identify and measure the rhythm of developing skills, of measuring knowledge in a quantitative and qualitative manner and to measure school results for teacher-pupil relation.

Main objectives are:

- Conceiving and realising common assessment actions both for pupil and teacher;
- Realising the evaluation as capable action to assure information to allow decisions to improve the situation;
- Developing evaluation function and instruments to increase the rigour to measure and evaluate.

In the period in which computer imposes in social and economics life, metrics enters inside educational field. Many data from psychology, biology and philosophy operation and so on. can be used easier if they are presented in a numerical manner.

This is the reason for which, statistics, biometry, anthropometry, psychometric, sociometry, econometrics can become bases for pedagogic investigation.

The use of mathematic instruments in research of educational phenomena involves an attentive analysis of them to determine didactic way of action. So, using mathematics instruments is not a purpose in itself but an activity with a practical end. We try to improve the work between teacher and pupil and in order to reach this objective is necessary to analyse data, to measure and interpret them.

The value of interpretative act on certain mathematical instruments/methods is assured by choosing ways for educational intervention which aims to present clear information, understanding notions and especially mathematics operations.

The process of improving teaching, learning and assessment remains the main objective of research efforts made by specialists from pedagogy that uses didactic metrics.

According to pedagogy metrics, we remind you the fact that, because of their variable character, almost all phenomena and educational processes are part of random events. So, meanwhile, nature laws express stabile relations, necessary, universal and mathematically expressed (exact laws), social and thinking laws, including educational laws, which does not involve, stability and necessity in relations between phenomena and sometimes they does not , find mathematical expression (statistic laws, undetermined).

Many times, in case of educational phenomena, we talk about statistic determinism, because, a certain educational influence has not always the same well known effect and can have different effects. The relations between educational phenomena are statistic, and the identified value manifests practically as valuable tendency only at assembly level and not for each case.

The conclusion is that in pedagogy there are laws with an absolute character, with a value of general truth and also statistic laws with probabilistic value.

An absolute law example: „Moulding process of human personality depends from education, from formative educational influences" represents an issue with general truth character and is verified in all cases.

A statistical law example: „Learning productivity depends from week's days, the maximum effort being possible in the middle of the week (there is an effort curve)" represents an assertion which can be false, there can be subjects which are studying and which has an effort not inscribed in effort's curve.

According to educational phenomena characteristics and their relations, it results that the laws from pedagogy can not be mould mathematically or with mathematic formulas help. So, considering the complexity and the specific of educational phenomena, the mouldings and the mathematical descriptions of educational processes, would not be enough relevant and valuable for necessary analyses. So, we have to remember the fact that, in knowledge general plan, we overpass the conception according to that, scientific laws must be expressed by mathematical formulas, jumping to the conclusion that the whole mathematical approach of a research field (using exclusive the reasoning, the structures, the measuring and mathematics mouldings) is impossible, but is not necessary an more it would be fake and dangerous. This does not mean that, it is not possible to exist a rigorously knowledge in this field. In this context, Nicolae Mărgineanu affirms that: „phenomenon law's character is not only an exact one, but also a probable one; it is not mathematics but also logic." (1973, p.207).

2. Relevant elements for founding metrics in pedagogy

Founding pedagogic metrics and a metrics adequate to pedagogy, represents a complex process, an assembly of actions realised at macro level and at micro level addressing both to the persons who educate and the ones educated by these, including the instruction and also the self instruction. The education and self education, both teaching and learning, assessment and self assessment are not always explicit formulated, and preoccupations for quantification and measuring in education are obvious, and according to them, at macro and micro level, they realise a quick and efficient feed-back, for an objective evaluation, a regulation and self regulation for improvement, assuring an efficient educational management and so on.

As general truth, at macro and micro level, we will start from the idea that a permanent exercitation of a „mathematic spirit", will not involve, compulsory, the existence of mathematical aid and of mathematical formulas, but rigour and accuracy in educational sciences.

Examples:

- Correctness and written language rigour, attention for terminological and conceptual definitions, of operationalization and so on, as premises to realise analyses and investigations in theoretical and practical plan.;

- Adjusting the methodology (qualitative and quantitative) to investigate practically and theoretically, the proposed objectives at educational context itself, to elaborate flexible working instruments, adequate to proposed purpose. There are educational themes difficult to quantify and, implicit, educational aspects difficult to measure (for example aesthetic education themes, aspects connected to learning motivation, of epistemological interests, of school violence and so on.), what makes necessary to choose and combine attentively the methods to investigate and elaborate certain educational aspects (tests, questionnaires, probes, items objective and subjective, essays structured and not structured, and so on.).
-

Orientations and educational demarches registered at education's macro level in our country, found in clear correlation with the crystallization of a pertinent pedagogic metrics.

We identified the preoccupations and the experiences regarding the creation of a standards system for a job educator, to consider specific one educational activity, its complexity in space presence „ of situations to which, standard dimension is subordinated to situations and contexts with a powerful but not standard dimension" (E. Păun, 2002, p.22).

Didactic profession standards represents an assembly of expectations and requests explicit formulated, regarding the knowledge, abilities and mentalities assured by a teacher in its activity or in student's activity, to consider that he has professional duties at a qualitative level, accepted in society. The fifth elements components of a standard for didactic profession are:

- What activities are going to be made by a teacher?
- What are the characteristics for these activities to be appreciated as realised at the social accepted level?
- What is the motivation and the reasoning to realize those actions?
- What are the criteria to evaluate the qualities of requested activities, the noticed and measurable behaviours which indicate realising the demanded activities at social accepted qualitative level?
- How would we measure and assess the required activities?

Even if the standards for Romanian's teachers were always the same, with a law character, and so on; they were not explicit and transparent in content, to be able to contribute to teacher's initial and continuous formation. That's why, the Research and Education Ministry initiated measures to elaborate professional standards for teachers, according to article 155 from Education law number 84/1995, republished, which stipulates the Research and Education Ministry's task to establish „through speciality organs, national standards to show teachers' level of teaching quality."

Inside Education and Research Ministry there are departments, centres (for example, National Centre for Staff Training from Pre university Education), working teams and so on, which intend to ameliorate initial and continuous training for teachers. For example, National Council for Teachers Training initiated a series of

actions on national plan to establish national standards for teachers. We remind the following:

- A research was realised at national level to identify specific criteria to construct professional standards for didactical career
- To elaborate a Romanian system for didactical standards, there were several workshops for reaching the following objectives: to elaborate a system of scales to evaluate didactical performance according to pilot standards for educators and mathematics teachers and to elaborate a methodological project for teachers and to give them a certification for academic profession using standards for didactic performance.

We remind also the fact that, according to actual curricular reform, school programs contain, beside general objectives and general competences, reference objectives/specific competences, contents and examples of learning activities and *performance curricular standard*s. These are national standards and evaluation criteria for education quality process which indicates the degree to reach curricular objectives. They assure the necessary connections between curricula and evaluation and allow to distinguish pupil's level form a school level to another, creating a reference system common for all pupils at the end of school step (are elaborated according to educational finalities of school level, frame objectives and references objectives and other factors too).

Starting with the fact that, nowadays, science is consider meanwhile, theory and practice, product and ceaseless process to elaborate and to construct in order to develop different sciences' didactics, the specialists recommend, considering *sciences characteristics*, and their *epistemology,* the possibility to realise rigorous scientific investigations, based eventually on mathematic help and implicit in formulation of generalisations and pertinent conclusions which are valuable and scientific based.

The didactic docimology was created – and special the education subject, with the task to assess and evaluate.

Form the perspective to elaborate an adequate metrics for pedagogy, regarding evaluation, the following things are relevant:

To formulate the educational objective in an operational manner, announcing them during the classroom (eventually formulating assessment objectives).

Focussing the assessment steps on operational objectives, permanent report for didactic results obtained according to performances and behaviours prefigured in operational objectives.

Creating assessment criteria and sharing them to evaluated subjects.

A rigorous anticipation of assessment strategy encloses the behaviours, its realised operations and the observed pupils.

The rigorous elaboration of schemes to evaluate and to assess and items and criteria standardization followed in oral and written evaluation with essay, projects and portfolios help.

An example of assessment criteria's scale for giving marks for an oral exam:

- Scientific content correctness – from 0 to 6 points

- Answer's coherent and logic organization– from 0 to 1 point
- Response presentation – from 0 to 1 point
- Originality and personal creativity manifestation – from 0 to 1 point
- 1 point for granted.

Using different assessment systems and assessment scales for metrological aids/scales with different conventional degrees on which the examiner's quantifiable appreciations are distributed. The main types of scales are qualitative or quantitative.

Examples of assessment scales by qualifications: „below average-good-very good", „good enough -good-very well-excellent".

Scales examples to evaluate quantitative arithmetic progression decreasing – 1: from 5 to 1, from 10 to 1, from 20 to 1 so on. and increasing arithmetic progression from 1 to 5, from 1 to 10, from 1 to 20 so on.

Using the computer as assessment and self assessment instrument, with big efficiency in valuing interactive educational soft, it was conceived by interdisciplinary teams made by specialists from different areas, pedagogy specialists, sociology specialists, mathematicians, statistics specialists, economy specialists, specialists in teaching-learning-assessment process from different study disciplines. There are soft with certain educational values and specially a methodological flexibility which makes them applicable, with success to each study discipline. The educational soft approved by Department of Education and Documentation Methods from Education Ministry is, of course, extremely valuable from didactic point of view.

From didactic metrology point of view, the computer offers advantages: displays the right answer on the screen, counts the number of correct and wrong answers, the percentages and the points realised by the subject.

We make efforts to create an epistemology for education scientific research, a course in which we saw significant steps.

Pedagogic research represents an authentic factor for adjustment and self adjustment, to optimize the educational system and the educational activity, a factor for general progress in education. They have a rigorous scientific character, proposing to study the educational phenomena in their complexity, as inter, pluri or trans disciplinary.

From metrics point of view and from pedagogy metrics regarding education area researches, we mention certain relevant aspects:

- Under no circumstances, should anyone consider as absolute the quantitative dimension of the educational phenomena and the quantitative research paradigm*, in comparison with the qualitative research.* In fact, we do not establish opposition relations between two paradigms, but we establish interaction and complementarily in order to know more objective the educational reality's aspects. So, the quantitative research can not substitute the qualitative research and neither vice versa. That's why, in general plan of scientific knowledge, the dihotonomy from quantitative mathematic knowledge and qualitative structural knowledge was excluded. We consider this option justified, because the main objective is to assure science progress, to elaborate critically the models and also the theories validated and pertinent

from new theoretic constructions. That's why, our attention must be focus not strictly on used methods system (which, must be continuously improved), but also on theoretical constructions quality, being pertinent and having an educational relevance for the stated theories.

- According to this situation, we can accomplish *extensive researches*, based on observations, questionnaires, written papers and so on., from which we follow classes or groups of classes and *intensive researches*, realised on representative samples, using analytical methods (for example, individual interviews, portfolio analyses, case study). The obtained results on studied sample are confronted with gathered data from extensive methods, formulating the research conclusions.
- The quantitative dimension of pedagogic research is seen in the level of its own methodology, on three parts:

a) Methods system to collect research data,
b) The system of measuring methods for research data,
c) The system of organisation methods, to present the research data mathematical and statistical.

Gathering research data methods which are valued to gather and register more objective and to correct data and information regarding the studied theme, which would be the necessary staff for a further analyses and interpretation.

We mention few methods to gather data in educational research together with elements which assure the contribution to the quantification and measurement of different aspects (table 1). We mention the fact that, in using all pedagogic research methods, we should impose the demarcation and conceptual operationalization, for theoretical analyses, interpretations, and generalisations and so on.

Table 1

Quantifications in pedagogic research

Data gathering method	Quantification requests (quantification exigencies)	How can we contribute?
Observation	- Clearly establishing the followed objectives - Establishing observational indicators	- Elaborating observation protocols - Elaborating attended aspects scales/categories
Special education experiment	- Clearly establishing the followed objectives - Establishing clearly the independent and dependent variables	- Data are gathering with the contribution of tests, observation and so on.

Investigation method	- Establishing clearly the followed objectives	- Elaborating investigation instrument – the questionnaire (which is able to contain closed or open questionnaires)
Interview method	- Establishing clearly the followed objectives	- Elaborating investigation instrument – interview scale (which is able to contain structured or not structured questions)
Portfolios analyses and activities products	- Establishing clearly the followed objectives	- Establishing holistic criteria to evaluate the portfolio or the product - Establishing specific criteria to evaluate portfolio/products elements
Curricular documents research and school documents research	- Establishing clearly the followed objectives	- One can follow quantitative aspects, schools numbers, classes, graduates, pupils, and the dynamics of pupil's number in a school year, in a certain area so on.
Tests method	- Establishing clearly the followed objectives	- Creating assessment scales and giving marks scales
Case study	- Establishing clearly the followed objectives	- Realising intensive research to apply case study followed by quantitative interpretations
Sociometric methods	- Establishing clearly the followed objectives	- Establishing social expansion (how many choices or rejections of certain subjects) - Establishing social inclusion (how many choices or rejections received a certain subject) - Calculating sociometric value (determining choices and reciprocal rejections inside a group)

The system of measuring models for research data includes mainly:

- numbering
- classifying /ordering (group classification)
- Comparing/reporting (determination of probabilities, percentage, exact index); to remember a small number of students, the percent deforms the proportions, that's why we operate both with numbers and percents.

The organization methods system is the presentation and statistically research data.

The statistics is a field of applied mathematics, used in mass phenomena research, according to many factors, and big numbers' law is the mathematic method from statistic's base.

These systems' components are:

- Data organisation and presentation: statistics grouping, statistics scale (structure diagrams, comparison diagrams, histograms, frequencies polygon, distribution curbs and so on.)
- The determination of some statistic values, of central tendencies /values (media arithmetic average, median, module), the determination of deviation from tendency/central value (the amplitude, the simple deviation, the dispersion and standard deviation)
- Studying relations between phenomena: correlation methods (simple correlation coefficient, determination coefficient, correlation coefficient rank), regression methods ,
- The interpretation and statistic interference, statistic estimation (average meaning, the meaning of a frequency or a percent, the meaning of correlation coefficient), statistic comparison (average difference meaning, frequencies difference meaning)

We recommend the use of *triangulation technique* respective using many investigation methods, to minimize research instruments deficiencies and to realize analyses from many perspectives to gather values data by applying different instruments.

We recommend *meta-analyse* capitalization – a quantitative method which involves studying reports for small purposes, coordinating their results and investigating conclusions. For example, meta-analyses makes possible the coordination of results offered by many researchers, individually developed by students, without being necessary to coordinate their studies.

Regarding the *education micro level*, it assures the application field and all orientations and measures capitalisation, elaborated at macro level. We talk about creative adjustment, to consider the particularities of educational activity, of persons who are educated by others or of educators, of study discipline, of educational context, and so on. For example, the creation of didactic docimology is mentioned at macro level, but its recommendations are applied and tinged at micro level. In other words, we establish obvious interactions between pedagogic measures at macro and at micro level, the ideas mentioned at point A, were applied in effective practice at micro level.

The elaboration of observation sheets models for didactic activities which involves observational index and points, is going to be used in the didactic activities with audience.

Example of lesson observing sheet for a didactic activity have the next scales of categories in teacher's and pupil's assessment activity; assessing purchases and pupil's capacity, and also using learning things usefulness.

LESSON OBSERVATION SHEET / DIDACTIC ACTIVITY

Data: ...
School/High School: .../Vocational school: ...
Class: ...
Study subject: ...

Teachers: ...
Pupil's number: ...
Absent pupil's number: ...
Inspector's name /Person's name
Participant to the lesson: ...

Lesson's theme	Lesson plan and footnotes, positive aspects (+) and negative (-)	Observations during lesson /didactic activity
Assessing teacher's activity Score	Didactic projecting. Knowing subject's content. Didactic strategies. The efficiency of resources valuing. Pupil's assessment. Homework.	
Assessing pupil's activity Score:	How much were they engaged in teaching-learning process? Attitude towards didactic process and towards learning. Study responsibility. The behaviour, the relations and the cooperation with teachers and colleagues.	
Assessing purchasing and pupil's skills and the utility of learned information Score:	The progress registered during the lesson. Purchases, pupil's skills, and their utility.	
Observations Score:	Resources. The attention towards the differentiation and the individualisation of instruction. The attention for pupils with special needs.	

Legend: Score: Very well = 1; Well = 2; Satisfactory = 3; Weak = 4; Very weak = 5

The qualifying term: Teacher (signature)
Inspector/Teacher (name and signature): ..... Director (signature)

3. Conclusions

This study intended to present some systematic efforts to create pedagogy metrics used in educational actions. We do not talk about mathematical characteristics for pedagogy, which, from objective reasons, would not be possible and desired; an accepted truth in nowadays science world tells us that, the law described from a mathematic formula is not a unique scientific model. A rigorous and scientific character, a mathematic spirit, does not mean pure mathematics, mathematics formulas, but it means especially, the spirit of order, rigour, precision. This must not pretend, of course, a complete elimination of hazard, of subjectivity, because the educational phenomena are part of random phenomena, so this would not be possible.

Against the great complexity of education, the diversity of education forms, of strategies, of techniques, of age and individual particularities of peoples who are educated and of peoples who teaches them, significant steps were realised toward creating and applying a real metrics for pedagogic steps.

REFRENCES

1. Dewey, J. (1992), *Fundamente pentru o ştiinţă a educaţiei*, Didactic and Pedagogic Publishing House, Bucharest
2. Ionescu, M. (1979), *Previziune şi control în procesul didactic*, Dacia Publishing House, Cluj-Napoca
3. Ionescu, M. (1998) (coord.), *Educaţia şi dinamica ei*, Tribuna Învăţământului Publishing House, Bucharest
4. Ionescu, M. (2005), *Instrucţie şi educaţie*, ediţia a II-a, „Vasile Goldiş" University Press, Arad
5. Jucu, R. (2005), *Formarea cadrelor didactice – sisteme, politici , strategii*, Humanitas Educational Publishing House, Bucharest
6. xxx, *Education law no. 84/1995*
7. Lisievici, P. (2002), *Evaluarea în învăţământ. Teorie, practică, instrumente*, Aramis Publishing House, Bucharest
8. Maliţa, M., Zidăroiu, C. (1972), *Modele matematice ale sistemului educaţional*, Didactic and Pedagogic Publishing House, Bucharest
9. Manolescu, M. (2004), *Activitatea evaluativă între cogniţie şi metacogniţie*, Meteor Press Publishing House, Bucharest
10. Mărgineanu, N. (1973), *Condiţia umană*, Scientific Publishing House, Bucharest
11. Radu, I. (2000), *Evaluarea în procesul didactic*, Didactic and Pedagogic Publishing House, Bucharest
12. Roteau, P. (2004), *Metodelele şi statisticile experimentale în ştiinţele umane*, Polirom Publishing House, Iaşi
13. Rotariu, T. (1994), *Curs de metode şi tehnici de cercetare socială*, third edition, „Babes-Bolyai" University, lithograph
14. Rotariu, T. (1999), *metode statistice aplicate în ştiinţele sociale*, Polirom Publishing House, Iaşi
15. Skinner, F. (1971), *Revoluţia ştiinţifică a învăţământului*, Didactic and Pedagogic Publishing House, Bucharest

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

NEW LOOKS IN THE TEACHING THEORY AND PRACTICE

Senior Lecturer Vali Ilie, PhD
TSTD, University of Craiova

Abstract:

Teaching is a system of actions, different as form and content, pupils-oriented, for the purpose of developing the side of their personality. Since teaching tends to become the central issue of the teaching process, it is talked about a teaching theory, about patterns, structures or paradigms in teaching. The diversity of these patterns represents a varied strategic offer made to the teacher and consolidates the conditions of the didactic mastership affirmation.

The need to perfect the teaching style represents a concern in order to obtain a better efficaciousness in one's performance. Since it is a specific form of manifestation, the teaching conduct engages the teacher's competence. Any rebate made to the competence criteria will have an immediate impact upon the pupils' personality.

The recent paradigms and evolutions of the curriculum methodology and theory, of the training and evaluation requires from the teacher new competencies concretized in: maximizing each child's potential, having the pupils involved in their motivation development, favouring the team work, building knowledge, negotiating with the pupils, adjusting to change, evaluating holistically the performances.

Key concepts: *training, teaching, influencing, change, challenge, educational/pedagogic style, didactic style, teaching style, self construct, competences, competence profile, skills, attitudes, aptitudes, teacher, interaction.*

1) Features; the relation between teaching, learning and evaluation:

As a function of the teaching process, teaching includes all the activities instructive-educative lead by the teacher. In some theoretical approaches, teaching is identified with training: actually, it is indeed one of the training aspects or one of its integral parts. Since it represents the intentional side of the teaching process, teaching answers the question: How the teaching sequences are organised and developed from the teacher's perspective?

If we define teaching as transformation, as change in the pupils' behaviour, then teaching represents the challenge for these changes.

The modern approach of the teaching problems supposes the following features (apud Neacşu, 1990):

- it supposes teaching if the intentional aspect can be found in a valuable result;
- it is not limited to the mere knowledge transmission, but combines training with shaping;
- it expresses the programmed, the intentional, the organised feature of knowledge communication;
- it represents a chain of interactions, a teacher-pupil relation based-process;
- it interacts with teaching and evaluation;
- it is built as normative and prescriptive process, which supposes a particularisation and a conversion of the pedagogic principles in practical items of transmitting knowledge and of forming skills and habits;
- it is a sequential and reversible process, depending on the pupils' level of understanding;
- it is a management issue since it supposes actions such as: organising conditions, taking the most appropriate decisions, casting roles within solving a didactic task.

The quality of teaching is appreciated to the extent in which it possesses transforming qualities. This is why the teacher should not have as objective to train pupils so that they can listen passively but he should seek to share with them his own shaping. It is stated that teaching is at the same time a technique but also an art; as technique, it can be learnt and perfected through effort; as art, it is rather a gift and it can be nuanced and enriched with new expression elements (Nicola, 1996, page 341). In time, there have been created the favourable pre-requisites so that what it is called "the art of teaching" should be more and more similar to "the art of science": "while the art of teaching means skill and creation, the art of science means reason and strictness, it is logics and scientific substantiation on rules and strict norms" (Cerghit, 2002, page 230).

Teaching was known in the traditional didactics as communication activity, as activity of transmitting information, of presenting the object to be studied and learnt, by the teacher. In the modern school, teaching means that interaction organised and regulated so that it can be met, according to the proposed objects, the knowledge transmission functions, those of coordination, facilitation and control of the teaching effort made by pupils.

From which results that teaching is a system of actions, different as form and content and pupils-oriented for the purpose of developing the sides of their personality:" In its development teaching appears as a chain of interactions, as a process of transmitting a content based on a subject-object relation from which the pupil gains something, a doubtless personal and social experience (Neacşu, 1990, page 111).

Teaching, learning and evaluation are the essential functions of each and every school institution, yet without remaining isolated from the other functions; as

fundamental sides of the teaching process, they are not in a mere juxtaposition relation, but in a tight connection, merging in a whole. Organising the teaching and learning activity involves a multitude of variables and transformations specific to each moment of their development, the relations between them having a dynamical process-like character.

Each moment represents for the teacher a chance to reply creatively to the challenges of the school life: "The analyst of the teaching-learning process must answer to certain questions that are formulated in a relatively simple fashion – (1) how the teaching sequences are organised? (2) what exactly should the pupil learn? (3) why must he learn? (4) in what way does he learn?" (Ionescu; Radu, 1995, pp. 6-7). It results that teaching can be approached as: structure (of actions) generating learning, learning management, act of communication, offer of educative experiences, conduct interaction, learning directing (apud Cerghit, 2002, pp. 234-249).

The teaching study "shall be performed according to the pedagogue's types of activity (explaining, proving, guiding, recording, testing and evaluating), the operational objectives types (affective, cognitive, psychomotor), learning constituents (motivation, stimulation, reaction, reinforcement) and the learning theories (Dicu; Dimitriu, 1973, page 123).

The logic of the person who teaches is not the same with the one of the person who learns. To train pupils in a certain study object means (apud Albulescu, 2000, page 208): to offer them the possibility to ask questions, showing their curiosity, their amazement, their interest; to respect their ideas and to develop their value; to understand what means for them to learn the contents discussed about, what difficulties must be overstepped in order for a concept to be completely assimilated by them; to identify what independent activity tasks are necessary in order to complete the pupils' training.

The conscious coordination of the relationships between the teaching activity and the learning one is the task of the teacher who uses certain strategies for this purpose; among these the didactic strategies of evaluative type can be found. The evaluation of the school results is an important stage of the instructive-educative activity; it is the common activity of both the teacher and the pupils within which the teaching-learning circuit is closed.

2) Teaching patterns:

Since teaching tends to become the central issue of the teaching process, it is talked about a teaching theory, about patterns, structures or paradigms in teaching. If we address the shaping of a typology of the teaching patterns, we can identify, depending on the role of the partners in the training, the teaching pattern teacher-oriented, the teaching pattern pupil-oriented and the teaching pattern Subject-Object-relationship-oriented and depending on the training organising criteria, conduct patterns, cognitive-operational patterns, simulation-based patterns, programming-based patterns, training patterns and informative-persuasive patterns.

C. Bîrzea finds out that "some authors stressed the conduct modifications obtained through the teachers' activity (conduct theories), some others on the personal relationships that occur between teachers and pupils (personal relationships theories) and most of them insist upon the logic of presentation and upon the fashion in which it determines the appropriate learning logic (rationalist theories)" (Bîrzea, 1987, page 24.).

The conduct theories start from the idea that the teacher is a conducts technologist, using stimulate-contents in order to obtain the adequate conduct of the pupil (B.F. Skinner, R. Glaser). In the case of the personal relationships pattern, teaching must be oriented on the pupils' needs, the teacher being more like an advisor, a psychologist (M. Lobrot, W. Glasser, C. Rogers). The rationalist theories in the first place see teaching as a cognitive process in which a flow of information is communicated for the pupils' benefit (H. Taba, D.P. Ausubel) (apud Maciuc, 1998, pp. 223-225).

I. Neacşu identifies the following training patterns (Neacşu, 1990, pp. 116-162).

1. Conduct patterns – start from the establishing of training methods which allow the teacher to have an increased control over the pupils and implicitly, over the taught study object.

- the conduct pattern elaborated by E. Reese has the following nodal points: mentioning the final performances or the terminal conduct (which means to structure the conduct according to certain objectives), respecting the individual differences of the subjects and preventing the blockage conditions;
- the mathetic pattern elaborated by Th. Gilbert stresses the principles of learning situation profitableness, of the degree of economy and of resources optimization; the mathetics (term that comes from Greek: mathein means to learn) it is an organizing strategy of the training unit aiming especially at conduct in the situation of shaping the cognitive or motor habits, their transformation into performances); S. Papert, the one who proved the usefulness of computers in learning introduces the concept of mathetics (the art or the act of learning).

2. Rational and cognitive-operational patterns – they are focused on the cognitive processes that occur during the teaching-learning activity:

- Taba pattern: H. Taba claims that teaching should develop with pupils certain logical processes; it is focused on three types of cognitive tasks: shaping concepts, generalizing and inferring through data interpreting, through applying principles and facts known when explaining new phenomena; it starts from the presupposition that planning the curriculum is a scientific matter rather than a political one and it is important to organize the learning experiences;
- Turner pattern claims that teaching is a "problem-solving" type of conduct (the teachers' abilities to solve problems are directly connected to their training and experience; importance is given to practicing in teaching);

3. Programming-based patterns – take into account: the clear defining of objectives, elaborating didactic strategies, mentioning the taught subjects, elaborating evaluation tools:

- Algorithms-based patterns approach teaching as a methodical structure of programmed type which has as basis certain algorithmic guidelines or conditions; the in and out values are compellingly drafted, the relations between variables are established so as to increase the teacher's control over the pupils' activity (pupils and teachers' initiative, spontaneity and creativity are neglected);
- Semi Algorithms-based patterns has as basis the theory of shaping by stages of the mental actions; it allows the effective leading and the right ordering of representation, the planned induction of teaching almost simultaneously with teaching, the increased control over the mechanisms that cause transformations on the subjects level, the right relating between ins and outs;

4. Simulation-based patterns – they use as principle the analogy, the didactic playing and the stage version; these are the didactic methods that illustrates this teaching fashion; they use computer programs that simulate biological, geological, technical or other kind of phenomena;

5. Interactional patterns – they emphasize the teacher-pupil relationship in teaching:

- the interactional pattern elaborated by A. N. Flanders is based on the influence (direct or indirect) that the teacher has during class: the direct influences are shown through formulating the action directions, through presenting information without applying to the pupils' knowledge or to their experience (the teacher criticizes the pupils); the indirect influences are shown through applying to the pupils' ideas and they should intervene actively in the class – this is recommended for the smaller grades or when the teaching of a chapter or of a lesson is started);
- the interactional pattern elaborated by G. Ferry starts from the idea that the teaching process is a system of communications with two basic circuits: a vertical one (the teacher-pupil connection) and a horizontal one (pupil-pupil); the degree of merge between the two circuits corresponds to certain pedagogical conduct schemes: it prevails the communication on vertical (the teacher leads compellingly the training process, the horizontal communication prevails (the teacher only organizes and creates teaching situations) or the two schemes function in correlation, depending on the type of didactic activities;
- the nonverbal interactional pattern elaborated by B. Grant and D.G. Hennings stresses the information connected to the main types of moves used by the teacher: training moves and personal moves;

6. The shaping-persuasive pattern – applies to the conduct and motivational pupils' repertoire and to the communicative environment created by the teacher in class; in its succession, teaching has as purpose for the pupils to understand the

message through a minimum of decoding, so that the receptors' opinions should be influenced. This pattern is represented by J.N. Kapferer and it emphasizes the persuasive aspect of teaching.

The diversity of these patterns represents a varied strategic offer made to the teacher and it reinforces the conditions of affirmation of didactic mastership.

3) The problems of didactic styles:

The specialty literature has shown lately a special interest to the complex problems of the didactic teaching styles. The terms style of teaching has so many meanings that it almost denies only one definition. Meaning the way in which the teacher organizes and leads the teaching process, the teaching style is the set of conduct manifestations of the teacher in determined didactic situations.

For E. Geissler, the educational style refers to "the preferred conduct fashions (…) that return with a certain frequency" (Geissler, 1977, page 77). D.P. Ausubel mentions that the terms educational style "have so many meanings that defy a clear definition, since there is an unlimited possibility of combining and conceptualizing the teacher's individual particularities, shown through the didactic activity, in the idiosyncratic sense" (Ausubel; Robinson, 1981, page 542).

The style translates the operative functional quality, the active position of experience and of personality structure that in concretized in specific means of reception and processing the information. In other words, through style, we understand "to cultivate our own genuineness in its material sense" (Narly, 1996, page 428), the calling seen in gestures, mimics and expression. The professional style is marked by the unique, original and non-recurring manifestations of the person who promotes it, expressing "the way in which the teacher exert the powers that the social status provides him, the authority he was invested with, the degree of professional skill acquired as well as the degrees he has in this regard." (Ezechil, 2002, page 153).

Personal construct that expresses the teaching personalization in individual cases, the style is the teacher's personal note, "his personal equation" (Potolea, 1982, page 153) that reflects his pedagogic conception and his professional competence. The didactic style presents a certain internal consistency, relative stability and it appears as product of personalization of principles and norms that define the training-educative activity. Considered to be fit closely on the personal style, the professional style reveals the importance that the teacher gives to his role, the values after which he guides himself in his didactic activity, his attitude towards profession and pupils, his aspirations on professional level. Regarding the conduct flexibility and adaptability, the educational style "depends on the adopted pedagogic perspective in what education is concerned, on one educative ideal or another" (Antonesei, 2002).

It is affirmed that each teacher has "a specific fashion to approach pupils or adults and styles to learn, to treat and to emphasize the values of his subject matter, to handle methods, techniques and proceedings." (Văideanu, 1988, pp. 207-208).

The teaching style typology has as basis several classification criteria, among which:

a. openness to innovation or the inclination towards routine: innovational and routine-like;
b. conducts of the teacher's personality: cognitive, affective, will-like;
c. the didactic conduct motion: rigid, inflexible and adjustable;
d. the predominating purpose proposed by the teacher: informational and experience-based;
e. the used methodology: exposure- oriented and conversation-oriented;
f. the communication ability: communicative-open, reserved-censured and monologue-like-distant;
g. the professional deontology: responsible, detached-indifferent and negligent (who tries to mask responsibility);
h. attitude towards requirements: severe and indulgent;
i. the predominating purpose proposed by the teacher: informational and experience-based;
j. stress on the group or on the pupil: group-oriented and pupil-oriented;
k. the individuals' maturing: directive, tutorial, mentor-like, delegate-like.

The validity of a style is established contextually; there is not only one teaching didactic style that we could consider as the most important. We cannot talk about style purity but rather, just like in the case of tempers, we can talk about a dominant of only one of these styles. Moreover, since we cannot say exactly which of these styles is the best it is sustained the idea of style adjustment to the specific situation.

The teaching style problems requests answers to the following questions:

- What do we understand by effective teaching in the circumstances in which pupils practice different learning styles?

There are several learning styles:

- depending on the orientation within the task: linear/tree-like, systematic/unsystematic, active/reserved;
- depending on how pupils perceive the task and on how pupils think: analytically/synthetically, inductively/deductively, divergently/convergent;
- depending on the liberty regarding the task: informally/formally, flexibly/rigidly;
- depending on the dominating psychical processes: motion-causing/auditory/visual, informational/experience-based, conceptual/iconic.

It results from here that if pupils practice different styles, then the multi style teaching can be one of the conditions of an effective teaching.

What will be the didactic styles that will be promoted in the future?

The didactic styles that will be promoted must have the following features: interest for cooperation, stimulation of pupils' participation, balance between strictness and indulgence, promotion of democratic relationships, orientation on learning compared with teaching.

- Once shaped, are the didactic styles perfectible?

The necessity of the teaching style perfecting represents a concern in order to obtain a
better efficaciousness in the performed activity. The modification of the didactic style, to the extent in which the latter is not appropriated any longer for the psycho pedagogic requirements is a hard mission, achievable through the recycling stages, within which the teachers' system of values changes.

From the multitude of the involved investigation paradigms, four conceptions are noticed (Cerghit, 2002, page 264): ideographic (style is a product of the teacher's personality), nomothetical (style comes from the teaching activity specificity), situational (it awards a causal role to the context), ideothetic (it promotes the ipothesis of the triple origin of style, as synthesis or as an original merge of the three reminded determinative variables).

The analysis of the teaching styles helps us better understand the new orientations and directions of the teaching development and to avoid the perpetuating some anachronistic, nonperforming styles.

4) The teacher's role within the teaching process:

Interaction between teacher and pupil established during teaching supposes that the teacher must also practice other functions:

a. the function or activity organizing – it organizes the pupils' conduct in class, it shows the tasks succession;
b. the development function – it gives the support requested by pupils, it stimulates;
c. the imposing function – it imposes information, solving methods, action methods, opinions, attitudes, value judgments;
d. the personalization function – it individualizes the training, it invites pupils to use their personal experience;
e. the feed-back function – positive (it approves) or negative (it disapproves);
f. the affectivity function - positive (it praises, it encourages, it acknowledges the merit) or negative (it criticizes, it forbids, it rejects).

L. Coudray speaks about the teacher's recognized fashions to influence (apud Maciuc, 1998, pp. 211-212):

- influence through compulsion and violence, coercion and punishment; in the Antiquity and even later on, the body coercion was a very current method, in the Spartan's education system, the rods slapping was used;
- influence through rivalry setting, through the pupils' hierarchy setting: even in the area of the old Greece, competition was encouraged; along the time, in school competition was stopped, but also the denounce;
- influence through and by help of patterns and of the environment: there were periods when it was required to comply with the pattern;

- influence through consideration of affectivity, doubled by a moral and intellectual climbing: the pupil is turned into a "sentimental vassal", a protected disciple – idea valid also to the old Greeks up to Pestalozzi;
- influence through encouraging the pupils' liberty of action: met with M. de Montaigne, J.J. Rousseau, E. Key and J. Dewey.

The points of view existing around the ideal teacher's theme and the opinions about his role usually correspond to the functioning of a certain hierarchy of values at some point from the social evolution.

Considering the accepted principles and goals that circumscribe genuine values, we can say that what interests more is how teachers should be. This aspect is underlined also by I. Kant when he affirms the necessity of children's education considering a better condition in the future.

R. Dottrens raises rhetorically the issue of the pedagogic vow: "I will exercise my mission with consciousness and dignity. I will se in my pupils, not necessarily school-children, but children and I will never forget that for the part that is my responsibility, I am responsible for their destiny. I will maintain through all means that I have available, the honour of the didactic profession (…). I make these promises solemnly, freely, cross my heart" (Dottrens, 1971, page 77). Adjusting the subject of this vow, I. Todea considers that "through its subject or its pomp, such an act could have a strong influence upon the subsequent attitude of the pedagogue" (Todea, 1996, page 32).

There are several types of teachers (G. Ferry, 1975; E. Noveanu, 1990):

- charismatic/with calling (oriented on the personality that is often charismatic of the teacher), of adjusting (collaboration-oriented, oriented on the adjustment on the didactic situation) and of emancipation (oriented nor on pupil or on teacher, but on the relationship between them);
- proactive (he shows initiative, he perfects his didactic conduct), reactive (he is flexible, but a little bit amenable, he has no clear objectives and he does not follow them perseveringly) and ultra reactive (the extremist teacher).

D. Ausubel reminds of three conduct structures that make teachers fall into three categories: structure A (affection, understanding and friendship), structure B (responsibility, methodical spirit) and structure C (stimulation, imagination and enthusiasm power).

It is said that a real effective teacher is "friendly, cheerful, understanding, virtuous, sociable, with affective stability, they maintain good personal relationships" (Bergin, 1970, page 348); "lively, stimulating, inventive and enthusiastic towards the subject matter they teach (D.P. Ausubel, 1981, page 538).

The teacher plays several roles (A. Woolfolk, apud Nicola, 1996; D.P. Ausubel and F. Robinson, 1981):

- an expert of the act of teaching (he can make decisions regarding everything that happens in the teaching process), a leader (he leads a group of pupils), a motivational agent (he sets going and maintain the pupils' interest, their curiosity and wish to learn), an advisor (he is a

guide and observer for the pupils) and reflexive professional he reflects over the new events in class);

- a friend and a confidant, a substitute of parents, a councillor (advisor), spokesman of the adults' society and transmitter of the values approved by the society.

For M. Bonnett, the teacher's role is understood today from the perspective of the "ethos and of the market language", namely of those elements that represent the economist's perspective. We meet the same perspective with N. Blake, too who affirms that "the differences between teachers reveal a variety of types. One commits himself seriously in preparing the lesson (…), another one lacks the organisational spirit but he charms the class through the enthusiasm he has when he teaches. Another one lacks these qualities, but he is sensitive to the children's needs and he is able to gain their trust" (apud Stan, 2004, pp. 44-45). On the same line, it is affirmed that "a particular teacher can have an affectionate attitude towards pupils or on the contrary, an icy one, of indifference, he can show to them a calm, balanced and kind attitude or on the contrary – explosively, uncontrolled and aggressive (Postelnicu, 2000, page 46).

The teacher still possesses power resources that allow him to impose himself in pupils; but from the modern perspective though, this represents an abuse. In capacity of facilitator, the teacher must help pupils in taking and making inner the following values (Stan, 2004, pp. 65-66): diversity standing up, tolerance and freedom, creativity importance, emotions importance, intuition importance.

From the constructivist perspective, the teacher has to reconsider representations, arguments, rules that are no longer up-to-date. Gradually removing the knowledge transmission, he practices new roles (he facilitates, he challenges, he urges, he trains, he stimulates, he develops, he shapes, he builds and rebuilds etc.).

5) The teacher's competence profile:

In outlining a teacher's profile, an important role has the pedagogic delicacy. This is translated by the capacity to easily establish adequate relationships with the pupil who is being educated by the teacher, wit, self control, judgement, the sense of value. Also, it is important the pedagogic mastership, approached as system of features that confers to the teacher obtaining higher performances in his activity. Moreover, mastership means to act differently depending in each case and depending on the new factors that occur, some of them having an original and unpredictable nature. About the teacher who possesses pedagogic mastership, I. Nicola affirms that "he is better than a professional; he is an artist in his job" (Nicola, 1996, page 479).

The specialty literature awards large spaces to the teacher's competence profile. I. Neacşu (1990, pp. 203-208) signalises the introduction relatively late of the term competence. This is described as "an intellectual capacity that possesses a variety of transfer possibilities (…), capacity that associates affective and attitudinal components, of action justification (Maciuc, 1998, page 101). Having a great practical value, competences mean capacities, knowledge and attitudes that show in fact the chosen action fashion for the purpose of objectives attain.

From the social perspective, competence is a person's capacity to interpret a decision or to perform an action; from the general psycho pedagogy perspective, this includes an act of availabilities, capacities, abilities and other elements that engages the whole personality in achieving a task, in fulfilling the duties associated with a status (a person's practical value in relation to a specific role).

Since it is a specific method of manifestation, the didactic conduct requires the teacher's competence. Any rebate made to the competence criterion has immediately and direct impact upon the pupils' personality. Approaching the teacher's competence as being "the ability of his conduct in a particular fashion in a pedagogic situation", M. Călin mentions about the importance of the following competences (Călin, 1996, page 48).

- the communicative competence – initiate and set going the act of communication with pupils;
- the teleological and programmed competence – conceiving the goals that he tries to reach;
- the instrumental competence – using an assembly of means and methods that could lead to goals achieving;
- the normative and decisional competence – setting a specific order for the didactic actions and choosing the best action variables;
- the evaluative competence – measuring and appreciating righteously the results obtained by the pupils.

A. Dragu (1996) specifies the following competences:

- political – validated on the level of relations between the macro and the micro structural purposefulness;
- moral - validated on the level of relations between the didactic draft quality, the educational message quality and the quality of the response conduct of the pupils who are being educated by the teacher;
- psychological – validated on the level of relations between the informative density and the affective resonance of the latter;
- professional - validated on the level of openness towards the self perfecting in the specialty field;
- social - validated on the level of the responsibility taken.

As interpersonal dimension, the competence has several relational facets. In a teachers' training program that takes place in the U.S.A., the didactic competence is operationalised under the following specific competences (R. Gherghinescu, 1999, page 21):

- the cognitive competence – it includes the intellectual abilities and the knowledge expected from a teacher;
- the affective competence – defined through the attitudes expected from the teacher and considered as being specific for the didactic profession;
- the exploratory competence – that aims at the pedagogic practice level and it provides the occasion of the future teachers to practice their didactic skills;

- the competence connected to performance – through which teachers prove not only that they know, but that they can also use what they know;
- the competence of producing modifications noticeable by the pupils as a consequence of the pedagogic relationship.

Although considered from different angles, the teacher's competences represent "a spectrum with similar nuances: knowledge and a rich imagination, enthusiasm, lucidity, courage, determination, team spirit (G. Berger); attitude of understanding our fellow creatures, flexibility, capacity to rapidly adjust (G. de Landsheere); synthesis, selection capacity, sensitiveness, prospective outlook (G. Văideanu)" (Noveanu, 1999, page 69).

Approaching the idea of educator's role model, L. Antonesei underlines the importance of the following types of competences (Antonesei, 2002, pp. 116-117):

- the cultural competence – is represented by the expertise training and the general culture;
- the psycho pedagogic competence – provides a good transmitter quality to the beneficiaries of the educative processes of the specific culture but also of the relationships with the culture field in its whole;
- the psycho affective and communication competence – it is founded on certain structural personality qualities;
- the moral competence – supposes the necessity of relating to the values that form the educative ideal promoted by the teaching system;
- the managerial competence - effectiveness of organising and leading the activities, the processes, the staffs and the educative institutions.

The recent paradigms and evolutions of the theory and methodology of the curriculum, the training and the evaluation requires from the teacher new competences concretised in: the maximisation of each child's potential, the pupils' involvement in the stimulation development, in favouring the team work, in the cognition building, in the pupils' negotiating, in the adjustment to change, in the holistic evaluation of performances.

REFERENCES:

1. Albulescu I., Albulescu M., (2000). Teaching and learning of the socio-human study objects. Elements of applied didactics, Iasi: Polirom Publishing House.
2. Antonesei L., (2002). An introduction into pedagogy. The axiological and transdisciplinary dimensions of education, Iasi: Polirom.
3. Ausubel D., Robinson F., (1981). Teaching in school. An introduction into the pedagogic psychology, Bucharest: EDP (The Didactic and Pedagogic Publishing House).
4. Bering A.E., (1987). Principles of personality and conduct changes // The psychology of the educational process, coord. J.R. Davitz and S. Ball, Bucharest: EDP (The Didactic and Pedagogic Publishing House).
5. Bîrzea C., (1997). Science of teaching. Specific tendencies in didactics // Contemporary Pedagogy Problems, no. 9, Bucharest: B.C.U.

6. Călin M., (1996). Theory of education. The epistemic and methodological substantiation of the educative activity, Bucharest: All Publishing House.
7. Cerghit I., (2002). Systems of alternative and complementary training. Structures, styles and strategies, Bucharest: Aramis Publishing House.
8. Dicu A., Dimitriu E., (1973). Psycho Sociology of Education Problems, Bucharest: The Scientific Publishing House.
9. Dottrens R., (1971). Educators Yesterday, Educators Tomorrow, Bucharest: EDP (The Didactic and Pedagogic Publishing House).
10. Dragu A., (1996). The teacher's Personality Structure, Bucharest: EDP (The Didactic and Pedagogic Publishing House).
11. Ezechil L., (2002). The Educational Communication in the School Context, Bucharest: EDP (The Didactic and Pedagogic Publishing House).
12. Ferry G., (1975). Practice of working in groups. An experiment of teachers' training, Bucharest: EDP (The Didactic and Pedagogic Publishing House).
13. Gessler E., (1977). Means of Education. Bucharest: EDP (The Didactic and Pedagogic Publishing House).
14. Gherghinescu R., (1999), The Concept of Didactic Competence // The Didactic Competence, coord. R. Marcus, Bucharest: All Publishing House.
15. Ionescu M., Radu I., (1995), The Modern Didactics, Cluj-Napoca: Dacia Publishing House.
16. Maciuc I., (1998). Guidelines in the Training for the Didactic Profession, Craiova: the University Reprography.
17. Narly C., (1996). General Pedagogy, Bucharest: EDP (The Didactic and Pedagogic Publishing House).
18. Neacşu I., (1990). Training and Learning, Bucharest: The Scientific Publishing House.
19. Nicola I., (1996). Treaty of School Pedagogy, Bucharest: EDP R.A. (The Pedagogic Publishing House) R.A.
20. Noveanu E., (1990) Preliminaries on Drafting a New Teaching Plan // The Pedagogy Magazine no. 1.
21. Noveanu E., (1999). Competences of the Educator in Tomorrow's School. The Impact of Informatics Use // Modern Educational Tehnologies, coord. V. Mândâcanu, vol. V, Bucharest: Le Mot Publishing House.
22. Postelnicu C., (2000). Essences of School Didactics, Bucharest: Aramis Publishing House.
23. Potolea D., (1982). Educational Styles // Fundamental Problems of Pedagogy, coord. D. Todoran, Bucharest: EDP (The Didactic and Pedagogic Publishing House).
24. Stan E., (2004), Post-modern Pedagogy, Iasi: The European Institute.
25. Todea I., (1996). From the training Theory to the Practice of Integration, Tg. Mures: Sedcom Publishing House.
26. Văideanu G., (1988). The Publishing House to the Border between the Millenniums, Bucharest: The Political Publishing House.

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

STYLES OF LEADERSHIP IN SCHOOLS. TYPOLOGIES AND CRITERIA OF ASSESSING THEIR EFFICACY

Junior Lecturer Alexandrina Mihaela Popescu,
PhD student
TSTD, University of Craiova

Abstract

Performance in school organizations depends on the quality of the leadership that managers exercise. The study of the styles of leadership in schools derives from their effects over school climate, as well as over the quality of the instructive-educational activity.

The typologies of the styles of leadership can be taken as reference points and introduced in programs of training and improvement of the school managers' patterns of behavior in order to attain and increase the success of school organizations.

The field of the style of leadership in schools is open to debate and improvement and it is necessary, given the current context, to put it in relation to the insurance of quality in education.

Key concepts: *leadership, style of leadership, typologies of the styles of leadership, criteria of assessment, efficacy, quality*

Leadership is considered the key-factor that determines the success of the activity of an organization.

Along history, *leadership* has been seen under three different angles (Zlate, 2004).

- As *practical action* proceeding from the necessity to satisfy imperative needs;
- As *art* since it supposes the search, discovery, even the inventing of new procedures and action rules in order to reach the objectives
- As *science* since it involves theoretical reflection, use of specific research methods, effort aimed at discovering and wording the laws that govern the phenomena in this field

The three aspects do not exclude one another, on the contrary, and their balance can be the key to effective leadership.

There is not a unanimously acknowledged definition of leadership in theoretical works. This is due, on the one hand, to the intrinsic complexity of the

concept, and, on the other hand to its being an object of study and research for several sciences.

The great number of definitions of the concept of leadership makes it useful to synthesize the essential notions that can be identified in different approaches:

- It is a *phenomenon of social influence* (the activity performed by some people which influences other people's activity in order to attain certain organizational goals at the expected levels of performance)
- It is a *dynamic process of organizing and coordinating* groups of members of an organization towards fulfilling specific tasks or goals performed by a group of people over a given period of time in a certain organizational context
- In Romanian, the terms of *leadership* and *management* are often used with the same significance, thus appearing an overlapping of the connotations attached to each

Management and leadership are not synonymous, neither are they incongruous. Moreover "Leadership cannot be enacted without the help of management, just as management implies that the principles and ethics of leadership be acquired and applied" (Vlasceanu M., 2003)

For quite a long time, leadership was perceived as restrictive, as an activity of ruling, commanding, control with emphasis on discipline, order, hierarchy, which is why ever since the 90s we have witnessed a tendency to replace the term of leadership with that of management, thus risking to become prey to fashion. E. Paun (1999) warned against the abuse in using the term of management in education, against the necessity to integrate and harmonize the demands and the elements that are specific to effective leadership and those that characterize management, as well as the values of the educational system.

Performance in a school organization strictly depends on **the quality of the leadership** enacted by **school managers**.

Leadership theories

The theories about leadership, just like its definitions, are numerous and vary widely.

In his paper Leadership and Management, Mielu Zlate (2004) achieves the ordering and systemization of the theories and models of leadership by means of flexibly combining two criteria: the logic of the science and its history, the former being given a slight preference.

The grouping of the theories and models that the above mentioned author proposes can be seen below:

Personologic theories

- The theory of charismatic leadership
- The features theory

Primary situations theories

- The theory of submission to

The laws of the situation

Behaviorist theories

- The theory of the two dimensions of behavior
- The theory of the behaviorist continuum

Theories of the contingency

- Theories of the convenience of the situation of leadership
- The theory of the maturity of employees

Cognitive theories

- The normative theory of decision making
- The "path-purpose" theory
- The theory of attribution

Theories of social interaction

- The theory of vertical- dyadic links
- The theory of transactional leadership

In the next section we will focus on the synthetic presentation of characteristic features of theories and models of leadership since "most leadership theories proceed from the style of leadership". (Zlate M.)

I**. Personologic theories** are approaches that focus on identifying the personal features that differentiate the leaders from non-leaders, and especially from the led ones. Among these theories, two need special attention: the theory of charismatic leadership and the features theory.

a) The theory of charismatic leadership is related to the early studies in the field of leadership and envisages leaders as born, not made. The attribute "charismatic" was introduced in the scientific approach by Max Weber. "Charisma" should be understood as "an outstanding quality of a person, whether it is real, assumed, or pretended" (apud M. Zlate 2004, page 35). The theory of charismatic leadership in its initial form was overridden and sometimes even left out, but it does not totally lack significance. F. Sintion (2000) considers that the theory of charismatic leadership has had an important contribution to formulating the scientific hypothesis according to which "if the leader is endowed with a series of superior qualities that differentiate him from other persons, then it becomes possible to identify those qualities, and eventually even measure them."

b) The features theory started in the 30s-40s from the theory of charismatic leadership.

The theory is centered on the idea that the success of leadership is due to the leader's features of personality. Therefore, numerous studies have been carried out in order to identify the leader's features, but a consistent set that might differentiate the leaders from the led could not be put together. Moreover, features that are met in some leaders are not present in others, and no leader possesses all the desirable qualities.

Violently rejected and often abandoned by theorists, the features theory has nonetheless made an essential contribution in the practice of leadership (Zlate M. 2004):

- It points out to the necessity of leadership and of the evaluation of a leader's features
- It initiates the discussion on the concept of "a good leader" and justifies the current interest in the development of the leader's skills
- It influenced the change in the methodology of research of personality in as far as it laid the foundation for the factorial analysis of personality.
- It resulted in extremely important side effects such as the redirection of research towards other factors, besides the personality features, that might explain the success of leadership.

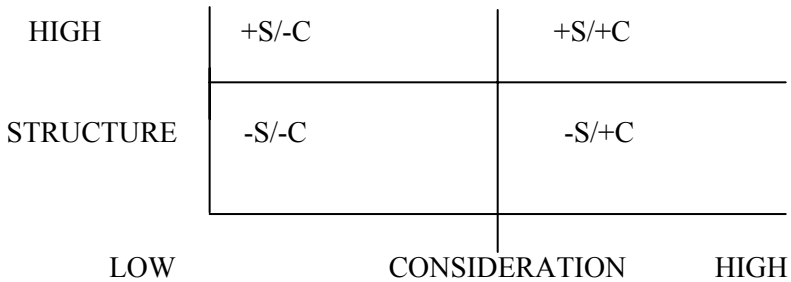
As far as the Romanian school management is concerned, in the context of decentralization, the personologic profile of the school and human resources managers becomes visible.

As I. Neacsu (2005) remarked, the personologic profile of the manager is not a new technique, what is new is the context within which it operates, its sources of inspiration, the extensive model of the model it adopts, the quality of the molding of the modern efficient manager's personality.

II **Behaviorist theories** developed as an alternative to personologic ones. Unlike the features theory, which attempts to answer the question "what, who is the (efficient) manager?" the behaviorist theory focuses on the question "what does the efficient manager, leader, do?" In order to practically establish the leaders' behaviors, observation questionnaires are used. The most influential studies in this area are those known as "the Ohio State Studies"- The theory of the two behaviorist dimensions, and "the University of Michigan Studies"- the theory of the behaviorist continuum.

a) The theory of the two behaviorist dimensions used a series of scales and had recourse to the factorial analysis, which led to the discovery of two behaviorist dimensions for the leaders: **consideration (C)** towards employees by means of motivation, delegation, participation in the decision making process, and **structural initiative (S)** which comprises those behaviors that influence the fulfillment of the formal tasks, the role definition, task repartition and planning of activities.

When combining the two dimensions, four typical situations are obtained: low consideration with high initiation of structures, high consideration with low initiation of structures, low consideration and initiation of structures, respectively high consideration and initiation of structures, of which the last is considered to be a situation.



Optimal behaviorist dimensions of the leader

This theory can be considered the starting point for research focused on the diagnosis and assessment of the styles of leadership.

b) The theory of the behaviorist continuum was devised by Rensis Likert. Out of concern for the study of the behavior of the leaders of highly productive groups and leaders of weakly productive groups, he set up a continuum that starts from the exploitative-authoritative style, goes through the benevolent-authoritative and consultative styles and ends with the participative style.

Authoritative leadership	Authoritative-permissive leadership	Consultative leadership	Participative leadership

Focus on production Focus on the employee

Behaviorist continuum of the leader

Weakly productive groups Highly productive groups

This theory proved its value through the participative leadership that Likert proposed, even if a series of limitations can be found in its original form. Research in the early 90s attempted to complete the behaviorist model of leadership by introducing new dimensions that focus on the development that is specific to leaders and generates and implements change.

III. **Primary situations theories** appeared as a reaction against personologic theories and focus not so much on the individual, but on the context he evolves in.

Consequently, this approach ignores both the leader's objective capacities and the creative features of the employees, subject to the pressure of the situation. (Stanciu S., Ionescu M.A. 2005)

IV. **Contingency (situational) theories** add a new element to the analysis of the manner of leading people in an organization- the context, the situation in which leadership is enacted. These theories seek an answer to the question "what is the efficient style of leadership?" The creator of this theory is Fred Fiedler. He starts from the idea according to which the efficacy of leadership depends on the influence of two factors: on the one hand the leader's personality, and on the other hand situational variables. Fred Fiedler considers that there are two types of leaders: some who focus on the relations and others who focus on the task. The novelty is brought about by an instrument called LPC- "least-preferred co-worker" or the scale of the least preferred collaborator, in order to establish the style of leadership.

Fiedler's theory has the merit of introducing the organizational variables more directly in the study of leadership.

V. **The cognitive theories** are centered on the activity of processing information which appears as a contingent variable, which-therefore- the efficiency of leadership depends on.

Among the most significant cognitive theories the following can be mentioned: the normative theory of decision making, put forward by Vroom and Yettan in 1973 and revised by Vroom and Jaga in 1988, the "path-purpose theory" formulated by House in 1971 and which he and Mitchell developed in 1974, and the attribution theory formulated by R. Calder (1977), Green and Mitchell (1979).

VI. **The theories of social interaction** are interested in the major influence between leaders and employees in order to optimize the act of leadership. Such theories are that of vertical-dyadic links and the theory of transactional leadership.

The Style of Leadership- Conceptual Delimitations

It has become almost a cliché to state that good functioning of an organization depends on the manager's style of leadership.

"What is the style of leadership?" An answer to this question is not easily found.

E. Paun (1999, pages 120-121) concludes that the style of leadership is a concept that is relatively difficult to define as it depends on numerous personal variables that cannot always be identified and accurately described. In the practice of activity-leading, a combination of styles can be found, one of which might be dominant.

M. Zlate (2004, pages 95-98) also identifies a series of difficulties in defining the "style of leadership", which is due to the different attitudes the authors have towards the concept: some see the style of leadership as a set of features of the leader's behavior; others clearly separate the notion of behavior and the style of leadership.

Some definitions emphasize the fact that the style represents an objectivation of an individual's conception or philosophy of life and the expression of a set of values: some others lay the stress on the idea that the style represents the manner of acting as manager, the behavior and actions involved in this status. (E. Paun, 1999, page 120)

In our vision, two definitions of the system of leadership are productive in the context of school management:

- The psychological perspective: "the concrete manner of playing a role, therefore of effective transfer in behavior of the demands imposed by the leading status " (M. Zlate, 2004, page 97)

This definition has the advantage that the attitude-motivational element and the behaviorist one are reunited in the style of leadership, conferring it special qualities as soon as it is analyzed in situational terms.

- The organizational perspective: "the manner in which the manager acknowledges the power he is invested with by his position in school and the art of using his power in managing procedures that ensure both the achievement of the organization's goals and a climate of participation and personal contribution of each member of the school community." (E. Paun, 1999, page 121)

This definition stresses the idea that the style of leadership is not only a mere personal variable of the school manager, but also an organizational variable that affects teachers, their relationships, even the school organization as a whole.

The analysis of the styles of school management derives from their effects on the school climate and the quality of the instructive-educational activity performed.

Typology of the styles of leadership

The number of typologies of the styles of leadership that appear in theoretical works is quite impressive. Some of them are adapted to the specificity of school management. Consequently, a criterion is necessary in order to order and group them.

In the past few years M. Zlate's classification of the styles of leadership has pervaded the Romanian specialized works (2003, page 85, 2004, page 101). The criterion it uses is that of the number of variables different authors take into account:

- One-dimensional theories, which, though starting from several activities of the leader, give the preference to one of them which becomes fundamental;
- Two- or three-dimension theories, which start from two or three dimensions considered to be dominant in activities of leadership.

One- dimension typologies

The best-known one-dimension typology – and the first in chronological order- is that devised by K. Lewin and his associates R. Lippit and R. K. White.

- K. Lewin identified three styles of leadership, on the model of decision making. They are as follows:

  - *Authoritative or autocratic*, in which the leader decides on the activity of the group, establishes the working tasks and methods; though in the short run the style is efficient, it generates discontent, tensions, frustration, hostility, even aggressiveness.
  - *Democratic*, in which the leader discusses the issues and adopts the decisions in collaboration with the group, though he still produces objective, realistic evaluations of the others' activity; this style is efficient, it ensures the interdependence in action of all the group members, as well as the creation of good collaboration and a pleasant socio-affective climate.
  - *"Laissez-faire"* when the leader leaves to his employees the entire freedom of decision-making, provides additional information and is not interested in the carrying out of the activity, may begin by favoring the creation of a relaxed atmosphere but has low efficiency as the group works without deep involvement and randomly.

The typology created by Lewin and his associates had a flaw, namely "it suggested that there exist pure styles of leadership, whereas there exist rather combinations of different styles".

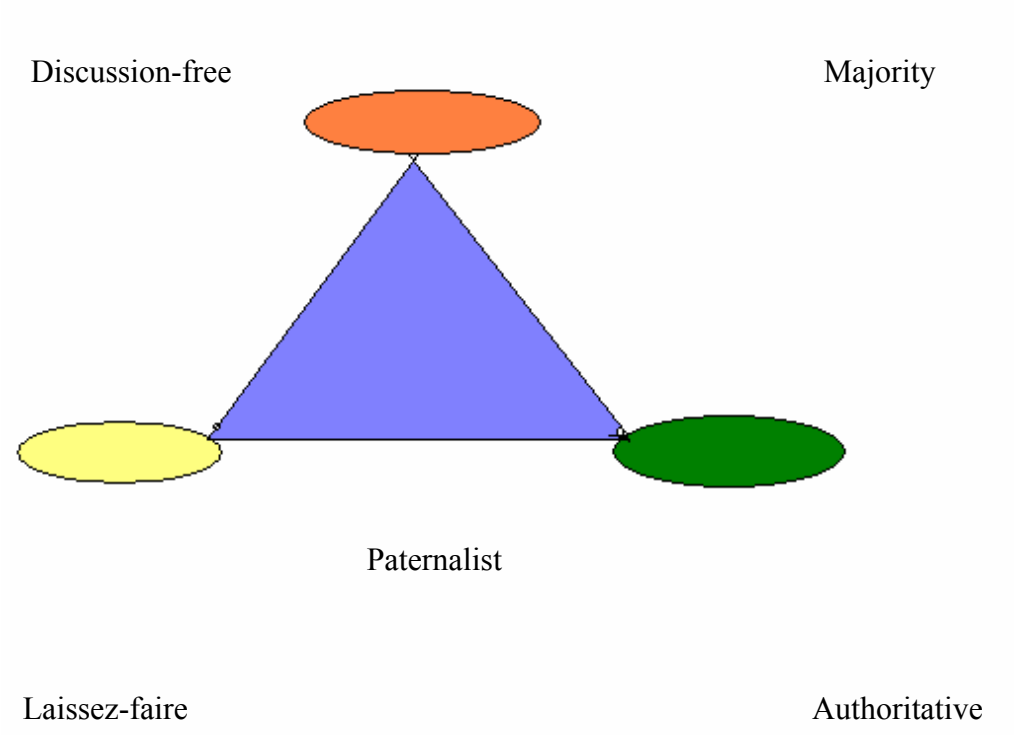
Differences appear with regard to the influence of these styles on the efficiency and the climate created:

- the efficiency of the authoritative style is high on short term, it creates satisfaction for the leader and dissatisfaction for the employees, it leads to the creation of a tense, aggressive, or passive climate; what's more, it excludes participation in decision making.
- The democratic style is efficient in the long run; it proves to be motivating and leads to the employees being involved in the act of leadership.

➢ R. Likert conclusion is similar to that of Lewin and his associates. He distinguishes four systems of management (styles of leadership) :

- System 1 (*the authoritative-exploitative style*), is characterized by leadership based on fear and constraint, summit communication, making and imposing decisions from the upper ranks of the hierarchy without prior consultation, the employers and their employees are psychologically far from one another, and there are occasional rewards.
- System 2 (*the authoritative-paternalist style*) implies leading by means of rewards rather than penalties, but the employees are still totally obedient, the information going up is convenient for the employer, the decisions are made at the higher levels of the hierarchy, only minor decisions are made by the employees, and their ideas and propositions are only required in unimportant instances.
- System 3 (*the consultative style*) is characterized by higher, though not total trust in the employees; the leaders efficiently use the employees' ideas and propositions and stimulate up and down communication; rewards are preponderantly used and penalties are not frequent, but decisions are still made at higher levels.
- System 4 (*the participative style*), is characterized by the employer's total trust in his employees, communication is permanently encouraged, so are the employees' ideas and propositions and their participation in setting objectives making decisions; employers and employees are psychologically close.

➢ Lewin, Lippit and White's theory was revised by N. R. I. Maier (1957) as shown in the following ske



In order to answer the question "what style of leadership is more efficient?", Maier introduced the idea of the " zone of freedom of action", inspired by the remark that , in exercising the democratic style of leadership, for instance, a series of factors interfere and limit the leader's zone of freedom of action. It is only what is left after removing these zones that constitute the field of actions that can be made and solved by group methods.

- Tannenbaum and Schmidt conceived another interesting theory starting from that of Lewin and his associates. It is known as the theory of the continuous style, as it claims that between the two extreme styles- the autocratic and the democratic ones- there is a whole range of styles according to the freedom given to the employees. This model accepts the idea that the pattern of behavior adopted depends on the context, the credibility, and the competence of the manager, as well as on the features of the employees. The authors imagined a continuum with two extremes (authoritative style, democratic style) and with countless points "behaviors" that are possible and accessible by a leader. The illustration of the respective styles of leadership can be found in the figure below:

Authoritative style					Democratic style
Use of authority by managers					Field of freedom for employees
The manager defines the limits and asks the employees to act within limits	The manager makes the decision and tells it to the employees	The manager lets the employees make the decision	The manager sells the decision to the employees	The manager presents proposal for the decision	The manager presents the problem receives suggestions and the final decision

The seven patterns of behavior of the leader suggest the existence of four styles of leadership:

- *Dictatorial* (behavior 1)
- *Negotiating* (behavior 2)
- *Consultative*(behaviors 3,4,5)
- *Cooperating or involving* (behaviors 6,7)

The classification that Tannenbaum and Schmidt proposed proved useful in practice, which led some authors to introducing it in the training programmes intended for leaders and managers (Zlate M. 2003, page 89).

Two basic activities that are interdependent can be found in school: on the one hand the managing administrative activity, which combines elements that are characteristic for bureaucrats and specific features of organizational development, and in this context the degree of authority of the school manager is higher, but open to participation; on the other hand the pedagogic activity, less influenced by organizational logic, which pushes the school managers to adopt the consultative and cooperative-involving style.

Two-dimension Typologies

Robert R. Blake and Jane S. Mouton's typology is representative for the two-dimension approach: focus on the task and focus on the employees' problems.

In the authors' opinion, concern for the people emphasizes the leaders' behaviour for the degree of personal involvement in the fulfilment of the objectives of the organization, the existence of normal working relationships, characterized by bi-dimensional communication, mutual help, and respect for the employees' ideas and consideration for their feelings. They find the necessary time to listen to their employees, they are open to change, show concern for the well being of their staff and are friendly and approachable.

Concern for the tasks (objectives) emphasizes the leaders' behavior for the working processes, work efficacy, the degree of creativity of the research and development activities, the general results of the organization. This classification counts 81 possible leaders but the two authors only focus on five types of styles of behavior:

a) *The task-centered style* is characterized by high interest in the task and low interest in the human issues: the relationships between the leaders and the led are based on authority, obedience and submission; there is little communication going on between the leader and the employees, and it is mainly meant to carry his orders.

b) *The populist style* is characterized by high interest in the human issues and low interest in the task; its advantage is that it ensures a good climate but it neglects the efficacy of the activity.

c) *The drained style* is characterized by low interest both in the task and the human issues; the leader who practices this style does not get involved in the decision making, avoids controlling, and avoids conflicts.

d*) The moderate- hesitating* style is characterized by moderate interest both in the task and in the human issues; the leader that practices this style looks for compromise, has a conciliatory role in communication, is realistic, but does not encourage creative spirit, appeals to rules and traditions.

e*) the group-centered style* is characterized by high interest both in the human issues and in the task; such a manager leads the people by making them understand , adhere, self-management is often reached; he establishes a high level of morale, tackles conflicts by means of open debate, makes proof of creative spirit, promotes initiative. Such a style should be adopted by school managers so much the more that the reform in education has become a permanent accompanying feature of the educational system. Unfortunately, empiric expertise
confirms that the maximal actualization of the two dimensions is impossible. However, "planning" styles that are efficient both in terms of the quality of the activity and human issues can become an essential aim.

Three-dimension typologies

Three-dimension typologies are obtained in two ways:

- Starting from a two-dimension typology and adding it another dimension. For instance, Blake and Mouton revised their management grid by adding a third dimension referring to the consistency or depth of a style.
- Considering from the very beginning a number of three dimensions. One example is the typology Reddin built, which starts from three dimensions: focus on the task, focus on relationships, and focus on efficiency. The quoted author identifies 8 styles of leadership, 4 efficient and 4 inefficient ones. (W. Reddin, apud I. Petrescu, 1993; A. Prodan,1999):
    - *The negative type*- weak features of a leader, lacks interest, avoids problems, and does not take suggestions, easily demoralized.

- *The bureaucratic type*- deals with efficiency in a rigid manner, has few ideas, is not encouraging, neglects the task fulfillment, and underestimates relationships.
- *The altruist type*- mostly interested in relationships, creates the favourable climate but has low efficiency
- *The promoting type*-attracted by efficiency, team-bound, stimulates participation, develops interest
- *The autocratic type*- gives priority to short-term tasks, minimizes relationships, has recourse to threats, constraints, and control, rejects initiative, smothers the conflicts, and creates a climate of anxiety.
- *The benevolent-autocratic type*- concerned about tasks and efficiency knows how to be demanding without irritating.
- *The hesitating type*- hesitating, concerned about tasks and relationships, low interest in results, takes decisions under the pressure of the events, compromises.
- *The achieving type*- insists on efficient organization of efforts, demands efficacy, knows his collaborators, uses differentiating methods, open to suggestions, and solves conflicts.

There are many other typologies of the styles of leadership, regardless of the number of dimensions taken into account. They can be taken as reference points and introduced in programmes of training or improving the different patterns of behavior of school managers, with a view to reaching and increasing success in this type of organization.

Criteria of assessment of the efficacy of the styles of leadership

Which style of leadership is more efficient? The answer to this question is not easy.

Based on comparative analysis, the superiority of the democratic style over as opposed to the authoritative one can be emphasized. The democratic style "creates optimal interaction among the subjects and the task, problem solving appearing as a result of the activity of the subjects', whereas the authoritative style appears" like a system of external orders and commands that "blocks" the view on work and stops any independent action." While, in the former case the employees are induced an internal motivation that makes it possible to establish positive relationships with the task and the people, which thus prevents the appearance of tension and aggressiveness, in the latter employees are induced external motivation, which allows their interacting with the task only in the presence and under the pressure of the authoritative leader, so that they can be described from the psychological point of view as "open" to disturbing influences from the outside. The democratic style creates the conditions to harmoniously combine efficiency and the socio-affective climate in the group, while the authoritative style loads the employees with emotional tension, makes them aggressive, willing to "migrate" from the field of the task, which causes some

discrepancy to appear between efficiency and group atmosphere. (M. Golu, 1974, page 232)

If one cannot definitely take one side or the other in as far as the advantages and disadvantages are concerned, the advantages range on the side of the democratic style when it comes to the influence of the two styles on the climate. (E. Paun, 1999, page 127)

There are situations when the same leader might be authoritative in some instances and democratic in others, under the pressure of the facts. This is why, the first feature a manager must possess, which has no connection to professional training, is flexibility.

The efficacy of a leader does not depend on his own construction capacity, but on the involvement, specificity and participation of a number of persons. The focus on obtaining high performance or success involves the encouragement of cooperation rather than competition or personal accomplishment.

In specialized literature we do not find a list of "firm" criteria to assess the efficacy of the styles of leadership. Assessment is generally performed in relation to the other variables of the organizational life.

An attempt at sketching and supporting the criteria of assessment of different styles of leadership can be found in M. Zlate's (2004) works: *Treaty of organizational-managerial psychology* and *Management and Leadership.*

1. *The number or weight of the positive and negative effects of the styles of leadership* on the general structure of the activity. This criterion derives from the idea that the practice of each of the styles can be associated both with positive and negative effects. The number of positive and negative effects of each style could be significant for the assessment of its efficacy.

Although this is an objective and quantitative criterion, it has low operational value because it evaluates the style in an abstract, limited manner, without taking into account the numerous variables that interfere with the act of leadership.

2. *The real significance of the positive and negative effects*. An effect which is seen as positive at a certain moment could be only apparently positive, and be in fact negative. The authoritative style shortens the time for making the decisions, but increases the probability of the appearance of incorrect decisions, while the democratic style sometimes delays the decision making process, but the probability of their being correct is higher.

This criterion is qualitative and provides the possibility of better assessment of the efficacy of the styles of leadership, but introduces a higher degree of subjectivity.

3. *The consequences of practicing the styles of leadership for a long time*. This criterion takes into account both quantitative and negative aspects, in correlation with the time (duration) variable. Thus one style of leadership can be assessed not only by taking into account the immediate effects of its practice, but considering the future ones too.

The limitation of this criterion consists in the fact that it selects only one from the number of factors that influence the efficacy of the styles of leadership and neglects the others.

4. *The situational criterion.* Most criteria have shown that the styles of leadership are unequally productive depending exactly on the particularities of the situation they operate in.

In order to harmonize the styles of management and the particularities of the situation, Fiedler (1967) formulated two strategies (apud M. Zlate, 2003, page 98):

a. the change of the situation of leadership by task structuring or the increase of the formal power of the leader over his group, or by changing the composition of the group in order to offer the leader a favorable climate of activity.

b. the leader's adaptation to the situation by placing the leaders with a low LPC (least-preferred co-worker) score in very favorable or very unfavorable situations, and those with high score in moderately favorable situations.

Unfortunately, Fiedler considers that leaders should manage only such situations that match their style of leadership, which is impossible since, due to the complexity of the organizational frame and to the influences he receives, there are an infinite number of situations a leader might be in.

Conclusions:

School is an organization in which the climate constitutes an essential variable that influences the quality of its activity. The style of leadership is in obvious correlation with the school climate.

There is no universally effective style of leadership because the situations of leadership and the organizational contexts are extremely diverse and changeable. The style of leadership must be both flexible and dynamic.

As far as school practice is concerned, a solution might be given by the psycho-social and organizational training of school managers so that they are acquainted with different styles and be able to adapt to the diverse situations they have to face. The style of leadership requires the development of their abilities by a coherent training programme intended for school managers.

School has become an ever more complex organization in need of specialized management.

Many of nowadays head teachers have an authority complex which induces the idea of a need of authority and an "iron fist".

Empiric evidence shows that many head teachers fear contradictions, do not wait and do not keep on communicating until the conflicts are solved. Most of the times, in crisis situations, they appeal to acts of authority.

The problems of the style of leadership of the school manager must also be linked to the teachers' desire of getting closer to power. They need to be treated with confidence, to be given permission to freely express their fears and even to be allowed to make decisions that seem risky.

Under the circumstances of the reform in education, the management of change must be the best ability and first priority of the manager.

The school manager who is efficient in managing change and continuously communicates to prepare the introduction of change will meet success.

Each new change is perceived as a problem, a supplementary stress, even if, in the end, it proves to be leading to an increase in the efficacy and quality of education.

Unfortunately, many Romanian teachers show signs of fatigue and despair and dream of the day when changes will end and things will get back to normal.

The issue of the style of leadership in schools is still open and prone to improvement, and in the current context it is necessary to relate it to the achievement of quality in education.

REFERENCES

1. Boboc I., 2002, Psihologia organizațiilor şcolare şi managementul educațional, EDP., Bucureşti
2. Bonciu C., 2000, Instrumente manageriale psihologice, Ed. All Beck, Bucureşti
3. Bogathy Z. (coord), 2004, Manual de psihologia muncii şi organizațională, Polirom, Iaşi
4. Constantin T., Stoica – Constantin A., 2002, Managementul resurselor umane, Institutul European,Iaşi
5. Cornescu V., Mihăilescu I., Stanciu S., 2003, Managementul organizației, Ed. All Beck, Bucureşti
6. Covey SR., 2001, Etica liderului eficient sau Conducerea bazată pe Principii, Ed. Allfa, Bucureşti
7. Cristea S., 2004 (II), Managementul organizației şcolare, EDP, Bucureşti
8. Iosifescu S. (coord.), 2001, Standarde manageriale şi de formare managerială, ISE, Bucureşti
9. Iucu RB., 2000, Managementul şi gestiunea clasei de elevi. Fundamente teoretice şi metodologice, Ed. Polirom, Iaşi
10. Joița E., 2000, Management educațional. Profesorul-manager: roluri şi metodologie, Polirom, Iaşi
11. Jinga I., Istrate E.(coord.), 1998, Manual de pedagogie, Ed. All, Bucureşti
12. Neacşu I., Felea G. (coord), 2005, Asigurarea calității în educație, Ed. Şcoala Gălățeană, Galați
13. Păun E., 1999, Şcoala-abordare sociopedagogică, Polirom,Iaşi
14. Stanciu S., Ionescu MA., 2005, Cultură şi comportament organizațional, Ed. Comunicare.ro, Bucureşti
15. Stanciu S., 2001, Managementul resurselor umane, Bucureşti
16. Țoca I., 2002, Managementul educațional, EDP, Bucureşti
17. Vlăsceanu M., 2003, Organizații şi comportament organizațional, Polirom, Iaşi
18. Zlate M., 2004, Leadership şi management, Polirom, Iaşi
19. Zlate M., 2004, Tratat de psihologie organizațional managerială, Polirom, Iaşi
20. http://www.edu.ro

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

STRATEGIES OF SELF INSTRUCTION – TENDENCIES AND ORIENTATIONS

Junior Lecturer Mihaela Aurelia Ştefan,
PhD student
TSTD, University of Craiova

Abstract

The formation of self instruction competence of the students is a problem which is more and more invoked by the experts in the field. The projection of the personalized strategies of self instruction can be an exclusive autonomous demarche which can include: the settlement of the objections of self instruction; the determination of the methods of turning to good the internal resources; the determination of the methods of utilize the external resources necessary for the self instruction; the identification and the option for self evaluation means of the process (self instruction) and the results.

After the presentation of the contemporary current which takes into consideration the self instruction and the accentuation of two aspects about the coordination of the self instruction processes (the psychological and the methodical preparations) the emphasis lays on the approach of the self conducted learning capacity.

The ability to self learning is formed using self instruction and includes cognitive, metacognitive and emotive factors.

All recent research in the area of the pedagogy of self instruction comes with a conclusion that supports the idea of the necessity of stimulation, development in the frame of the process of learning "the own initiative" and "the self conducted activity"-qualities needed for any of the future places of work.

So, the formation of the necessary capacities of self instruction becomes a priority for school, their exercise calling up a series of strategies. This paper reviews such strategies.

Key concepts: *Instruction, self conducted learning, strategies, responsibility, autonomy, personalization, initiative.*

1. Contemporary approaches considering self instruction

The first main theoretical syntheses – the ones which have laid the basis of the whole area of self instruction - belong to R. Caffarella and M.J.-O'Donnel (1988), to

P. Galvani(1991) and Ph. Carré (1997). “Their works, become classical, synthesize previous works (mostly Americans - Caffarela and O'Donnel), or propose typologies of the main manners of approach of the problematic of self instruction (Galvani).

Ph. Carré (1997) entered the suggestive collocation “the galaxy of self formation” referring to the innumerability and the diversity of the activities of “self formation” nature and identified the main “currents”/ approaches in the area.

There were eight approaches that could be identified in the area, contemporary currents considering self formation (the term is constantly used in French and within the francophone space).

- the extra scholar current.
- the socio cultural current.
- the current centered on development.
- the psychometric current.
- the epistemological current.
- the current focalized on organization.
- the didactic current.
- the cognitive current.

According to a definition which is useful for the research and practice (R. Foucher, 2000) self formation (self didacticism) is “a demarche which involves certain disposals and is influenced by the capacity of reflection upon himself”; it is supposed to take initiative according to self formation and to imprint an orientation to the learning acts, to administrate them (controlling their development); it can be achieved in different manners and supposes the capacity of taking advantage of the funds keeping a possible autonomy in learning; the containing and the initiative of the learning acts (which can be about: controlling the knowledge, to know to do or to be) can be more or less planed.

The autodidact has the individual capacity of organizing his/her own training and a proper attitude (J. Reischmann, 1997).

The competence of self instruction is specialized; it evolves in connection with the practices/the activities of the individual in an area (G.A. Straka, 2000).

It has been formulated even a “model of competence” of self instruction (Friedrich and Mandl, 1997). It develops a series of motivating and cognitive competences involved in self instruction/self conducted learning. Helmuth Friedrich and Heinz Mandl synthesize the model in the next scheme:

The motivating and cognitive competences of the self controlled learning (of the self instruction):

- Structural
- Procedural
  - the necessity of learning.
  - the interests.
  - the aims.
  - the proven efficiency.
  - strategies of rising self value

  - volitional strategies
  - emotive processes
- Procedural
  - strategies of processing the information
  - controlling strategies
  - strategies concerning the resources
  - knowing the contents.
  - knowing the tasks and the themes
  - knowing the strategies
- Structural

So, the competence of self didacticism supposes:

- getting the source in which you can find the necessary knowledge;
- selecting the necessary knowledge for the solution of certain problems;
- distinguishing what is important from what is less important;
- achieving the necessary connections between the old and the new knowledge, between the knowledge from divers areas etc;
- realizing one's own cognitive demarches (meta-cognition).

So, the formation of the necessary capacities for self instruction becomes a priority for the school; their exercise in learning the adults is inevitable. The science of resolving the problems will be considered more important in the future (Delphi Report, 1998).

Self-responsibility of the individual gets a more and more important role in the system of training.

According to the researches, the coordination of the process of self instruction refers to two aspects: psychological preparation and the methodical one.

The psychological preparation follows, on one side, the development of the interest for knowledge, the formation of the intrinsic motivation, the wakening of the interest for the knowledge and the modeling of self personality, on the other side, the formation of the qualities of will and character, the development of the responsibility consciousnesses of each individual for his self become. The individuals with self positive esteem:

- assume responsibilities- "I can solve this problem"
- behave independently- "I can manage for myself to plant the tulips"
- are proud of their realizations- "I managed to find the solution"
- achieve without problem new tasks- "I can also solve the cause-effect items"
- express both positive and negative emotions- "I like myself...what bothers me is the attitude of my mates who talk during the lesson"
- offer help and support to the other mates- "I couldn't have won without you"

The methodical preparation supposes:

a. the formation of the skills and habits of intellectual and independent work
b. teaching the pupils the strategies of self instruction
c. the formation of the style of the intellectual work

Among the strategies of pedagogic self instruction, literature mentions:

- the formation of the skills and habits of using the sources of documentation and the drawing up of new plans of ideas, summary, files, etc.
- the development of some special procedures of learning, depending on the content and the complexity of the task.

d. the development of the capacity of using some methods and procedures of self-control and of self stimulation of the autodidactic preoccupations (self persuasion, self control, self appreciation, autosuggestion, practice etc.).

2. Self controlled learning-condition of self instruction

Self controlled learning, this concept of psycho pedagogy, was subject of the researches in the last years and nominates the process in/through which the individual: (S. Siebert, 2001): has the initiative of learning; establishes his own needs of learning (with or without any help); formulates his aims, objectives; identifies the human and material resources necessary for learning; chooses and applies proper strategies of learning; estimates his own results.

Self control (based actually on organization) is best expressed using "the degrees of freedom" in report with the learning; these (Gnahs, 1998) (manifests) in: the decisions referring to the projects of learning; the priorities in the area of needs and of the interest of learning; the justification of the objectives of learning; the utilization of the publications and other helping materials; the choice of certain styles and strategies of learning; the evaluation of the results of learning.

The autonomy is very important in the stabilization of the aims of learning; thematically contents are, usually, free chosen (the decision belongs to the one who is learning); the results of learning are established using self-control. Therefore, the principal element is the responsibility.

Psycho pedagogically, the implication is: when you will create conditions for self knowledge, the individual will discover his own possibilities/capacities of learning and also the preferences, the necessities of learning.

The self controlled learning supposes:

- A self responsible learning; the adults (and the teenagers too) are learning to take decisions and to be responsible for them;

- The separation between the principle of instruction and the principle of learning- the theory of constructivism, neurobiological established, focuses on self creation, self reference and self-determination of the perception and knowledge (H. Siebert, 1999); In different words, we learn what "fits" with our psychic system; we give senses (in individual way and in accordance with the personal psychic structure). The result is obviously: What the teacher/instructor says and believes is not the same with what the student hears and understands;

- The creation of some social contexts-although is emphasized the individualization of learning, we can't ignore the fact that the intelligence of each individual is a social construct; the self controlled learning and the social one are not in contradiction; the self controlled learning is rarely an isolated act; it depends on

contextual and consensual experiences as much as it depends on the singular experiences; also exists a current named "social constructivism", which supports these ideas;

-The necessity for a emotive optimum context-the self conducted learning is established by the interest for the world, by the pleasure of learning, by the self confidence; Self controlled learning gives results if the individual is aware and estimates the emotions he has; the self learning competence (which is formed using self instruction) includes cognitive, meta cognitive and emotional factors. It is spoken (and written) more an more (in the area) about meta-emotions (the feelings that they had about the occasional learning feelings/self controlled learning); is extremely appreciated the expression "emotional self management", self motivation (the desire and the will of learning "alone") being elemental.

3. New directions in the development of the strategies of self instruction

Within an educational plan, the strategy represents (I. Neacsu, 2006):

a. the preparation, the planning and the personal organization of the academic study, starting from an unifier, comprehensive and incorporated plan of aims orientated toward the assurance of the quality;
b. the articulated projection of the approaching techniques of the content of study, starting from a decisional model which has unit, coherence and internal consistence;
c. the activation of the ways of identification and procession of the previous experience, having as finality the improvement and it's transfer to the new contexts of academic learning;
d. the application of the frame schemes of systematization of the elaborations, of the utilizations and of the transfers of the new structures of knowledge (knowledge, abilities, competences, attitudes) in formal and/or non formal contexts.

Nowadays, the following tendencies and orientations are outlined regarding the strategies of training, so that they bring to the formation of the self instruction capacity:

- Direct contact with reality, with life and concrete activity problems -
  The utilization in harmonious combination of the abstract, formal methods with the experimental, applicative-practical ones;
- The increase of the possibilities of procuring and assimilating an elder volume of information in short time;
- The increase of the methods' weight methods which solicit to the pupil an effort of thought, imagination, memory, will;
- The improvement and the cultivation of the whole potential of the pupil, through the development of the mental capacities, the cultivation of

interests and superior aspirations, abilities, creativeness. The increase of the methods weight with a prominent formative character;

- The utilization of the new technical ways in the process of learning with the aim of optimization and getting efficient, a stronger use of the methodology;

In the self didactic process, besides the personalization of the known didactic strategies: personal reflection, the technique of reading, the free observation, experimental, the exercise, the study of case, the method of practical works, the method of projects, learning on stimulators, e-learning, personal brainstorming, we can add others which accentuate the formation of the capacity of independent learning (I. Neacsu, 2006). Among these we mention:

- **RICAR technique**

The RICAR technique represents a rational way of reading, being followed the touch of great results/performances of the study applied to more types of texts/learning units, scientifically oriented and didactic transformed.

The phases that the lecturer goes through are:

1) Browse (R)-it is formed a general opinion about the content, on the strength of the organizing plan of the ideas in report with the general economy of the text (is recommended 5-8% from the allocated time);

2) Questions (1)-it is formulated a set of key questions about texts concerning: his utility, the significations, the relevance etc. (is recommended 10-12% from the time);

- **PQRST technique**

- represents a didactic model of evaluative approach of the text, set up by the cover of the following phases:

1) P (Preview)-the realization of a vision/perceptive and/or mental perspective upon the text;

2) Q (Questions)-short questionnaire or an explicit interrogation upon the values of the lectured text;

3) R (Reading)-the careful reading of the hole text, with elemental fixations;

4) S (Summary)-the mental or written summary of the basic ideas from an operational plan;

5) T (Test)-the testing/the control/the verification/the orderly evaluation, using items and proofs of what was learned (retained).

- **SQ3R technique**

Configured using simplification, the SQ3R technique involves three stages:

1) S (Survey) global survey of the text browsing it;

2) Q (Questions) - the questionnaire using uncontrolled interrogation upon the essential from the lectured text;

3) 3 R (Read, Recit, Revise)-the complete reading, the repeat with the accounting of what has been retained and global, correct revision of what was retained from the synthetic reading of the text.

- **MURDER technique**

As extension of the SQ3R technique, proposed by a team of Danserau (1979), the MURDER technique contains added values resulted from a better and more explicit

specification of the procedures of reading and also from the inclusion of the co-native-affective component on the background of the assurance of a better focus on the axis understanding-retain.

- **The method** of LEARNING USING THE ANALYSE OF THE CONTENT (MIAC)

MIAC represents a set of combined techniques procedures, with theoretical statute (conceptual, epistemological) and thematic statute, aiming the identification, the objective description and the systematic study of a manifest and/or latent content (Chelcea, S., 2001). The dominant orientation of the method is toward the contextual, lexical and co-relational, semantic instrumental, descriptive, inferential, glossarial, evaluative and didactic study of a single or more documents, works, texts, off cuts.

- **The method** of MENTAL MAP (MMM).

Elemental, MMM "represents a functional unit of mental image+ a generative scheme, a formal model which we can learn and form through study, through the internalization process and which, through evocation, is rebuild, enriched, refined, thus becoming more efficient, more innovative, more able to produce new systematic mental associations.

The central nucleus of MMM is represented, usually, by the set of arborescent values reflecting: a theme, a conceptual field or the elements of a conceptual map (N:Valeria, 2004) the diagrammatical representations with radial, hierarchical, non linear organization; the associative coherent model, branched out of ideas, subjects, concepts, themes formulated orally/written, symbolist or text, image with frequent colored visualization, thus becoming an integrative "architecture" easy to retain/memorize and to use.

- **The technique** of LEARNING by USING OPERATIONS of DEFINITENESS (TLOD).

The practitioner who learns independently asks, initially and normally, some questions which prepare him to utilize TLOD.

Step (1): What we define?

Step (2): For what aim we define?

Step (3): Through what linguistic methods we define?

Step (4): What kind of definition we can use for the settlement and the examination of the criteria of definiteness?

- THE STRATEGY OF CRITICAL THOUGHT (SCT).

Using the strategy, the methods and the techniques of critical thought in independent academic learning represents a modern and efficient manner of report us to the content of the studies, having a personal position, based on rational, argumentative backgrounds. Through detachment from the initial texts, the student can formulate ideas and solutions which belong to him;

- METACOGNITIVE **strategies** (SMC)

Meta cognition in academic study represents a complex mechanism, a conduct oriented toward knowing self processes, mental and emotive activities of their products, focalizing the efforts toward the active (self) adjustment of the organization

and the assimilation of the declarative, conditional and procedural knowledge (Tardif, 1992).

- MNEMOTEHNIQUE (MM).

The first fundamental condition for the memory and mechanisms to function is to put it to work, knowing that there cannot be a mono functional, and integral functioning block.

The utilization of the memorizing techniques (mnemonic or mnemotechnique) is based on the basic functions of the human brain, which can encode and interpret complex stimulus: images, colors, structures, smells, tastes, touches, spatial sizes, emotions, and languages etc, these becoming tools of the mind. The productive conditions of MIM are connected to the application of four technical fundamental principles/models: a) association; b) imagination; c) focalization and d) reflection upon the lived experiences framed in systematic mental relations (Neacsu, 1990; Baddeley, 1998), taking into account some valid, efficient phases/sequences.

REFERENCES:

1. Carré, Ph., (2000), *Self-Directed Learning in France;* in: G.A. Straka (ed.), European Views of Self-Directed Learning – Historical Conceptional. Empirical. Practical. Vocational, Münster.New York, München, Berlin; Waxmann,
2. http://www.user.uni.bremen.de/los/mitarbeiter/straka/reihe1/kap.3.htm.
3. Chelcea, S. (2001). The methodology of sociologic research. Cantitative and calitative methods.Editura Economică
4. Foucher R., Hrimech (2000), *L'autoformation dans l'enseignement supérieur. Apports*
5. *européénsetnord-américains pour l'an 2000,* Edition Nouvelles, Montréal.
6. Neacşu, I. (1990). Methods and techniques of efficient learning. Bucureşti: Editura
7. Militară.
8. Neacşu, I. (2006). The independent academic learning. Methodological guide. Bucureşti
9. Negovan, Valeria. (2004). Autonomy in academic learning-fundaments and resources. Bucureşti: Editura Curtea Veche.
10. Siebert, H., (1999), *Pädagogischer Kostruktivism: eine Bilanz der Konstruktivismusdiskussion für die Bildungspraxis,* Hermann Luchterland Verlag, Neuwied, Kriftel.
11. Siebert, H., (2001), *Selbstgestenertes Lernen und Lernbereitung,* Luchterland Verlag GmbH
12. Neuwied, Kriftel.
13. Straka, A.G., (2000), *European Views of Self-Directed Learning-Historical. Conceptional.*
14. *Empirical. Practical. Vocational. Introduction.* Waxmann,
15. http: //www.user.uni-bremen.de//los/ mitarbeiter/straka/mihe1.

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

THE CURRICULUM MANAGEMENT – CONSIDERATIONS ON INSTITUTIONAL METHODOLOGICAL APPROACHES AND DEMARCHES

Junior assistant Claudiu Marian Bunăiaşu, PhD student
TSTD– University of Craiova

Abstract

The managerial approach of the curriculum, as much to the level of curricular politics and even in scholastic practices represents a necessity given by the theoretical-methodological reconstruction from the area, of the paradigmatic conceptual evolutions and most of what provides the rationality and managerial creativity of the scholastic managers and teachers of the classes, in the process of projection, administration and optimization of the implementation of a decentralized, flexible curriculum, centered on the needs and interests of the pupils, of the parents, of the local community, oriented towards the development of the scholastic organization.

The present study has a double structure: the theoretical, containing the view of conceptualization of the curriculum's management, for providing the comprehension of the successful management's paradigm and the methodological-actionable size, approached from the prism of the curriculum's procedural character, comprising the projection, the implementation, the evaluation and the curriculum's adjustment to the decision of the school. The paper focuses on the elements of the curriculum's praxiology, such as: the instrument of the curricular projection to the school level, the approach of the cross-curricular themes through the curriculum to the school's decision - as alternative and complementary strategies of the curriculum's perviousness.

Key concepts: curricular reform; curriculum's management; curriculum to the school's decision; cross-curricular themes; management of curricular projects; management of implementation, overlooking and evaluation of the curriculum.

1. Preliminaries

The concept of curriculum, in actuality, is tackled in comprehensive manner, involving a multivariate complex analysis, on many plans (the structural plan,

emphasizing the curriculum's components and the relations among these, the procedural plan indicating three processes- projection, implementation, estimation-in this way accomplishing an unification of the intentions with the action and of this last one with the evaluation-and the product's plan, indicating the results of the curricular projection, which can be differentiated in main- instructional plans, curricular programs, scholastic and academic handbooks and curricular auxiliaries-methodological guides, multimedia sets, educational software) (Potolea, 2002), having positive consequences as much about theoretical reconstructions about concepts, as about educational practice by guiding the elaboration of programs, the curricular projects, as opposed to the simple, reduced use of the concepts from the previous stage. The transpose of the new curricular conception in instructive-educative practice is facilitated by a managerial tackle of the curriculum, involving roles, functions, processes, strategies and managerial instruments.

The difference between curricular reform (which began suddenly to become operationally from the scholastic year 1998-1999) and institutional reform (where the institutional decentralization is in an experimentation phase in many mauls), which challenged unbalances in the Romanian education reform, can be attenuate through setting emphasis by some decision-maker factors, the pedagogic community, on the process of improving the managerial competences in the curriculum's area, on the managers of schools and teachers; thus, the curricular processes agree with the standards of quality in education, and the curricular programs from the curriculum's zone to decision of the school constitutes funds for the institutional development, for the development of the communitarian relations, for the benefit of the educational groups' needs.

Another strong argument, which justifies the managerial tackle of the curriculum to the level of scholastic organization, is about the fact that, this way, the integration is provided in a flexible building, free of the modern conceptions about curriculum in scholastic institutions:

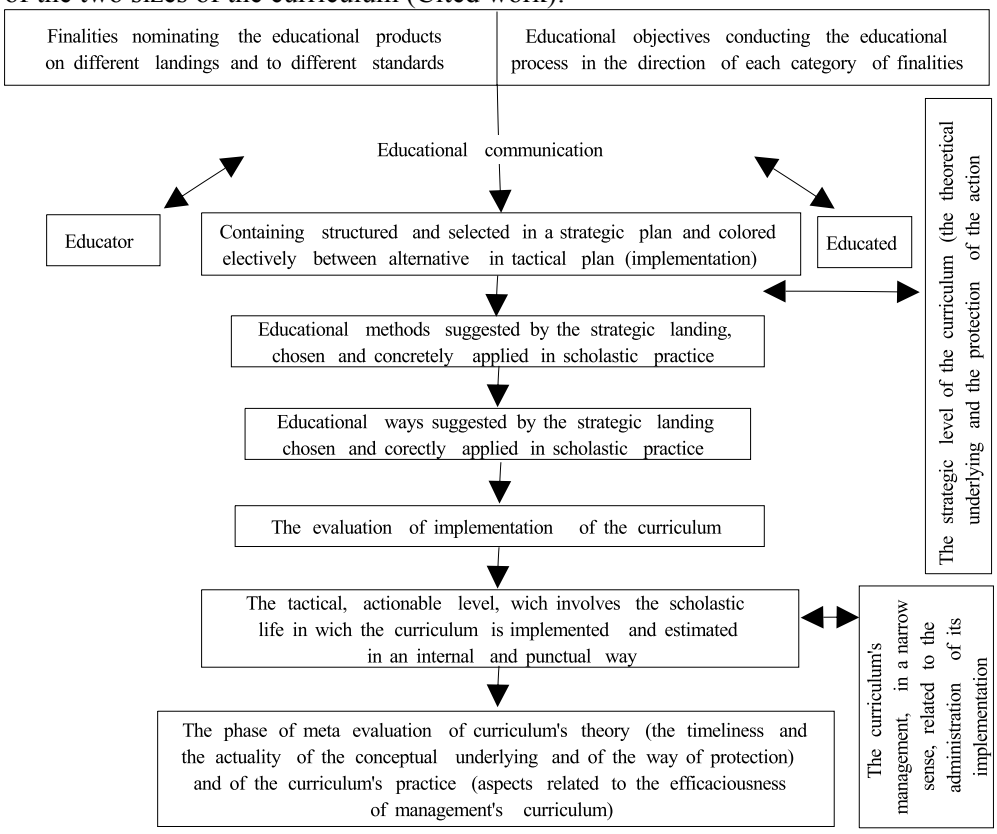
- curriculum focused on pupil, whose essence consists in the assertion that the educated must stand in the foreground of the instructive-educative process, with the peculiarities, interests and life experience;
- curriculum focused on comprehension and improvement of society, which shows those learning experiences that guide to a quick and efficient social integration of the formed personality;
- the systematic-holistically view about the curriculum, as a direction which enforces the modular-integrated tackle (inter, trans disciplinary) of the curriculum, as innovating method of curricular organization, realizable in systematic way through the curriculum to school's decision, taking count of the fact that the curricular segment elaborated to central level is build mostly on separated disciplines (in mono disciplinary manner).

2. Considerations within the conceptual analysis of the curriculum management

The indicative studies point out many views of conceptualization of the management of curriculum, all having in common the essence of managerial activity in the area, which involves finality, strategies of implementation and evaluation, the procedural character, the hierarchical character of decisional instances, managerial function.

R.M. Niculescu (2003) defines the Theory and curriculum's management as "a pedagogic interdisciplinary discipline, having an introductory character in the study of pedagogic disciplines and a fundamental role for understanding the others, its theoretical tackle having important connections with the philosophy of education" (Niculescu, 2003).

In the spirit of a comprehensive demarche, the authoress limits the elements and the attributions of the curriculum's theory of those of the curriculum's management one in a graphic rendition which emphasizes most the complementarities of the two sizes of the curriculum (Cited work):



Thus, in the conception of the authoress, the curriculum's management includes scientific management (in large sense of the term) correlated to the idea of educational engineering in the curricular zone, recording many stages:

- the representation of the curriculum (projective size, the curriculum's design);

- the implementation of the curriculum, involving the practical aspects of the management (the limited sense of the term);
- the meta-evaluation of the curriculum;
- the development of the curriculum through: reconstructions in theoretical plan, rethinking of the design plan, reconsiderations in the implementation plan (Niculescu 2003).

Ş. Iosifescu (2001) tackles the problem of the curriculum's management from the view of the making the curricular practice efficient through the managerial functions adjusted to the last tendency of the educational management and guided after the principles of the management of change(a participating, implicative management, having as strategic options the communication, the team work in the realization of finalities), laying stress on the curriculum's management to the level of school, which represents "the key point of the realization and success of the reform, premise of the success to large scale (Iosifescu, 2001).

At school level, the curriculum's management, in the author's conception, is structured on:

- the curriculum management for pupils;
- the curriculum management for adults.

The curriculum management for pupils comprises the following managerial activities:

- the analysis of the educational needs of the target-groups;
- the projection of the curriculum to the decision of school, referring to: the settlement of the finalities followed in the curricular development; the terms and stages of achieving these; the necessary resources for the realization of the anticipated finalities; the procedures of consulting the persons and organizations-resource, of delegating the authority; the ways of formal and informal communication; The techniques and the procedures of overlooking and evaluation referred to the curricular development;
- the curriculum implementation, comprising: the monitoring of the objectives specific to the operational levels of planning; the monitoring of communication, participation and motivation of the persons involved in the curricular development; the prediction of the flexible elements of the operational plans; the cross-curricular coordination, looking for providing the coherence and consistence of the whole curriculum achieved in the school; the struggle to resist to changing;
- the curriculum evaluation, guided by the new tendencies in the educational evaluation: the evaluation in the optimization aim of the curricular development processes; the preponderance of the formative, situational and transactional evaluation; the diversity of the methodological portfolio of evaluation;
- the performing of curriculum and management of the class, referring to the teacher's carrying it out, of all the managerial functions, both related to task and human factor; the activity refers to the operational

management of the educational-instructive process of the teacher and the overlooking of the activity and implementation of the curricular projects to the level of class, of the managerial staff of school.

The curriculum's management for adults refers to the level of school, on the one hand, monitoring the programs of continuing formation of the teachers, after criteria referring to efficiency, contribution to the professional and institutional development, their timeliness, as much as the elaboration and administration of an own policy of the teaching staff's development, constituted on the strength of a equilibrium between the national, zonal, local and individual needs and priorities. In the curriculum's management for adults we also have programs for other categories, especially the ones referring to the parents counseling.

E. Joița (2000) tackles the curriculum's management from the view of the general management's functions, contextualized to the specific of managerial problems of the educational processes relating to" the decisions of elaboration and application of curricular projects and programs, varied documents, the organization of the conditions of application and overlooking, the evaluation and validation of the results". (Joița, 2000).

Mentioning the landings of the decisional instances of the curriculum's management (the strategic level, tactical and operative), the authoress elaborates the problem of the curriculum's management to the level of class, as being the operational basic zone, the middle of the managerial activity in this area. To this level, the curriculum's management gets an integrative appearance, resulting separated chapters:

- the management of definiteness, specification of the objectives;
- the management of definiteness, remaking, utilization, accommodation of the contents;
- the management of definiteness, realization, optimization of the didactic strategies;
- the management of evaluation;
- the management of the relations teacher-pupils;
- the management of resources of the didactic process;
- the management of better pedagogical research; the management of own formation as a teacher.

3. The projection of the curriculum to the decision of school

3.1. Levels and instruments of the projection of the curriculum to the decision of school

The projection of the curriculum to the decision of school is placed in the frame of projective acts of the curriculum to the procedural level, of the scholastic institutions and of the educators, what represents the freedom of decision to the level of school and what personalizes through definiteness and application of particular routes of learn of the pupils, expression of democratization of the society, of decentralization of the instructional systems, of receptivity of the scholastic unit and of

the readily and efficacious answer to the needs, interests of the pupils, of the parents, of the local community.

Within this level of the curricular projection, we mention two more levels of the CDS projection:

- the one of the formal management of scholastic institutions;
- the one of educators, as authors of curriculum.

Certainly, we cannot separate the projective activities of the two decisional instances-the one of the formal managers and of the managers of educational act, but we can easily speak of a coordination of these in the direction of assuring a management of success of the curriculum, materialized in a curricular bid of the school characterized through series of emergent, social, individual, democratic and procedural values:

- the settlement of some optional disciplines referring to the perfecting and the development of the competences, the capacities, the habits, the pupils' abilities, the satisfaction of their interests, the stimulation of the investigative demarches of the pupils, and also of the interests of the local community's factors;
- the introduction of an optional curriculum in agrees with the resource of the scholastic unit, which can assure the feasibility, the optimum implementation and also the possibility of curricular development to the level of scholastic unit;
- the harmonization of the social exactingnesses having an inter- and trans-disciplinary character, with different formative-educative valences, which could compensate the limits of mono disciplinary approach of the common body;
- the joining of traditional values with the innovator ones, being facilitated thus the demarches of applying the new experiences, learning techniques;
- the assurance of attractiveness, actuality, curricular diversity, in order to expand the possibility of turning to good the resource "pupils", the learning availabilities, the capacities, the abilities and interests of each pupil;
- the assertion of a contextual frame favorable to the optimum school partnership-other educative factors(family, church, cultural institution, non-governmental organizations) school-local community;
- the attraction of the community supports in the scroll of the school's curricular projects, the improvement of the opportunities offered by the geographical, cultural zone;
- the harmonization of the local, regional cultural values with the national and universal ones;
- the identification of the school's interests with the ones of pupils and parents;
- the possibility of developing the school's curricular bid through an attractive extra curricular bid, harmonious combined in the project of the

scholastic unit, thus to be maximal improved the opportunities of the pupils' formation/development;

Thus, CDS represents the curricular segment which favors the creation of an own ethos, conferring the specificity of each scholastic institution.

To the level of formal management, CDS is included in the institutional developmental project and in the curricular project of the school.

The institutional developmental project represents the managerial instrument in which are prefigured the mission, the target and the strategic options of the scholastic unit (strategic component), as well as the program, the activities and the concrete acts through which are touched the strategic targets (operational component). In the frame of institutional developmental project, CDS is prefigured and comprised in the direction's frame referring to the curricular development to the level of scholastic unit.

The curricular project constitutes the managerial instrument of representation of the applying demarche of developing the competences, capacities, abilities and habits of the pupils, through the instructive-educative process scrolled to the level of a scholastic institution, as curricular particularized bid, through managerial decision referring to the administration and the implementation of the instructional frame-plan, the building of curriculum depending on the needs of the groups of interest, depending on their own resource and on the developmental view, as well as on the elaboration of the performing pointers and of the overlooking procedures of the implementation of the curricular projects. The curricular project of the school is build on the base of the optimum report between the percentage size of the common body the one of the nucleus-curriculum, of the equilibrium between the curricular segments specific to the local curriculum (as answer to the needs of the local authority) and of the curriculum resulted as an answer to the needs of the pupils and the school, of the report of educational resources-needs of the target-groups.

The curricular bid of the school, containing the common body and the optional packages, presented by the administration Council, will contain (S. Iosifescu, 2001):

- the finalities and objectives of the scholastic unit;
- the specific objectives and proper themes;
- the system of internal evaluation, proper to the curricular bid;
- the methodology of option (for parents and pupils) and of selection of pupils (if the theme is over busy or if it is addressed to the pupils which own certain aptitudes, abilities).

To the level of the actionable management, of the educators themselves, the CDS projection, as function of the curriculum's management, as stage of the processes of training and education through CDS (implementation, evaluation and curricular adjustment) it is dealt with through curricular programs of the optional disciplines and through projects of didactic activity (of the learning units, of a theme, chapter, lesson, sequence).

To these curricular products are also added the programs of continuous formation of the didactic personal, incorporated in the continuous formation project, as instruments of developmental personal didactic politics centered on the school. The

needs and the priorities of the perfecting program in school are established by the director and the intermediate managers (the chiefs of the desk and of different workgroups), which will frame them in an elaborated list, consequence to a deep analysis of the topical appearances to national, zonal level, either of the respective school.

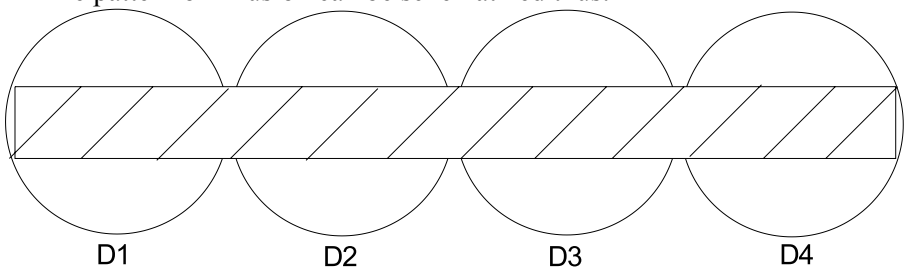
3.2. The approach of the cross-curricular themes through the curriculum to the decision of school

The problem literature describes many structural patterns of integrating the cross-curricular themes in the curriculum, feasibly of project and implement chiefly in CDS zone, in the Rumanian education. A sketchily description of the patterns applied in the national curriculum from the advanced countries, which, for the Rumanian education, represents alternative and complementary strategies of perviousness of the curriculum, of flexibility and incorporated approach of this, using the cross-curricular themes, in the current stage remaining to the decision of the school's Committee for Curriculum, is the following (Ciolan, 2005):

1. *The pattern of infusion* consists in the formulation of some objectives-frame/general competent competences or in the specification of some thematic areas having a trans-disciplinary character, commune for the discipline study from the instructional plan or for a group of disciplines. The spoken objectives constitute go-off points in the realization of some curricular off cuts in the frame of scholar disciplines. The realization of the objectives is followed through the ensemble achieved from the unification of these off cuts, and the cross-curricular theme is outlined, in this case, of the expected results of the study.

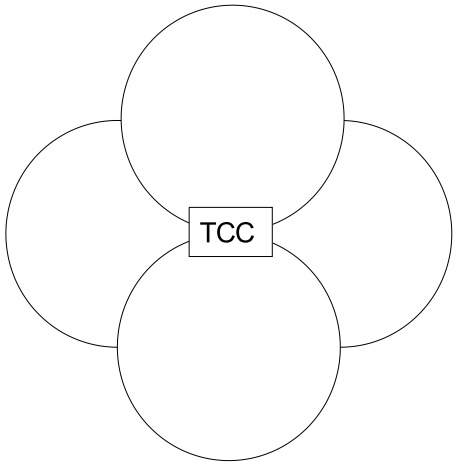
Examples of themes which can be framed in this category: Education for the assurance of quality life; Education for average surrounding.

The pattern of infusion can be schematized thus:



2. *The pattern of hybridization* consists in the formulation of some complex objectives of incorporated type, which requires the organization of an independent domain (hybrid). The pattern is viable for the cross-curricular themes between the formal disciplines, turning to good, chiefly the interdisciplinary view. Examples of such themes entered in the nucleus curriculum from the advanced countries and the possible of achieving in the CDS frame, are: Education for health; Domestic economy; Driving education; Entrepreneurial education.

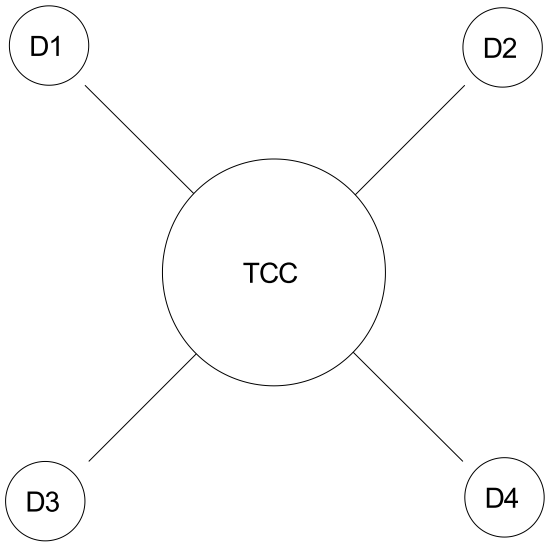
Schematically, the pattern can be thus represented:



3. *The pattern of satelizing* capitalizes the plural disciplinary hypostasis, an elemental theme from the frame of a discipline, being open for an incorporated tackle of multi perspective type from other scholar disciplines which become, provisionally, satellites of the discipline from which is the theme. The cross-curricular theme is set up around a segment of the main discipline, which polarizes the inter-relational contents from other disciplines.

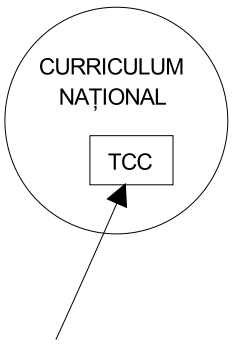
An example of implement of a pattern of hybridization in the national curriculum can be seen again in England, in the visual Arts.

Schematically, the model is represented thus:



4. *The pattern of insertion* consists in the introduction in the curriculum of some undisciplined themes, which cannot be ascribed to the scholar disciplines

foreseen in the instructional plan. Problems of cotemporary world (poverty, the drugs, violence) can constitute such themes, which can take diverse forms in the frame of instructional Rumanian system: optional discipline, the disciplinary/inter-/trans-disciplinary way, in the frame of some parcels which follow the formation of some determined competences, incorporated project. The pattern of insertion can be represented thus:



An example of such cross-curricular theme, which could be included in the CDS frame, could be the education the mass media.

4. Strategies of implementation of the curriculum to the decision of school

The strategies of implementation of the curriculum to the decision of school can be divided in:

- didactic innovator and interactive strategies;
- strategies specific to the management of the class of pupils, related to the managerial
- functions of organization and coordinates;
- methods and procedures of formative evaluation.

a. **Didactic innovator and interactive strategies**

In the process of implementation the curriculum into the school decision we can apply a whole spectrum of training methods, instructional ways and organization forms of the didactic activity which is employable in the case of compulsory curriculum, too. However, in the case of CDS, one must use older training methods which favor the study using research, the solution for the problem-situations, for learning using cooperation, which are not intensely improved in the frame of the official curriculum. Thus, the methods of exploring the reality, based on action, the method of educational interaction (the brainstorming, synectics, the technique Phillips 6, the technique 6. 3. 5., the mosaic method, the Frisco method), the activity on homogeneous and heterogeneous groups represents methodological basic marks of the curriculum to the decision of school.

b. **Strategies specific to the management of the class of pupils**

These strategies contain methods, actionable modalities specific to the managerial functions of organization and conduct, coordination, which we will enumerate forwards:

b.1. The actionable organization:

Elena Joița (2000) elaborates a methodological algorithm of the actionable organization, easy to operate in the curricular organization's case from zone CDS too:

a. the preferred definiteness of the aim, of the frame-objectives of the curricular process;
b. the outlining of the specific objectives, objectives of reference;
c. the specification of the ensemble of actions which drive to the realization of each specific objective, as organizational methods;
d. the definiteness of the categories of the proper activity for each possibility, outlined action;
e. the definiteness of the attributions, processes, forms of realization, stages for each suggested activity;
f. the achievement of each attribution, process through the realization of many proper formulated tasks (build on operational objectives);
g. the solution of the tasks through the effectuation of a string of operations, concrete actions, according to some rules, norms (logically, methodologically, of content, of evaluation, of relationing).

b.2. Methods of achieving the lead, the coordination:

a. leading on the strength of motivation, for the pupils' awareness of the objectives and theirs implication in the optimization processes of achieving them;
a. leading through cooperation, collaboration;
b. leading through exception, as a method of identification, analysis and solving the problematic situations which appear in the curricular process;
c. leading through alternative means, as a method of elaborating the variants of solving the curricular objectives.

c. **Methods and procedures of formative evaluation**

The formative evaluation represents an elemental strategy in the process of implementation of the curriculum to the decision of school, having a role in the opportune improvement processes. As methods and procedures of formative evaluation we mention:

- proofs of current evaluation (oral and written);
- the permanent overlooking of the pupils along the elaboration of the products subordinated to the alternative evaluation: projects, essays, papers, portfolios;
- the empiric and scientific accumulation of relevant dates about the management of the project, about the impact of the program on the beneficiaries, utilizing: the questionnaire, the interview, the conversation, the method of objective appreciation, the study of case, the analysis of the individual documents, the analysis of the products of the pupils' activity,

the causal analysis, the factorial analysis, the organizational analysis, the operational analysis, the contextual analysis, the task analysis.

5. Levels and hypostasis of the evaluation of the curriculum to the decision of school

The CDS evaluation is achieved at many levels and knows many hypostases. We present, on what's next, an incorporated scheme of the CDS hypostases to the level of scholastic institution and the class of pupils:

5.1. To the level of scholastic institution:

- the evaluation of the projects, the managerial programs centered on CDS;
- the evaluation of the management of the curricular/educative projects;
- the evaluation of the management of implementation, overlooking and evaluation of CDS;
- the evaluation of cross-curricular coordination in the CDS frame, through the CDS articulation with the elements of the official curriculum;
- the evaluation of managerial strategies referring to the curricular development to the level of scholastic institution;
- the evaluation of human resources management, referring to the activity of their improvement in the area of the curriculum management.

5.2. To the operational level of CDS (of a class of pupils, teacher, schoolmaster):

- the evaluation of the way in which the analysis of needs of the trained people was achieved, of other interested factors;
- the evaluation of products of the curricular projection from the CDS zone: curricular programs, of educative activities, the projection of the units of training/education, thematic, of some didactic scholastic or non scholastic activities;
- the evaluation of implementation and evaluation/adjustment of the training and educative processes;
- the evaluation of the pupils' results: intellectual capacities, relational, knowledge, abilities, features of personality;
- the evaluation of the management of the curriculum to the level of the class of pupils;
- the evaluation of the activity of the auto-training of the educators, of the awareness, of the implication in self management of the curriculum.

For each hypostasis of the CDS evaluation, the assessor (representative of the Ministry in territory, the managerial staff of the school, the teacher, the schoolmaster) establish a series of criteria which could cover the whole complexity of the evaluated appearances, thus that the process of evaluation could be characterized through validity and faithfulness. Thus, in the evaluation programs of formation from CDS zone the following criteria can be used (Iosifescu, 2001):

a. **For the evaluation of the planning programs**:

- the achievement of strategic and tactical conditions (fitting, feasibility, economicity, operativeness, flexibility, concreteness, originality etc);
- the pursuit of planning stages;
- the way of selection/settlement and formulation of the objectives established;
- the formulation of the performance indicators, the instruments of evaluation.

b. **For the evaluation of the implementation and overlooking of the program**:

- matching the concrete conditions of work ("formational environment");
- the leadership (direction, motivation, and representation);
- the current decisional activity in situational approach of the instructive-educative process;
- the educational and managerial style adopted by the formatter;
- the matching of the formation procedures to the concrete situations and the way of utilizing the resources;
- the use of overlooking and evaluating instruments;
- the analyze of the impact of the curricular educative program upon the target group, upon other interested factors, upon the development and formation of curriculum to the level of the scholastic unit.

REFERENCES

1. Ciolan, L. (2005). *Abordarea integrată a curriculum-ului. Temele cross-curriculare(teză de doctorat, coord. Dan Potolea)*. Universitatea din Bucureşti.
2. Cristea, S. (1998). *Dicţionar de termeni pedagogici.* Bucureşti: Editura Didactică şi Pedagogică, R.A.
3. Crişan, A. (1994). Curriculum şi dezvoltare curriculară: un posibil parcurs strategic. *Revista de pedagogie,* 3.
4. Crişan, A. (1998). *Proiectarea curriculum-ului de bază – Ghid metodologic.* Bucureşti: Editura Didactică şi Pedagogică, R.A.
5. Cucoş, C. (2002). *Pedagogie.* Iaşi: Editura Polirom.
6. D'Hainaut, L. (coord.). (1981).*Programe de învăţământ şi educaţie permanentă.* Bucureşti: Editura Didactică şi Pedagogică, R.A.
7. Iosifescu, Ş. (coord). (2000). *Manual de management educaţional pentru directorii de unităţi şcolare*. Bucureşti: Editura Pro Gnosis.
8. Iosifescu, Ş. (2001). *Management educaţional. Ghid metodologic pentru formarea formatorilor.* Bucureşti: Editura ProGnosis, 210-211, 254- 262, 267-293.
9. Iucu, R.B. (2000). Managementul şi gestiunea clasei de elevi. Fundamente teoretico-metodologice. Iaşi: Editura Polirom.
10. Joiţa, E. (2000). Management educaţional. Profesorul manager: roluri şi metodologie. Iaşi: Editura Polirom, 70-74, 86-88.
11. Joiţa, E. (coord). (2003). *Pedagogie. Educaţie şi curriculum.* Craiova: Editura Universitaria.

12. Maciuc, I. (2006). *Pedagogie.Repere introductive.* Craiova: Editura Sitech.
13. McNeil, J. (1996*).Curriculum. A Comprehensive introduction.* Los Angeles: Harper Collins Publisher.
14. Negreț-Dobridor, I. (2001). Teoria curriculum-ului. *Prelegeri pedagogice.* (coord. I. Cerghit, I. Neacşu, I. Negreț-Dobridor şi I. O. Pânişoară). Iaşi: Editura Polirom.
15. Niculescu, R.M. (2003). *Teoria şi managementul curriculum-ului.* Braşov: Editura Universității Transilvania, 24-30.
16. Păun, E. (1999). *Şcoala – abordare sociopedagogică.* Iaşi: Editura Polirom.
17. Potolea, D. (1983). Interdisciplinaritatea conținutului învățământului; o tipologie şi câteva implicații. *Revista de pedagogie,* 8.
18. Potolea, D. (2002). Conceptualizarea curriculum-ului. O abordare multidimensională. *Pedagogie. Fundamentări teoretice şi demersuri aplicative.* (coord. E. Păun şi D. Potolea). Iaşi: Editura Polirom, 69-83.
19. Stanciu, M. (1999). *Reforma conținuturilor învățământului.* Iaşi: Editura Polirom.
20. Voiculescu, F. (2004). *Analiza resurse-nevoi şi managementul strategic în învățământ.* Bucureşti: Editura Aramis.

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

EDUCATIONAL PRACTICE – NEW INTERPRETATIONS AND PERSPECTIVES

TEACHING RELIGION: PROBLEMS, DYNAMICS, PERSPECTIVES

Reader Irina Maciuc, PhD
TSTD – University of Craiova

Abstract

We believe that the education, in the context of European Integration, must improve the manifestations of religious liberty as part of modern and democratic Romanian culture. We will identify problems of reflection, new views of Religious Education, important challenges for Initial and Continuing Teacher Training, critical issues of Religion teachers and their educators in the context of European Enlargement. The objective is to support the implementation in Romania of a new view about Religion teachers-education in the context of Bologna Process.

The current debates about Religious Education and Religion Teacher is a part of the most important challenges of our time: educating for spirituality and moral values.

The decision-makers at the level of educational policy seek to adopt a more flexible, responsive and dynamic approach designed to guarantee a better teaching: teacher -education curricula is learner-focused, case-based and with opportunities for pedagogical practice. As a conclusion, we think that the key debates about religious plurality, about Religion teachers' education, religious identity and religious liberty, and spiritual values must continue, in order to help pupils to develop an individual and personal set of beliefs and values.

Key issues and strategies for theoretical approach have to be taken into consideration in the following years of study and reflection in the context of our research.

The Pedagogical Curriculum Development requires further review, and possible modification, needs analysis and case studies, and application materials for

quality assurance of teaching. Quality is obviously one of the major issues in the context.

***Key concepts**: Religious education, Religion teacher, pedagogical curriculum, European Integration, Human Rights, teacher professionalism*

1. Introduction

In recent years, the recommendations for those who teach Religion in public schools is based on an empirical research and theoretical knowledge about pluralism and diversity, as a democratic basis for living together in United Europe.

I believe that the education, in the context of European Integration, must improve the manifestations of religious liberty as part of modern and democratic Romanian culture. We will identify problems of reflection, new views of Religious Education, important challenges for Initial and Continuing Teacher Training, critical issues of Religion teachers and their educators in the context of European Enlargement. The objective is to support the implementation in Romania of a new view about Religion teachers-education in the context of Bologna Process.

The current debates about Religious Education and religious impulse is a part of the most important challenges of our time: educating for spirituality and moral values. It offers some possible responses to the plurality and diversity. In classrooms we discuss beliefs, meaning in life and spirituality. In Teaching Pedagogy, the Theory of Curriculum and the Theory of Instruction we teach about values. We discuss with student teachers about the role of Religious Education and about the relationship between religious and moral education or about spiritual development of pupils. The instructional process includes cooperative learning, discussion, integrated thematic learning.

We argue for a didactic model of Religious Education and for professional teacher competencies.

Teacher education is a key component of every educational system and professional learning is at the heart of teacher professionalism. In our country the fundamental reference marks of today teacher training are the pluralism of the theories and the pragmatism of the vision. In the knowledge-based society quality assurance in teachers and trainers and teacher professionalism design the frames for the development of common European principles for the competences and qualifications in the field of education and training.

The decision-makers at the level of educational policy seek to adopt a more flexible, responsive and dynamic approach designed to guarantee a better teaching: teacher -education curricula is learner-focused, case-based and with opportunities for reflection about teaching practice. The adoption of a reflective approach of teaching practice, and inter-disciplinary approach can be associated with the deep approach to

learning and with the orientation to learner diversity. We consider the very well-known Religious Education models: social sciences model, phenomenological model, typological model and some recent challenges like interfaith or integrated models.
In present day , in Romania professional teacher competencies are related with:

1. Knowledge of subject area;
2. Knowledge of Learners:
3. Instructional planning and managing learning;
4. Knowledge of the teaching process, models and methods;
5. Communication skills;
6. Classroom Management;
7. Evaluation and record keeping;
8. Information Technology applications(to identify specific technology applications and resources that maximize student learning), utilize and select educational software tools and use digital information;
9. Partnerships with parents, peers and experts(Maciuc:2005)

The Romanian higher education offers diversified programmes of study for student teachers, a new legislation accompanied by institutional democratization and quality enhancement of teaching, learning and research. The present curriculum consists in general education subjects (core curriculum), professional subjects, pedagogical practice and I.T. knowledge. The curricula of teachers'faculties are harmonized with the changes of Romanian Educational System.Concerning the Initial and Continuing training of the didactic staff there are the harmonization of curricula and the assessment of the teaching competence at National Competency Standards.

Students practice consists of so-called observatory and autonomous work, but the theoretical instruction is dominant. The practical program contains planning and execution of lessons, non formal education and extra-curricular activity. During school practice student teachers cooperate with experienced teachers and mentors. The mentors are usually reputed teachers. Observing classes, managing the learning and the learners, the future teacher considers and discusses how to create a year plan that forms the basis for lesson planning, how is the classroom arranged for different activities, classroom organization and schedules.

At the same time, student teachers are offered differentiated program modules such as: Methodology of Pedagogical Research, Education Sociology, Family Pedagogy, Inclusive Education.
The System of Differentiated and Modularly organized Teachers Training provide the links between initial training and in-service training.

In the last years, the internationalization strategy provides the formal frames for immediate further action to establish an European area of education and training.

2. Religion Teachers Education: present and history

An analysis of the system of Religion teachers education during the last years of transition highlights an important point: the capacity to find an appropriate balance between learning about religion and learning from religion.

A short historical overview reveals:

'The Christian faith and ecclesial institution played an important part in the whole history of the Romanian people. Beginning with the 16th century in the orthodox monasteries there was the first printing in the Romanian language and the first Romanian schools. Within this religious universe the cultural and educational basis of the Romanian existence was born.'(R.Iucu, 2002:1).

In the past, in Romanian schools, religious education and moral education are related. G.G.Antonescu, a great pedagogue of a last century, appreciates that the religious education addresses to' the mind, feeling and will'(1937:116). In 1976, another great pedagogue, St.Barsanescu presents religious education as differentiated pedagogy (1976:319, quoting H.Hubert, 1971).

'After 1947 religious life in Romania was confronted with the horrors of atheistic communism. The dialectical, materialist ideology secularized religious manifestations, imposing restrictions and interdictions which deeply affected the religious liberty and the consciousness of the Romanian people'(Iucu, 2002:1).

After 1989 the Church and religious life regain their real autonomy and religious education has experienced a strong revival.

Today, C.Cucos affirmes that the Religion teacher must have a solid psycho-pedagogic well-training(1999: 300).

In fact, religious education is open to a variety of interpretations: inclusive approach, reflective approach, interdisciplinary approach and, recently, approach to citizenship in education. Mc Laughlin(1992) and Kerr, Robert Jackson and K. Steele(2004) debate the relationship between religious education and citizenship education.

An approach based on moral and spiritual development and values promote J.Dewey(1903), D.C.Meakin (1988), M.Eliade(1992), M.H.Grimmit (1987), Kuinick.P.(1993), D.C. Meakin (1988), Halstead M.J. and Taylor .M.J.(2000).

Jackson(2004:140) rejects the category of 'values-neutral' and Michael Grimmitt describes three models of religious education:1.educating into religion, a confessional approach, faith-based religious education;2. learning about religion approach, learning about the beliefs, values and practices of a religion, education in comparative religion, history of religion, phenomenology of religions or the ethnographic study of religions; 3. learning from religion approach puts the experience of the pupils at the centre of the teaching and gives pupils the opportunity to consider different answers to major religious and moral issues. They may develop their own views in a reflective way.

In Eastern emerging democracies the State ensures the liberty of religion education in keeping up with the specific requirements of each religious faith.

R.Iucu, a young pedagogue of my country, appreciates that in post-revolutionary Romania, the religious values are an increasingly acute need. After hard years of secularization and interdiction, religious liberties are now respected in Romania.

For Willaime J.-P.(1992) religious education presents social, cultural and educational challenges and for Joachim Wach(1997: 244), “truth and the religious experience are moral and social dimensions”.

In our didactic activity, we promote the dialogue built on a view of constructive knowledge and interaction. The purpose is to evaluate and elaborate what we find to be most important in understanding how to revise teacher’s status by the construction of professional competencies (M.Altet, 1994).

In curent activity, the trainers and the mentors provide orientation to school settings, and curriculum information, observe student teachers'lessons and performance and give constructive feedback. The mentor prepares recommendations for student teachers and evalue the materials and cooperative learning. Professional training implies experiential learning(, critical study of practice and its principles in the light of fundamental theory and research), using role-play and direct practice in schools and classrooms.

During their initial training, student teachers meet pupils and parents’educationnal needs in extra-curricular programmes. The autonomy of individual institution improves the curricula, the teaching methods, the materials and the evaluation. It combines and related education and practical work, too.

We think that Religion teachers’ education can be most efficiently if we design the preparation of students as future teachers based on two –cycles. The relation between community-based religion life and systematic classroom reflection on that experience can be better if we organize the studies and teaching practice in a more flexible and responsive way.

We consider self-study as a method of research.

We think that the differences in answers/opinions, concerning the continuing Religion teachers-education may appear at all professionalization's levels. Certain types of changes will obviously determine the construction of different representations about professional practices and teacher training. We aimed the compatibility between key challenges for the pedagogical professionalization and today is social representations of teachers and student teachers about religious life and religious liberty in Romania.

In our country, the professional development priorities in the context of European Integration and emerging issues for pedagogical practice provide the formal frames and useful information concerning the improvement of the quality of teacher education.

The instructional process may include problem solving, discussion-based activity, cooperative learning, projects and portfolios etc. Extra-curricular activities can support moral and spiritual development of students and increase the relationships with adults and others.

An overview of Teacher Education programs of Craiova University provides that the fundamental aim of higher education is the training of high level specialists capable of playing a creative role in the development of the society . Several innovative teacher education programs include strong relationships with local schools.

The University provides access to its Higher Education programs to students from a diversity of backgrounds on the basis of achievements, abilities and potential. The overall strategy of the University aims to provide a challenging teaching and learning environment, strongly influenced by research activity. The University of Craiova has a tradition of a very flexible curriculum structure, establishes and maintains high quality research facilities.

The pedagogical module is no longer compulsory. It has six components, psychology, pedagogy, methodology, educational management, IT, and teaching practice. The practical program (practicum) contains five main actions:

- intercommunity activities directly involving student teachers: non-formal education and extra-curricular activity;
- planning and execution of lesson, support for construction of materials and resources, and the process of post lesson and general reflection;
- armonization of curricula and the assessments of the student teachers' teaching competence at National Competency Standards;
- creating an open learning environment;
- initiating a student teachers into action research during their teaching practice.

Students may exercise the rights of expression and representation either individually, through student organization, or in their home communities.

We think that by introducing the new curricula it is possible to develop professional programs for teachers and future teachers. Through direct contact and practical cooperation we provide advice and assistance to the student teachers and we facilitate effective peer learning.

The aim is to facilitate reflection on status quo and gives students the possibility to discuss how to respond to the challenges of changed educational practices. Our approach places the experience of the student teachers at the centre of the teaching.

We agree that the future teachers should be trained to competently initiate cooperation and to develop constructive partnerships, in order to respond to diversity of children's abilities, personality and talents, for respect of Human Rights.

Spiritual and moral development of children is the central aim for the school curriculum.

On the other hand, in my current activity, I have interviewed approximately 300 teachers ranging in age between 25-58 years. The subjects teach all scholar matters without Religion.

Analysis of the transcripts has resulted in the identification of particular themes that the teachers find important and the identification of opinions about Religion teacher education.

The questions identify the needs in the area of the educators training for improvement. The list of themes and specific questions addressed in the interviews identify some topics for improved pedagogical curriculum (with the most popular category shown first) (*see table no.1)*:

Table no. 1

Religious Education: Theoretical approaches, and practical methods

The nature/specific of religious education
Religious education and the meaning of life
The Church, the family and the school
Religious plurality in the context of European Integration
School and dialogue between students from different religious and non-religious backgrounds
History of Christian Education
The political dimension of religious education
Religious education and citizenship education
Faith Development: Educational implications
The relation between religious education and moral education
The National Curriculum and the requirements for religious education
Religious education as a cross curricular theme
Current research into Religious Education
The professional framework and standards for Teaching Profession
Religious Education and The Challenge of New Religious Movements, alternative spiritualities
Methods for teaching and learning: case study, comparative analysis, lectures, group work, group focused
Human Rights Education and Religious Education.

My thesis here is that the Religious Education promotes student's spiritual, moral, social and cultural development and prepares all learners for the opportunities, responsabilities and experiences of life.

In addition, evaluating the nowadays' situation of Religion Education in schools, 150 Religion teachers appreciate:

5- very satisfied(11)
4- somewhat satisfied(17)
3- Average(29)
2-somewhat dissatisfied(47)
1-very dissatisfied(46).

*48 percent were male and 52 percent female. All of the respondents were Orthodox.

Analyzing the answers, I tried to identify the differences between the student teachers(137 subjects) and the teachers'(150 subjects) representations or perceptions about religious education and professional identity. I can not found major differences.The gender-related differences are unsignificant. For the male and female subjects aged 25-35 years, there is a similar distribution of preferences.

Related to Religion Education in public schools future teachers affirm:

5- very satisfied(9)
4-somewhat satisfied(16)
3- average(31)
2-somewhat dissatisfied(54)
1-very dissatisfied(27).

Using a framework of critical analysis, I examined some traditional teacher training programs and I considered some aspects of alternative approaches, and of Teacher Education Reform.
I asked questions related to purpose and to the frames of Religious Education(what is the purpose of Religious Education?, what has changed in the pedagogical curriculum and units of study?)
The research largely confirmed the assumptions about acquisition of professional identities as a teacher. Nearly 67% of respondents (future teachers and Religion teachers) could identify a innovative thematic units of study, 12% gave a variety of inappropriate responses, and 21% gave no response at all.

In fact, 11% gave a secular ethical explanation for the options, and the rest offered a theological meaning.

3. Conclusions

In conclusion, current research seeks to adopt a more dynamic approach designed to guarantee a better teaching and cohesion between the different actions in the field of Religion teachers-education and to establish a better cooperation program between the University and Training Schools or other institutions, to enssure that way of teaching for diversity, social justice and human rights.

Additionally, being a citizen of Europe we need counseling strategies and basic attending skills for the Religion student teachers.

The objectives of our work in the future:

- to identify key issues;
- to disseminate a good practice;
- to create support to teachers for social /pedagogical strategies.

Expected Results:

- to support materials for improving professional teaching and learning;
- to exchange experience;
- to develop the pedagogical curriculum;
- to guideline the student teachers(from Faculty of Theology).

We think that it is important for us to achieve a better sense of our collective purpose concerning the student Social Action and to maintain their involvement in rural placements and Social Institutions.

As a conclusion, we think that the key debates about religious plurality, about Religion teachers' education, religious identity and religious liberty, and spiritual values must continue, in order to help pupils to develop an individual and personal set of beliefs and values.

Key issues and strategies for theoretical approach have to be taken into consideration in the following years of study and reflection in the context of our research.

Additionally, the increasing diversity of education providers underlines the need for cooperation between European countries.

The Pedagogical Curriculum Development requires further review, and possible modification, needs analysis and case studies, and application materials for quality assurance of teaching. Quality is obviously one of the major issues in the context.

At the same time, teachers need to adapt teaching in order to accommodate students' diverse experiences to the religious plurality.

REFERENCES

1. Altet, M.(1994), *La formation professionnelle des enseignants,* coll.Pédagogie d'aujourd'hui, Paris: P.U.F.
2. Antonescu, G.G.,(1937), *Educatia morala si religioasa in scoala romaneasca,* Bucuresti: Editura Cultura Romaneasca S.A.
3. Barsanescu, St.(1976), *Unitatea pedagogiei contemporane ca stiinta,* Bucuresti: Editura Didactica si Pedagogica
4. Cucos, C.(1996), *Pedagogie,* Iasi:Polirom
5. Dewey, J.(1903), *Religious education as conditioned by modern psychology and Pedagogy,* Originally published in: *THE Religious Education Association: Proceedings of the First Convention,* Chicago: The Religious Education Association
6. Digest of Strasbourg case-Law relating to the European Convention on Human Rights , vol.5(1985), Kohln, Berlin, Bonn, Munchen: Council of Europe, C. Heymanns Verlag K.G.
7. Eliade, M., (1992), *Sacrul si profanul*, Bucuresti:Editura Humanitas
8. Grimitt, M.H., (1987), *Religious Education and Human Development: The Relationship Between Studying Religions and Personal, Social and Moral Education*, Great Wakering: McCrimmons
9. Halstead, M.J., Taylor, M.J.(2000), *Learning and Teaching about Values/ A Review of recent research,* in: Cambridge Journal of Education, vol.30, No.2
10. http;//europa.eu.int/comm./education/policies/2010/doc/jir_council_final
11. *The Bologna Process and Declaration* in: rks.dk/trends1.htm, unige.ch/cre
12. http://europa.eu.int/comm/education/policies/2010/lisbon_en.html
13. http://europa.eu.int/comm/education/policies/2010/lisbon_en.html
14. Jackson, R.,(2004), *Religious Education and Plurality: Issues in diversity and pedagogy,* London: Routledge Falmer
15. Jackson, R.,_Steel K.(2004), *Religious Education and Citizenship Education in Europe,* in: F. Schweitzer et al(Eds.), Yeabook of Religious Education, vol.21
16. Kuinick, P.& Jules, V;(1993), *Pupils' perceptions of a good teacher: a developmental perspective from Trinidad and Tobago, in:* British Journal of Educational Psychology, 63, pp. 400-413
17. Maciuc, I.(2005), *Towards coherence between psycho-pedagogic representations and improved teacher professionalism,* SIMPRO, Petrosani: Editura Universitas
18. Maciuc, I.,(1998) *Formarea formatorilor*, *Modele alternative* si programe modulare,, Bucuresti: Editura Didactica si Pedagogica R.A.

19. Maciuc, I.,(2003), *Pedagogie, repere introductive*, E.D.P., Bucuresti:Editura Didactica si Pedagogica R.A.
20. Maciuc, I.(1999), *Introducere in studiul educatiei: cu privire speciala asupra Educatiei Religioase),* Universitatea din Craiova(curs in reprografie)
21. Maciuc, I.(1999), *Educatia religioasa, dimensiune a educatiei actuale, in : Analele Universitatii din Craiova,seria TEOLOGIE,(THEOLOGY), Anul IV, nr.4, p.29-38*
22. Maciuc, I.(2005), *Educatia religioasa in scoala romaneasca, in :* Analele Universitatii din Craiova, seria Psihologie-Pedagogie, Editura Universitaria: Craiova, pp.52-59
23. McLaughlin, T.H., (1992), *Citizenship, Diversity and Education: a philosophical perspective, in:* Journal of Moral Education, 21(3), pp. 235-250
24. Meakin, D.C.(1988), *Personal, Social and Moral Education and Religious Education: the need for conceptual clarity,* British Journal of Religious Education, 11(1), pp.15-21
25. *Report for the Seminar* held on Friday 27 April 2001 at London House, Mecklenbergh Square, London, St.Gabriel's Trust and the Professional Council for Religious Education, www.pcfre.org.uk, 3
26. Wach, J.(1955)*, Sociologie de la Réligion,* Paris:Payot
27. Willaime, J.-P., (publ.), (1990), *Univers scolaires et religions,* Paris: Cerf

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

MODERN TYPICAL STRATEGIES IN TEACHING, LEARNING AND EVALUATION OF HISTORY

Lecturer Constanţiu Dinulescu, PhD
HPhG, University of Craiova

Abstract

The modernisation of the educational process imposes the implementation of the new methods active-participative in teaching history. The author presents the newest strategies used by the history teachers to optimise the activity with students, offering a rigorous classification in accordance with the new demands of the reformation of the Romanian educational system which will allow the Romanian students to become Europeans citizens.

Key concepts*: strategies, projecting, teaching, evaluation, conducting of learning, classification, optimization*

The modernization of the instructive-educative process asks for using beside the traditional methods, the teaching strategies centered to the students' actions. The teacher must identify the possible alternatives, to undertake, before, an operative analysis of the different ways in learning a concept. After the identification and the evaluation of the different strategically solutions, will be maintained that which is credited as the best of all. This is an act of a strategically decision. From all the imagined alternatives he will choose a strategy which will ensure the expected success, he will select the most efficient solution. The projection of the strategies involves attitude, valorization, and a serious cognition of learning processes and of the best ways of steer them, described synthetic in the actual theories of the instruction and the education[1].

[1] Elena Joiţa, *Didactică aplicată*, Casa Corpului Didactic, Craiova, 1994, p.110-114; Eadem, *Locul şi rolul metodelor activ participative în învăţământul* actual, în „Revista de Pedagogie", Bucureşti, nr. 10/1982, *passim*; Irina Maciuc, *Pedagogie II. Repere ale instruirii*, Editura Sitech, Craiova, 2006, p.15.

1. Projection of the efficient didactic strategies in teaching history – the establishment of strategies types

The didactic strategies are included in the didactic technology and represent the ensemble of procedures for the cooperation teacher – students in the accomplishment of teaching –learning in typical area in factors and possibilities.

Characterized as a modality of combination, organization of the demarches for the accomplishment of the objectives, the strategy offers criteria for the construction of the actions, situations of instruction by:

- Choosing the orientation to a type, form, modality of teaching and learning and conducting them;
- Choosing the ensemble of methods, ways and forms of organization used by the contents of learning;
- The conception of teaching, learning and evaluation by projected sequences by ordering them;
- The indication of a specified way of introducing the student in the created situation and to coordinate him in solving the task until its evaluation;
- The possibility of detailing components in proceedings which increases the degree of control, prevention of the deviations and up gradation;
- The formulation of hypotheses of research and the optimization of the instruction;
- The unification of criteria and adaptation in the establishment of the strategy of solving of the defined situation;
- The strategy cannot be limited only to the methods, it is necessary to impose the ways of learning and organization of the students' activity (frontal, independent, individual or in unitary groups) and of the general activity which is implemented in class-room, or outside de class-room.

Types of strategy

The activity of teaching is defined as a transmission of data and as an action of informing the students in a systematical and established way. In the theory of instruction, the action of teaching is regarded as a provocation of students' behavioral and personal changes during the teaching process. An important role is attributed to the teacher who must use participative methods and the students' independent work for accomplish his objectives. In the same time, the teaching may be regarded as an offer of learning experiences or as a management of the instruction, which suppose an evidence of the psychological resources and the orientation of the learning action[2].

---

[2] Ioan Cerghit, (coord.), *Perfecţionarea lecţiei în şcoala modernă,* Editura Didactică şi Pedagogică, Bucureşti, 1980, p.91-92; Robert Gagné, *Condiţiile învăţării*, Editura Didactică şi Pedagogică, Bucureşti, 1975, p.28-29.

The teaching action is an ensemble of students' products, results a succession of operations, actions, estates and events, and the active cognition (student's implication, participation at the instructive process). The two ways of learning (algorithmic and heuristic) can be combined and used in teaching in report with the typical particularities of students' group[3].

The evaluation represents a circularly process, active and dynamic of perfecting the instruction by mutual adaptation and appropriate strategies at the situation of instruction and particularities of the evaluated subjects. The students' evaluation supposes not only the appreciation of the results but the interpretation of data in making a favorable decision and anticipating negative effects. The evaluation can offer precious data about the evolution of an educational system in which the evaluation has a preponderant role[4].

In the specialized literature are defined the following types of strategies which are differenced thus:

a) *By the dominant activity in the instructive process :*

Teaching:

- Presentation and following of norms, rules of algorithmic type by exposition, demonstration, explanation, exercise;
- Students' activation in teaching, using participative methods and independent work;
- Combining the two ways of teaching;
- Combining the teaching process in an expositive way with tasks of heuristic learning;

Learning:

- *Algorithmic*:
- by models imitation;
- by perception, quote;
- by real-intuitive cognition;
- by algorithm (step by step);
- *Heuristic*
- by direct observation;
- by debates and heuristic dialogs;
- by simulation, formation and application;
- combining the other types;

Evaluation:

- initially;
- continue(summative);
- by measuring and notation of results;
- interpretation and appreciation qualitative;

---

[3] Laura Căpiță, Carol Căpiță, *Tendințe în didactica istoriei* (Prefață de prof.univ.dr. Zoe Petre), Editura Paralela 45, Pitești, 2005, p.34-36; Dan Potolea, *Reconsiderarea conceptuală a activizării şcolare*, în „Revista de Pedagogie", București, nr. 12/1990, p.1-4.

[4] Laura Căpiță, Carol Căpiță, *op.cit.*, p.67-68.

- verification: theoretical and practical tests , docimology tests and exams;

b) By nature of dominant objectives

During the process of teaching history in general teaching system it was created an idea: the teacher uses a combination of strategies, situations for increase the efficiency of the actions and the quality of the results. It may be concluded that the strategies types can be improved, because the structure of the strategy which includes the teaching media and the types of organization of the activity[5].

Towards the strategies of traditional orientation, the modern strategies indicate new attributes concerning the students' and teachers' role and the way of accomplish the action of learning.

- *Accomplishment of objectives:*
  - Predominantly informative;
  - Predominantly formative;
  - Predominantly educative;
  - Combining in different ways of the three types;
- *Accomplishment of operational objectives:*
  - cognitive;
  - attitudinal;
  - psychic-motional
  - combined
- *Accomplishment of objectives relatives to the themes and fields;*

c) *By the way of learning conduct*:
- algorithmic;
- half-conduct;
- partially nonintervention;

d) *By the used type of reasoning*:
- Inductive teaching-learning;
- Deductive teaching-learning;
- Analogical learning ;
- Combined reasoning;

e) By the categories of predominant actions:
- Main-based on communication;
- Main-based on researching learning;
- Based on practical-applicative action;
- Based on amelioration of the results;

---

[5] Gheorghe Tanasă, *Metodica predării istoriei*, Editura Spiru Haret, Iaşi, 1996, p. 62-66; Bogdan Teodorescu, *Prezent şi viitor în învăţământul preuniversitar de istorie*, în „Tribuna Învăţământului", Bucureşti, nr. 42, 1992, p.18-22; Dr. Ioan C. Roman, Prof. Paraschiva Tănase, *Coordonarea activităţii la nivelul şcolii pentru introducerea metodelor active în învăţământ,* în în „Revista de Pedagogie", Bucureşti, nr. 4/1988, p.4-8.

- Based on adaptation on changes by using proceedings, techniques, models and examples;

2. The typology of the implementation of the different methods of teaching – learning in history field

The learning methods are the ways of accomplishment of the informational and formative objectives of the history lesson and to the extra-curricular activities with historical content. They can be seen by the teacher as methods of teaching, but the students may consider them as learning techniques. But, in the real sense of the interaction teacher-student and of that the object of the education, they are seen as methods of teaching-learning.[6].

Main directions in the improvement of educational methods in teaching-learning history

The futures history teachers must consider the following main directions in the field of improving of educational methods:

a) To know seriously the theoretical fundaments of the methods of teaching and the ways of their practical use in teaching –learning history in general teaching, helped by special works of didactics and psycho-pedagogy;
b) To choose a better way for using the methods of teaching – learning history;
c) To avoid the abusive use of the exposition, explanation and the lecture
d) To use correctly active methods as learning by research, creating problem-situations, models, scheduled instruction;
e) To teach their students how to use correctly the teaching methods and to offer them the access to the teaching techniques;
f) To make differences between following concepts: teaching method, didactic proceeding (it is a sequence to the method, a simple detail), didactic methodology (as a coherent structure of methods, chosen and combined by objectives for their accomplishment);
g) To create didactic and efficient strategies, the most correct model of selection, in the following order: instruction methods, didactic materials, technical methods of learning;
h) To implement methods of teaching and research of history, based on computer use;

---

[6] Ştefan Păun, *Didactica Istoriei*, Editura Corint, Bucureşti, 2003, p. 135-136; Călin Felezeu, *Didactica Istoriei*, Ediția a II-a, Presa Universitară clujeană,
Cluj-Napoca, 2004, p. 133-210; I. Moraru, *Strategii creative transdisciplinare*, Editura Academiei, Bucureşti, 1992, *passim*.

i) To use a variety of methods which adapt permanently at the new teaching situations[7];

The clasificationof teaching methods

The establishment of the criteria for the classification of teaching methods is still open in the special literature[8].

The classification of the teaching methods supposes the existence of a strong connection between the components of the didactic process, with the students' instruction and formation.

It isn't made a classification unanimously accepted of teaching methods, because of a great number of criteria accepted by the specialists. We consider possible the following criteria, which may be attached to other ones which come from didactic experience.

A. historically:
   - Classic traditional methods (exposition, conversation, exercise);
   - Modern methods (algorithms, scheduled instruction).

B. By specialty field:
   - General methods (exposition, lecture, conversation);
   - Special methods (exercise, example);

C. By main method of presentation of the information:
   - Verbal methods, based by oral and written information
   - Intuitive methods, based on direct observation

D. The degree of student's implication:
   - expositive or passive methods
   - active methods

E. by the main didactic function :
   - the function of teaching and communication;
   - the main function of fixation and consolidation;
   - the main function of verification and appreciation of the results of the work;

F. by the organization of the work :
   - individual methods;
   - frontal methods;
   - combined methods;

G. by the axis of teaching by reception (mechanical) – by discovery (conscientious teaching):
   - methods of mechanical learning (exposition, demonstration)
   - methods of learning by conducted discovery (heuristic conversation, conducted observation, case study)

---

[7] Simion Mehedinți, *Profesorul, temelia tuturor reformelor şcolare*, Editura Socec, Bucureşti, 1929; Gheorghe Zmarandache, *Profesorul şi dimensiunea valorii sale didactice*, în „Studii şi Articole de Istorie", LXII (Serie Nouă), Bucureşti, 1995, p.90-94.

[8] Gheorghe Tanasă, *op.cit.*, p. 62-64; Ştefan Păun, *op.cit.*, p.119-122.

- methods of learning by discovery (observation, exercise, problems resolution)

The combination of methods and traditional proceedings with modern ones and the implementation of an active character of the teaching methods ensure the accomplishment of the objectives in teaching history. It is necessary a diminution of the expositive and verbal methods and the increase of the active and the creative character of the modern methods to ensure by their utilization a combination between the independent students' work and the group activity.

3. The technique of utilization and elaboration of didactic instruments in the field of history

Definition

The instruments of learning represent the ensemble of materials used by the teacher in teaching and by the student in learning history, for ensure a better accumulation of information, formation of capacities, attitudes, values and personal qualities and an objective evaluation.

The instruments of learning have a double function: informative and formative for the students who are getting used with the selection of the necessary instruments for describing and understanding of the reality.

The instruments of learning involve and help the operations of thinking, the research, have a positive influence for the imagination and the creativity of the student.

The instruments of learning can help the correct and coherent perception[9].

Pedagogic functions of the instruments of learning

The instruments of learning accomplish a lot of psychic-pedagogic functions such as:

- Cognitive-formative, documentary and didactic functions which help the instruments of learning to ensure the information over the reality and the act of cognition
- Connective function between teaching process with the socio-professional reality which ensures the understanding with social life and economic and social realities, forming the realist vision for the young generation.
- Function of civic and esthetic education. The instruments of learning, especially the mass-media offer to the students complex feelings, of cognition, esthetics and behavior.
- Function of multidimensional development of the personality. Mass-media, generally and especially those who present elements of the culture, science and education (*Discovery Channel, Viasat History,*

[9] *Teodor Mucica* (coord.), *Mijloace audio-vizuale în studiul istoriei*, Editura Didactică şi Pedagogică, Bucureşti, 1979, p. 9-22.

National Geographic etc.) can represent modalities of complementary media in development and the affirmation of the human personality [10].

Classification of learning instruments

In teaching history, the classification of learning instruments has a conventional character, being influenced by some criteria such as: their natural, imagistic, practical or ideal character [11]. The following categories can be distinguished:

a) *For the communication of information*

In this category are included video presentations on screen (transparent paper, images and video-tapes), audio (records, educational transmissions at local or national radio), mass-media presentations, didactic movies on computer, television, video-tapes, television with restricted access.

b) For obtaining information:
   - Archeological objects (coins, medals, jewels, weapons, pottery etc.)
   - models

c) For consolidation and verification of information:
   - Envelope with scheduled information
   - Historical maps

d) For rationalize lesson time (seals, models)

e) For transmission and visualization of the information:
   - projectors ;
   - radio tapes;
   - computers;
   - television sets ;
   - magnetic tapes ;
   - video tapes;

The learning instruments are necessary if they are integrated organically in lessons and offer a pedagogical finality. We can affirm, without the fear of mistaking that the integration of teaching instruments is realized by a permanent connection with the objectives of instruction and the contents of the history lessons.

Didactical base

The teaching-learning of history asks for the existence of an appropriate frame which must ensure the accomplishment of the objectives proposed by the history teachers.

The history cabinet is the place who must offer the best frame in transmitting historical information. Its endowment with special instruments offers the possibility of their integration in educational system, developing the creation of student's moral attitudes. Also the cabinet can be a place of discussion, based on tolerance and dialog[12].

---

[10] Gheorghe Tanasă, *op.cit.*, p. 114-115.

[11] Ştefan Păun, *op.cit.*, p.101-102; Călin Felezeu, *op.cit.*, p.211-213.

[12] Teodor Mucica, Minodora Perovici, *Cabinetul de istorie*, Editura Didactică şi Pedagogică, Bucureşti, 1976, *passim*. Călin Felezeu, *op.cit.*, p.223; Elena Smeu, *Metodica predării Istoriei României*, Editura Didactică şi Pedagogică, Bucureşti, 1983, p. 123-124.

An important way for completing the instruments of learning necessary for teaching history is self endowment (it includes a library thematic constructed, archeological, numismatic ethnographic collection).

4. The efficient organization of student's group for the process of teaching history

Class Management – Reason

In class, the teacher doesn't realize only the teaching-learning and evaluation processes, he also creates relations with students by influencing their learning behavior and he makes interventions in the direction of their general evolution being the central character in the class, the teacher plays a major role in the educative influence. He schedules the learning activities, organizes the class, communicates the various data conducting the class activities

The learning oh history in school is realized by the implementation of the complementarity's principle:

The frontal activity is a way to organize the didactic process in which the teacher conducts the students work, having the major role and the control over the entire class. The lessons based on teaching activity are the main form of organization of historical studies in schools.

The teaching in groups is not used on large scale because of disadvantages such as: a great period in studying a theme; the sequences of the lesson are poorly understood by students, only a few students take part to the solving of tasks given by the teacher, the copying of didactic material is difficult to made for the entire class. The teaching in groups in studying history cannot be realized in any conditions. In making the groups it is necessary to have the student's accord, to accord the students' number and capacities with the difficulty of tasks.

A mechanical construction of groups, alphabetically or by seats represents a failure initially assumed. In the opinion of the specialist the construction of mixed groups (homogenous and heterogeneous), having well, middle and weak students is indicated because of stimulation of the activity of the all members of the groups, creating the competition.

The role of the teacher is that of create the task of work, for conducting and controlling each group in part. The activity of groups may be extended because of the parts of the tasks, in many steps which included the organization of the class, studying and compiling the material by the members of the groups, presentation of the oral or written answer and the checking the results[13].

---

[13] Ministerul Educației și Cercetării, Consiliul Național pentru Curriculum, *Ghid Metodologic pentru aplicarea programelor de istorie la clasele IV-VIII*, București, 2001, p.26: „*pornind de la caractristicile generale ale demersului didactic, centrat pe activități de învățare, în actiitatea curentă a profesorului de istorie pot fi identificate următoarele roluri: creator de curriculum, consilier, moderator, partener, evaluator, model*".

As a practician, the teacher can use different strategies, general or appropriate, looking for motivations of value, efficiency and adaptation at the particularities of the class in which he teaches history. Today, more than anyway, the teacher must choose the appropriate didactic strategies, adjusting them to the purpose and to the objectives of the lesson. The strategy ceases its place to the spontaneity, to the creative intervention, eliminating the rigid automatisms and the routine.

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

SELF-AS-TEACHER: THE CHOICE OF A PROFESSIONAL IDENTITY

Lecturer Gabriela Grigoroiu, PhD
University of Craiova

Abstract

The article presents relevant information regarding the student teachers personality and personal evolution towards self-assertion and identification with the profession. The PhD study was undertaken at the University of Craiova on learning to teach between 1996-2000, the thesis being submitted to the University of Exeter, UK in 2002. The study was undertaken to investigate aspects of the initial training of Romanian EFL teachers, after introducing a reflective approach in pre-service teacher training at the University of Craiova. It explores professional learning and how student teachers construct their world and in what way reflection influences their learning. An interpretive naturalistic approach was used to interpret and understand these processes in terms of the student teacher perspective.

Key concepts: *initial teacher training, learning to teach, reflection, self-as-teacher, qualitative research, professional identity*

1. Learning to teach and reflection: discovering the self-as-teacher

Learning to teach with its multi-dimensional nature is a complex and challenging task (Calderhead & Shorrock, 1997: 194). It is related to the nature of teaching and the relationship between the personal and the professional in teachers' work, to the student teachers' personalities and modes of thinking. So far the personal and tacit dimensions to professional knowledge have been given special attention, which has led to considering the process of reflection as central to professional learning (Rowland, 1993: 110).

There were nine participants who were presented in the study. They were attributed fictitious names to protect them from any possible identification, which would have made the study ethically vulnerable.

The process of becoming a teacher involved defining a teacher identity, transformation of self, self-actualization, and integrity of self by reaching the congruence between the self and the ideal self (Fontana, 1986: 68). It was related to the student teachers' knowledge and understanding of the overall purpose of teaching as social practice, and to their own perceptions of self-as-teacher as committed to that purpose, i.e. to help others to become educated (Langford, 1989: 29).

Student teachers taught and regarded their teaching experiences in personal ways that were relevant to their learning in different ways. They perceived a close link between personality and teaching and tended to associate becoming a teacher with the teacher and person they wanted to be. They had to learn a body of knowledge consisting of techniques, skills, models, theories, tips etc. Yet what they took from the course and how they used it in their teaching was filtered through their minds and personalities.

I have introduced a reflective approach in the initial teacher training and undertaken the current study to see how student teachers learnt and if they learnt more effectively from experience by developing their capacity to reflect at different stages and on different events (Boud *et al.,* 1985: 19). The period of transition between two distinct periods of life implied the choice of a professional identity with professional commitment as a key event. Gradually, being a learner was to become a covert position implicit in teaching (Huberman, 1989: 5).

The student teachers' images of self and of teaching included especially their wishes, referring to the internal directions and aspirations that they had "for their own professional lives and development: their preferences, their ambitions, their chosen career path, their enthusiasm, and above all their values" (Claxton, 1989: 52). Because of this close link between personality and teaching student teachers seemed to associate becoming a teacher with learning to be the teacher they wished to be that implied personal change and a process of identity transformation. Learning to teach involved a constant process of comparison, adjustment and change, uncertainty about their identity and being vulnerable in a variety of ways (Calderhead & Shorrock, 1997: 166).

The process of defining their identity implied sifting and eventually changing perceptions of self, the other people's opinions and reactions, as well as their models of teaching and the images that they had generated. During their initial training views of self-as-learner teacher complemented the previous views of self-as-learner, which in some cases led to changes in the perceptions of self, in choosing a professional identity and in the relationships with others. The agents of such changes were primarily the pupils and class events, and to some extent the mentors and the trainer**.** Becoming a teacher implied passing from an egocentric to an altruistic viewpoint, changing their attention from self to pupils. This could be regarded as a dramatic shift in view (Guillaume & Rudney, 1993: 75), because changing positions created insecurity and a need of confirmation that was not done in the past (Argyle, 1967: 129).

The informants' images of self carried certain personal ways of thinking about themselves as well the others' perceptions of self. They had fairly well developed and conceptualized images of self-as-teachers that influenced the process of professional learning. As already presented in the previous two chapters the way they projected their self-image as teachers was related to what they had experienced as learners. Thus their personality, learning experiences and their models played an important role in shaping their perspectives of teaching and of self. They influenced their disposition to absorb new models of teaching or to modify the old ones, to adopt different attitudes or behave in different ways than their model teachers (John, 1996: 91). Their images of teaching had strong affective connotations and were associated with powerful beliefs and feelings of what were 'right' ways of teaching rooted in past school experiences. Their retrospective recollections became the lens through which student teachers viewed current classroom practice.

Student teachers' images of self and of teaching built upon brief, descriptive, and sometimes metaphoric statements (Elbaz, 1983: 137) that seemed to capture their perceptions of teaching, of self in the classroom context, of learners and of the subject matter. They combined their feelings, values, needs and beliefs about how teaching should be (Elbaz, 1983: 134) or as they would have liked it to be. They were the blueprint on which they constructed their ideal self. In some cases they were personalized, extended and enriched by new significances students attributed to the images formed during the past exposure to school teaching and by new experiences during their training programme.

The self-image should be seen as descriptive rather than prescriptive. Being largely an internal summary of how student teachers used to see themselves in the past it should not limit future behaviours and block change (Claxton, 1989: 96). *Reflection-on-action* implied a general understanding of the process of transformation and change, of the setbacks that might arise, of the feelings that might be aroused and of the role that their personal belief system could play in enhancing or blocking learning and change. It involved self-discovery, i.e. becoming aware of such images, contemplating them and deciding on how to adjust them to the context in order to reach their ego ideal. Thus student teachers' search for self-discovery became a search for a professional identity and once they managed to find this wholeness they became individuated (Fontana, 1986: 59).

2. The challenge of change

Change involved either an alteration or an expression of values and beliefs that led to the clarification of the direction student teachers chose in order to attain their purpose. They had been presented with challenging practical alternatives to traditional teaching, but it depended on them if they were able to find ways in which they could graft new beliefs onto the old (Claxton *et al.,* 1996: 101-102).

The role and place of reflection in the process of learning to teach related to preparing students of teaching for their socialization in schools, enhancing their capacity to adapt themselves to demands and unexpected situations. It might help them pursue professional development through self-reflection, seen as the need for student teachers to have the freedom to make a genuine choice for themselves. Reflection on improvement (Claxton, 1989: 154) stimulated some student teachers to decide about their professional development, and the changes it entailed that were triggered by (after Harris, 1967: 85-88):

- A desire to attain integration of self, i.e. Consistency between the way they perceived themselves and the others saw them leading to congruity of self, a sense of control and self-esteem
- A determination to change in order to improve their self-image and the quality of their experiences, which had caused pain and discomfort that could no longer be endured
- An apprehension of potential boredom and routinization of work or dissatisfaction with current understandings or practice (Claxton, 1989: 154)
- The sudden discovery that they could change, and thought of how to do it, using their ability to contemplate the future or estimate probabilities.

Perceptions of self as persons of worth were related to the way they projected their self-image in different contexts and to what extent they managed to behave in accordance with it. While being 'on-stage' and under observation, they were concerned with projecting an image of professional competence that they assumed was expected of them and would make pupils respond in the desired way. While being 'off-stage' they felt more vulnerable by also being learners with their doubts, hopes and struggles, which could damage the desired image of the self-possessed expert-to-be they wanted to project. In this way images of self and of teaching and the way they projected them had an impact upon the informants' ability to examine critically their teaching (Kuzmic, 1994), the situations they dealt with and their interpersonal relationships.

Danny, Lou and Robin felt safe in using what they already knew from their models. They were preoccupied with discipline, keeping the class under control and paid attention to what they taught and said lest they should mispronounce words. It also involved, as Danny mentioned, going down to their level, which they seemed to do with effort. They suppressed behaviour that was not in accordance with the role of the authoritarian teacher they adopted (Argyle, 1967: 125-126) and did not question their teaching and its unpredictability. Many of the dilemmas raised were context dependent, e.g. the issue of authority versus being authoritarian; dependence versus autonomy; and sticking to the known versus experimentation (Bennett & Carre, 1993: 215). They felt that their perceptions as persons of worth and consequently their self-esteem were threatened and shattered by events in the classroom and the encounters with pupils and they became sensitive to disruptive behaviour.

They perceived learning to teach as one of the many components of their academic learning that had a generalized character, and they failed to give it specific goals. They tended to focus more on the negative aspects of problematic situations and to look for solutions of immediate expediencies, which blocked reflection and made them appear resistant to change. Lack of time for planning and preparation, pressure of duties, managing difficult classes and adjusting to class routines and school seemed to be viewed as obstacles preventing them from being the teachers they would ideally have liked to become.

Person-specific factors relating to personal classroom experiences influenced the choice of a teacher identity and commitment to teaching. Robin left the impression that she was a person who searched all the time and disposed to think of events and weigh facts. Yet she was inclined to judge them at face value being constrained and stressed by the lack of time and the financial aspect of teaching. Danny wanted to make a successful career and get a well-paid job, which appeared to be possible in another field than teaching. Lou and May had traumatic experiences as learners, but May managed to initiate a process of change and reassertion of self, while Lou's confidence had been shattered long before she entered teacher education, which obstructed her understanding of teaching from the position of a prospective teacher. The image of herself as a teacher remained a source of discomfort as she failed to see herself in a teaching role.

Through teaching May, Tyger, Chris, Sam, Mitch and Ginger increased their self-worth and developed into confident teachers who felt comfortable in the classroom context, being in control of their classes, of events and feelings (Claxton, 1989: 59). They felt knowledgeable and competent in the sense that they felt confident and able to find ways to share their knowledge with their pupils and deal with the classroom eventualities. The emotions and fears that preceded actual teaching were treated as inherent to the process and were related to their perceptions as persons of worth, their images of teaching, and their own projections of the self-image. They were more tolerant with mistakes, be they their own or the pupils'. They were understanding and sensitive to the diversity of pupils in the classroom and felt confident they would know how to act or to take decisions as appropriate as possible to the pupils and class situations. They tried to be themselves and acted naturally, being aware that the teacher role implied a learner stance as well.

Their evolution as prospective teachers became an expression of their commitment to teaching and of their inner desires of becoming the teachers they had wished to be. Reflecting on events of their lives as learners and teachers they grew aware of the changes that the context triggered once they would accommodate to the teaching culture and assume responsibility for the life-long process of learning to teach.

Learning to teach implied a process of learning about the self and of raising awareness of the connections between and within their experiences that led them to one direction, namely to becoming teachers. It also involved a process of exploration of their

preconceptions in order to understand and update them by initiating a process of reflection. Such a process could help them understand their own perspectives as well as those of others. "They can not only understand their past, but they can also make predictions about their likely behaviour in a given situation, such as the classroom, because they know something about what that series of events is likely to mean to themselves and others" (Diamond 1991: 22). In becoming aware of their beliefs and purposes, which gave unity to their lives, the student teachers could have a sense of their own identity through time. The way in which they gave shape to their lives through their actions depended very much on their sense of who they were (Langford, 1989: 25).

Conclusions

"The adoption of a reflective approach is a choice which we can make or not as we wish, and is one which can be associated with the deep approach to learning" (Boud *et al.,* 1985: 24). It can refer to "something that occurs in action, is separated from action, as cognitive activity, or is itself an action, different from teaching action", it has an enlightenment function and leads to independent action (Bengtsson, 1995: 28). Thus *reflection-on-action* became paramount in taking decisions regarding personal professional change and development. Person-specific aspects influenced the student teachers' professional development and views on teaching. In the long run they may acquire skills of learning through experience and act upon their own practice as agents of change in order to improve the quality of their teaching and implicitly of their lives.

REFERENCES

1. Argyle, M. (1967). *The Psychology of Interpersonal Behaviour*. London: Penguin Books
2. Bengtsson, J. (1995). What is Reflection? On reflection in the teaching profession and teacher education. *Teachers and Teaching: theory and practice,* 1(1): 23-32
3. Bennett, N. & Carre**,** C. (Eds.) (1993). *Learning to Teach*. London: Routledge
4. Boud, D., Keogh, R. & Walker, D. (1985). Promoting Reflection in Learning: a Model. In D. Boud, R. Keogh & D. Walker (Eds.), *Reflection: Turning Experience into Learning* (pp. 18-40). London: Kogan Page
5. Calderhead, J. & Shorrock, S. B. (1997). *Understanding Teacher Education. Case studies in the Professional Development of Beginning Teachers.* London: The Falmer Press
6. Claxton, G. (1989). *Being a Teacher. A Positive Approach to Change and Stress.* London: Cassell
7. Claxton, G., Atkinson, T., Osborn, M. & Wallace, M. (Eds.) (1996). *Liberating the Learner.* London: Routledge

8. Diamond, C. T. P. (1991). *Teacher Education as Transformation.* Buckingham: Open University Press
9. Elbaz, F. (1983). *Teacher Thinking. A Study of Practical Knowledge*. London: Croom Helm
10. Fontana, D. (1986). *Teaching and Personality.* Oxford: Basil Blackwell
11. Guillaume, A. M. & Rudney, G. L. (1993). Student teachers' growth toward independence: an analysis of their changing concerns. *Teaching and Teacher Education*, 9(1): 65-80
12. Harris, T. A. (1969). *I'm OK – You're OK*. New York: Avon
13. Huberman, A. M. (1989). *The Lives of Teachers.* London: Cassell
14. John, P. D. (1996). Understanding the apprenticeship of observation in initial teacher education. In G. Claxton, T. Atkinson, M. Osborn & M. Wallace (Eds.) *Liberating the Learner* (pp. 90-107). London: Routledge
15. Kuzmic, J. (1994). A beginning teacher's search for meaning: Teacher socialization, organizational literacy, and empowerment. *Teaching & Teacher Education*, 10(1): 15-27
16. Langford, G. (1989). Teaching and the Idea of Social Practice. In W. Carr (Ed.), *Quality in Teaching. Arguments for a Reflective Profession* (pp. 21-34). London: The Falmer Press
17. Rowland, S. (1993). *The Enquiring Tutor: Exploring the Process of Professional Learning.* London: The Falmer Press

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

THE SIGNIFICATION OF LOGICAL OPERATIONS IN EDUCATIONAL PRACTICE

Lector univ. dr. Aurel Pera
DPPD - Universitatea din Craiova

Abstract

Education is a complex process which implies a logical classification of both its fundamental components and a structure which aims to develop each student's thinking capacity. The teacher must explain and make things clear, while the student must understand what he is taught. Therefore, explaining and understanding are rational processes which involve an entire problematic which we aim to analyze below. During teaching, the tutor reveals certain conclusions based on theories (or premises), and the student understands them and asserts, according to his or her psychology, the base that these conclusions are founded on. Both rational processes – teaching and learning (explaining and understanding) consist therefore of logical operations. Defining and explaining are fundamental logical operations. We can neither define nor explain anything without the use of language. Language expresses thought. It is a system used for expressing or communicating thought. It allows us not only to define and explain, but also to benefit from other people's experience. Considering that the central role of language is to express thoughts, we can hereby state that language plays at least two major parts: explaining behavior and transmitting information about the world.

The following article aims to emphasize the role and signification of logical operations in learning processes and educational practice.

Key concepts: *logical operation, defining, explaining, exposing, understanding, rational process, cognitive process, learning process, stating and verifying hypothesis, learning volume, logical laws, logical rules, formal operations, equivalent relations, ordering relations, denominating, identifying, asserting.*

Education is a complex process which implies a logical classification of both its fundamental components and a structure which aims to develop each student's thinking capacity. The teacher must *explain* and make things clear, while the student must *understand* what he is taught. Therefore, *explaining* and *understanding* are *rational processes* which involve an entire problematic which we aim to analyze below. During teaching, the tutor reveals certain conclusions based on theories (or

premises), and the student understands them and asserts, according to his or her psychology, the base that these conclusions are founded on. Both rational processes – teaching and learning (explaining and understanding) consist therefore of logical operations. *Defining and explaining are fundamental logical operations.* We can neither define nor explain anything without the use of *language*. Language expresses thought. It is a system used for expressing or communicating thought. It allows us not only to define and explain, but also to benefit from other people's experience. Considering that the central *role* of language is to express thoughts, we can hereby state that language plays at least two major parts: *explaining behavior* and *transmitting information about the world.*

In order to use a language, it must first be acquired, although there are theoretical works which claim that many communication systems are complex mixtures between acquired and innate factors (especially in regard to animal communication systems). This can also apply to human communication systems. Noam Chomsky states that the most prominent characteristics of human language are innate [2]. However, Michael Devitt and Kim Sterelny claim that "the wide vocabulary of each human language must be learned. Therefore, the learning volume afferent to acquiring a language largely outsizes the learning involved by non-human communication systems." [3].

In his works, G. F. Kneller insists on defining the concept of "logical operation" in relation to pedagogy. From this point of view, the author states, "logical operations" are often used in pedagogic research in a "non-formalist way in order to determine mental activities which lead to valid and certain conclusions and which are subjected to a set of procedure regulations" [1, p. 109]. From a formal or non-formal logical perspective, the notion of "logical operation" seems to be "a metaphor" for the certain ways of thinking which lead to logical products, although logical operations "are not *literally* logical in themselves" [1, p. 109]. From an anti-formal perspective, logical operations are involved by precise and valid thinking, hence G. F. Kneller's conclusion that "the operations involved by logical thinking are subjected to regulations" [1, p. 109]. The author attempts to approach logical operations from both a logical and a psychological point of view. A psychologist, says the author, investigates what may be called the "laws" of these operations only in the measure in which they can be verified. A logician prescribes "rules" which must be followed for a successful learning.

G. F. Kneller states that the various problem-solving methods proposed, like that of J. F. Dewey, are inadequate to become a general thinking ideal, while the operations that they denominate – stating and verifying hypotheses – take place on a much larger scale than defining, classification etc. Jean Piaget also analyzed numerous logical operations, but the categories he came up with are just as vast, while B. Othanel Smith took S. E. Toulmin's reasoning structures for category definition, although it is arguable how logical some of these categories are" [1, p. 109].

A detailed analysis of specialized literary works reveals that psychologists have paid little concern to the psychological features behind logical operations. This can be explained through the behaviorist view's domination over thinking, according

to which each thought is a reaction caused by a stimulus due to their repeated association by trial and error, straightened by success. According to this view, thinking is not subjected to logical laws. On the other hand, the liability of linguistic symbols and the relation between symbol and meaning must also be taken into consideration. Meaning permits symbols to play crucial roles in human life, especially in explaining and predicting behavior, but also in providing information about the world. Symbols rightfully gain their meaning in the context of language, which is "an ultimately powerful communication system, not subjected to environment stimuli, abstract, arbitrary, acquired and productive" [2, pp. 29-30]. Therefore, Michael Devitt and Kim Sterelny note that language philosophy deals which two unusual problems. The first consists of describing and explaining the properties which confer symbols a central role in our lives, which the two authors refer to as "the problem of explaining meaning". The second consists of describing and explaining linguistic competence – the traits which allow the human mind to use and understand symbols and the system of symbols called "language" [2, p. 30].

According to the "language of thought" hypothesis, largely attributed to Jerry Fodor (1975) and Gilbert Hartman (1973), thoughts are similar to phrases in human languages (like English, for instance), therefore having a linguistic dimension. Thoughts are *mental* phrases, while their components, concepts, are *mental* words [4].

Thoughts seem to possess the same semantic characteristics as human language phrases do. M. Devitt and K. Sterelny consider that phrases, like thoughts, are referentially connected to the world and that, like assertions, convictions are true our false. "Thoughts, like phrases, can be part of an inferential relation." The representational *contents* of a thought "seems to differ only *nominally* from the representational 'meaning' of a sentence used to express or communicate the thought" [3, p. 140].

The two authors state that thoughts are similar to phrases not only because they share the same meaning, but also because they share the same syntax. Another reason is that thinking, like language, is systematic. People do not learn to produce and understand sentences one by one; they learn the elements of a sentence and the means to put them together. Two other reasons would be that, firstly, "thoughts are abstract, as are phrases"; then, images, maps and diagrams are too simplistic to properly express the contents of thoughts. Both thinking and speaking "are abstract in the same way. Images can be *associated* to thoughts, especially to those based on perceptions, but are not thoughts themselves". Hence the conclusion that, if the "language of thought" hypothesis is correct, then the same approach is just as promising for thoughts, because, in this regard, "the contents of thoughts are meanings of *mental* sentences" [4, p. 141], and the final conclusion that "thinking is placed within a language" [3, p. 142].

Given the context, these few observation justify such an approach, and also the need to take into consideration the aspects related to the logics and psychology of language within educational practice. On the other hand, we must also consider J. P. Guilford's theory regarding the psychological components of logical thinking. Guilford attempts to structure the factors and intellectual abilities involved in the

thought process and to elaborate a series of tests to measure them [5]. G. F. Kneller believes that, despite the fact that Guilford's cognitive and evaluative factor category groups include the abilities to effect logical operations, like deducing, his individual categories are not detailed enough [1, p. 110] and [6].

In the second part of his activity, J. Wittgenstein noted that psychology contains "experimental methods" and "conceptual confusions" caused by the inability to assimilate a language's logical components. Elisabeth Maccia states that, if psychologists must study linguistic behavior, then "the concepts deduced from analyzing the grammatical steps of these games must become a part of psychology" [7]. Given that the learning process is based on linguistic behavior and subjected to logical laws and operations, the same statement can apply to it as well. It is not a coincidence, therefore, that specialized literature has focused on those stages of the educational process which involve teaching and learning. For instance, teacher E. Maccia uses the word "educatology" to characterize the science of educative processes within a school. Educatology, she says, "is a collection of grammatical regulations concerning human behavior in school, the unique form of this behavior is the grammatical stages hierarchy... Where there are grammatical regulations there is logic. This is where the logic of education derives from. From the point of view of a researcher or pedagogue which elaborates these rules, the logic of educatology becomes the logic of investigation and educational research" [7, p. 10].

E. Maccia is convinced that the science of education will be more efficiently elaborated if our notions of educatology will result from analyzing educational behavior in itself and not undertake principles from the grammar of psychology, sociology or philosophy. In regard to this aspect, G. F. Kneller comments that another possible way would be the adaptation of Peirce's concept of *retroduction* [8]. In analyzing the role of logical operations in teaching and learning, G. F. Kneller identifies five main problems:

1. At what age should children become able to perform logical operations?
2. Which logical operations are involved in school dialogue?
3. Which norms should students and teachers be subjected to in order to establish whether the product of a logical operation is a valid one?
4. What operations should teachers perform during teaching?
5. What logical operations should students perform during individual study in order to acquire various types of information?

The author analyzes problems (1) and (2) in detail, briefly discusses problem (3) since "it has been of less concern to pedagogues", while problems (4) and (5) are left for future analysis, although they are considerably important to pedagogues.

1. On a first approach, says G. F. Kneller, we are tempted to either overestimate or underestimate students' ability to think abstractly. In the first case, teachers' explanations would become inefficient, as would be the case in teaching mathematics. In this regard, Jerome S. Bruner notes that students perceive numerous mathematical operations as working instruments and are not aware of their fundamental signification. The reason, says J. S. Bruner, is that these procedures are

not translated in their own terms of thinking [9]. As for the second case, this can lead to uselessly delaying students' progress; experiments have revealed that some middle-school students tackle Euclidian geometry as an ensemble of axioms and theorems, without having any previous experience in using the simplest geometric shapes and symbols intuitively [1, p. 112].

Jean Piaget makes several notable observations on children's intellectual evolution. According to this author, *classification* and *ordering* in serial relations and *counting* are fundamental logical operations. As they become aware of their ambient and begin to interact with it, children gradually classify ambient objects, ordering them in a basic hierarchy and numbering them. These operations are base for complex logical operations, like deduction, which is based on classification and ordering [10]. J. Piaget considers that, in their first two years, children lack language and therefore they can only perform exterior activities; they almost completely lack self-awareness. Between 2 and 7 years, they learn to use a limited language, become able to imagine the actions of other people, but cannot communicate socially through speech, as their intelligence is limited by egoism and therefore, says J. Piaget, children are not preoccupied to demonstrate their statements; they do not look for arguments, but use personal analogies. Children tend to assimilate causative and logical relations (cause – effect) with psychological relations (motivation – action). Egoism prevents them from distinguishing a series of relations between objects. In other words, up to the age of 11 or 12, children think intuitively and non-deductively; in other words, they perceive an idea, but are unable to argument it nor to follow other people's reasoning. As J. Piaget states, children at this point lack the fundamental concept of “reversibility”, without which they cannot grasp certain basic principles of mathematics (for instance, the mathematic principle stating that a subdivided quantity does not alter in size) and physics (the physical principle of the weight and mass conservation, when an object changes its shape). [1, p. 115].

Children between 7 and 12 years old are starting to understand “specific operations”, the most important of these being *classification* and *writing*. These operations are considered to be *specific* because children can perform them by making use of real or imaginary objects and not of symbols. They cannot understand probabilities and cannot systematically imagine the variety of the possible consequences of an ensemble of formal or specific conditions. They cannot hypothetically admit that a premise is true and cannot think systematically at this point. They cannot be given an ensemble of definitions and axioms and expected to deduce specific propositions, but only to acquire several notions of invariance and reversibility. This period is characterized mainly by intuitive perception.

During the next stage, of *formal operations*, children can perform logical operations by making use of symbols and, not being limited by the limitations of concrete existence, students can rationalize based on hypothetical data. Finally, according to J. Piaget, children do not think logically before 12-13 years. As they grow yet older, they start operating with the relations between sentences and propositions and can perform logical operations concerning prepositional estimations.

These considerations have been largely criticized by American psychologists, as well as other experts [11]. J. Piaget was remonstrated that his subjects were few and homogeneous; that they have been studied at different ages in a brief time period; it was suggested that children's language would not precisely reflect their way of thinking. Other experimenters have reached the conclusion that many children can think logically long before J. Piaget estimated.

Ch. W. Valentine, Th. V. Moore, D. L. Arnold, Cyril Burt and H. Fischer have reached different conclusions. The latter claims that J. Piaget's experiments provide more information about the ability to educate than average intelligence tests, because they focus primarily on fundamental reasoning processes. As J. Piaget's experiments can be explained through symbolic bivalent logics, says H. Fischer, "his system can be connected to logical measures... It would then be possible to estimate... children's behavior according not to a differential statistic process, but rather to a logical differential one" [12].

Given the context, it can be concluded that precisely establishing the logical operations which children can perform in each stage of their development and their complexity poses a considerable importance to the psychology of education. G. F. Kneller concludes that most psychologists show that the ability to perform logical operations develops gradually; however, they do not agree on defining the stages of children's evolution and their similitude [1, p. 118].

2. B. Othanel Smith from the University of Illinois has performed an important study in regard to logical operations in the teaching and learning process [13]. The author does not examine the logical operations involved in school dialogue, but "the more ample maneuvers regarding the means to control the teaching materials", thus elaborating a vast system of changeable concepts. In his view, the student-teacher dialogue consists of logical operations – defining, classification, demonstration – expressed through words, within which we can distinguish between monologues and *verbal exchanges*, defined as *episodes* by B. O. Smith. As the conversation progresses, one episode replaces another. Each episode is initiated through a verbal operation called *introduction* and, if this is a question regarding the signification of a word, the answer will most likely be an attempt to define it or a regulation, whereas if the introduction is an explanation, the answers will be arguments or descriptions. If an episode requires a definition, then its ideal logical configuration will be a definition, whereas if it requires an explanation, its ideal logical configuration will be that of an explanation. Therefore, each episode occurring during the school discourse has an ideal logical structure according to the logical operations requested by the introduction. It is ideal in that it is mostly approximated by real dialogue. According to their observations, B. O Smith and his collaborators estimated that the learning attitude rarely conforms to strictly logical structures, like those which consists the basics of ideal explanations, definitions etc. The question whether or not the learning attitude should conform to these structures is an empirical questions, say the authors, and its reply must be stated through references to certain criteria of effective learning. "The analysis of the logical structure of episodes, in

terms of an ideal shape, can indicate the types of variations within the logical dimension of learning and can suggest useful directions of research" [13, p. 152].

The authors have identified twelve different forms of logical operations within school discourse, some of them strictly logical (defining and classification) [14], others in regard that they present intellectual operations involved in the teaching process. *Defining* is the most used logical operation, which establishes the meaning of a word (term), a notion or a *formal object*. When referring to objects (or object categories), defining reveals their characteristic determinations, gives them an adequate notion. When referring to new terms, we establish their meaning through introduction, explaining or stating. If we take formal systems into consideration, we provide the constitution regulations for the formal objects (or object categories) and therefore provide a definition for the corresponding term. Consequently, a definition points out the essential characteristics of objects, gives an adequate notion to an object, separates the meaning of terms or words and indicates the characteristics which an object or an object category within a formal system must possess.

Logics contains many means of defining. The most frequently used is defining in accordance to the *proximate type* (the closest type) and specific differences. The relation of defining "is not *a relation of equivalence* but *a relation of ordering* which is asymmetric, transitive and non-reflexive" [15]. Reflexivity and symmetry can be written A = df.A and A = df. BC => BC => dv.A respectively, which would be errors within a definition: the first is the *idem per idem* error, the second is the error of the *vicious circle.* Although the relation of defining is not an equivalence in itself, it always involves a relation of equivalence: a = df.BC => A = BC. For instance, A = BC can be an equiference or extensional equivalence. This explains one of the most commonly-encountered errors: the confusion between definition and equivalence (and particularly equality). "Therefore, we must conclude that there are no *inter-definisable entitites*" [15, p. 71].

At other times, a student is asked to *describe* a person or an object, but it seems that this type of introductions are ambiguous since, says B. O. Smith, it cannot be established precisely whether they require a *description* or an *identification*. The teacher may very well describe or indicate something and ask the student to name it. *Naming* or *identifying* is done with the aid of *words* or *symbols*. In other cases, introductions ask for *assertions* which imply plenty of descriptions and which can be either a consequence, a theorem, a conclusion, an opinion or a stage of a demonstration. Asserting requires the student to make a clear, concise and objective presentation. Some introductions require the *recounting* of a certain content, in order to provide accurate information regarding a summary or text, while others require the performing of a symbolic operation, usually a mathematic one, through *substituting*.

Introductions which imply a certain *evaluation* also require students to make assertions in regard to *value, opportunity, viability* etc., while others may require the voicing of an *opinion* or *conviction*. *Classification, comparison* and *opposition* are other operations which a student may be asked to perform. An introduction may also require the student to make a comparison, without mentioning the criteria expected, or

to determine in which measure certain things are similar or different according to certain criteria.

"Conditional inference" introduction types require that students find a consequence of a stated cause. "The cause, is an expression regarding a condition or a state of fact which results in another condition or state of fact, stated accordingly" [1, p. 123]. When dealing with conditional inferences containing both cause and effect, students are asked to confirm or deny the consequence or to conclude that they have never verified the consequence in the given context. For instance: "You got fat after you ate ice-cream" The cause is, "you ate ice-cream", while the consequence (consequent) is, "you got fat".

B. O. Smith feels that *explaining* stands for stating previous conditions which lead to the main event; in other words, putting together rules, definitions or facts in order to justify decisions, judgments, actions etc. According to the dictionary, explaining an expression is an operation through which an expression (*the explained term*) is replaced with an equivalent, clearer and more accurate expression (*the explicative term*). There are several types of explanations in logics: *causal explanation*, which is also mentioned by B. O. Smith and consists of establishing the cause of a phenomenon; *logical explanation*, which consists of the logical argumentation of a proposition; *technological explanation*, which consists in justifying a decision or action through its purpose and is mentioned by B. O. Smith; *nomological explanation*, justifying tests through regulations, and *concept explanation*, which reveals the contents of a concept [15, p. 109]. In his study, B. O. Smith also mentions *mechanism explanations* or *consecutive explanations*, asking a student to enumerate the sequences leading up to an event; *procedural explanations* (describing the steps or operations necessary in order to reach a specific goal) and *normative explanations*, which request a student to justify a decision, judgment or information. The second aspect of *normative explanations* starts off with an introduction that requires the student to provide a grammatical or mathematical rule, an action or a decision. For instance: "Why do we say that one is better than the other?".

Analyzing B. O. Smith's point of view, G. F. Kneller concludes that each episode has an ideal logic model, determined by the logical operations that the introduction requires. This model can or cannot be transposed into practice. Since the school discourse rarely benefits of *complete explanations* (most explicative episodes contain either interconnected facts or, more frequently, explicative principles), the ideal logical model of an episode "is not necessarily best for didactic goals". Often, the principle becomes implicit, and therefore mentioning would be useless. Other times, the principle itself is the essence of the explanation and omitting it would nullify the reasoning as a whole. Since not all these operations are logical, i.e. they are not all governed by strict regulations, G. F. Kneller states that a more thorough examination is in order to determine the types of thought which can be subjected to procedural regulations, for instance. In his view, researching the logical aspects of thought must be deepened by a thorough investigation of the psychology of logical thinking, for instance, "of the mental factors that various logical operations require" [1, pp. 125-129]. The author is aware that thinking can only be studied through

behavior. We can assume that a certain type of behavior is representative for a type of thinking, but we cannot confirm or deny this assumption. We cannot establish, he says, that a certain thought causes a certain action or behavior, because we cannot establish a constant relation between unobservable thought and observable action. Any attempt to observe thinking results in observing its consequent action and not thinking in itself [1, p. 129].

J. F. Kneller questions *the meaning of logical operations in educational practice*; in other words, which is the contribution of knowing the logical structure of the school dialogue to educational practice? The answer is obvious: if we know the ideal logical structure of an episode given by introduction and by its real structure, we can establish, one one hand, how well a teacher managed to put together a certain logical structure, and on the other hand, which steps should be taken in order to improve this structure. For this, says G. F. Kneller, teachers should become accustomed to several logical operations that they can apply during practice; should be able to transmit their knowledge in a logical way, but also to guide students in order for them to become able to use their own knowledge logically.

If teachers knew what the operations of logical thinking are and how students can be helped in order to perform these operations more efficiently, they would be better prepared to perfect logical thinking and would be capable to identify reasoning errors in defining, explaining and other logical operations and present these errors to their students.

On another hand, this ideal logical structure offers a theoretical base for the experimental research of other matters, such as: in which measure the acquiring of logical thinking depends on the degree in which the teacher himself successfully finalizes each logical operation; to which level students are required to comply with the ideal logical structure of each episode; in which measure students should know the logical structure of the episodes. The conclusion is that teachers should take part in special courses for learning and exercising logical operations. The answers should be found experimentally, and "experiments presume the existence of theories for the logical structure of school dialogue" [1, p. 130].

Not only logical operations, but also their products – namely, *logical assertions* – influence school dialogue. In other words, how can a student find out if the results of his or her thinking (or of other people's thinking), either deductive or inductive, are valid or certain? The most complex answer until the 1960s was given by Robert H. Ennis from the Cornell University, who suggested twelve categories for this classification:

- *perceiving the signification of an assertion*, the student must know the pro and con arguments, the implications of the assertion, the situations which involve it and what assertions come in contradiction with it;
- *finding the ambiguities in the chain of thought*, therefore verifying whether a notion or statement within the reasoning is vague or has more than one meaning;

- *asserting that statements do not contradict each other; checking the necessity of a conclusion* – asserting the possibility to accept the premise, but deny the conclusion;
- *verifying the specificity of an assertion* – many times, an assertion is too vague to be deemed as true or false;
- *appreciating the fact that an assertion given as a direct application of a principle truly corresponds with the afferent principle* – some principles or hypotheses are not universally valid and their conclusions contain words such as "probably", "possibly" etc.;
- *verifying the accuracy of an observational assertion;*
- *asserting the possibility of an inductive inference* – the student must retain that the more data his assertion is based on, the less probable it becomes for it to be infirmed;
- *asserting the fact that the problem has been identified;*
- *asserting the fact that a statement represents a hypothesis;*
- *asserting the adequate value of a definition* (students must become familiar with various types of definitions and criteria);
- *asserting the acceptability of a statement emitted by an authority* (in this case, one must define the credibility of the respective authority, its reputation and level of knowledge in the field).

G. Frege's final conclusions in regard to the neglecting of logics in the learning process are essentially the following:

- the neglecting of the importance of logical operations within the teaching-learning;
- the focus on learning through acting, interpreted as an exterior action (for instance, progressive education and experimental psychology);
- the claiming that speech and writing as teaching methods should be replaced, which lead to a disregard of speech-based logics;
- logics have been neglected in school due to certain pedagogues' tendency to interpret the method of problematisation strictly in psychological terms (J. Dewey opposed this method, although some logicians criticize him, claiming that he would 'psychologize' logics);
- the teachers do not stimulate students' intellect enough because they are not familiar with the logical techniques of argumentation, exposing and debating, commonly used for the mobilization and guiding of one's intellectual capacity; they do not grasp the logical operation which students perform when coming to a conclusion;
- students' intellectual developing is slowed down because they are not aware of the logical operations they perform; they do not know how to assert other people's conclusions nor make use of the *art of clear thinking*;
- students rarely transfer what they learn about logical thinking beyond its learning context; in other words, they do not know how to extrapolate or do it wrong.

Finally, according to G. F. Kneller, pedagogues should pay more attention to the operations and norms within specific fields of knowledge and should elaborate new teaching methods, as a part of their subject within these observations [1, pp. 130-135].

This analysis on the logics and psychology of education, brief though it may be, comes to confirm what Anaxagoras stated hundreds of years ago: "all things were mixed together; then, reasoning came and sorted them out". G. F. Kneller and other experts hardly revealed anything new in regard to logics, but brought to attention the logical components within the learning process and the role of logical analysis in approaching psychological matters, especially since G. F. Kneller is the first author attempting to systematize the relation between logic and education. Refreshing these discussions in specialized works comes to bring a small contribution to the educational applicability of logics and psychology. Romanian authors have also observed that logicians have paid much more attention to mathematical logics, in detriment of argumentation, and therefore pedagogues lack guidance in handling the both the logical and psychological problems in education.

REFERENCES

1. Kneller, G. F., *Logica şi limbajul educaţiei*, Bucureşti, Editura Didactică şi Pedagogică, 1973, p. 35.
2. Chomsky, Noam, *Language and Problems of Knowledge: The Manager Lectures*, Cambridge, Massachusetts, MIT Press, 1988.
3. Devitt, Michael şi Sterelny, Kim, *Limbaj şi realitate. O introducere în filosofia limbajului*, Iaşi, Editura Polirom, 2000, p. 29.
4. Vezi Fodor, Jerry, *Concepts: Where Cognitive Science Went Wrong*, Clarendon Press, Oxford, 1998 şi Hartman, Gilbert, „Psychological Aspects of the Theory of Syntax", în *Journal of Philosophy*, 64, pp. 75, 87, 1967, reeditat în Stich, 1975 şi Hartman, Gilbert, „(Nonsolipsistic) Conceptual Role Semantics", în Ernest Lepare (ed.), *New Direction in Semantics*, London, Academic Press, 1987, pp. 55-81.
5. J. P. Guilford, *Three Faces of Intellect, The American Pyschologist*, XIV, 1959, p. 469-479 şi (cu R. P. Marrifield), *The Structure of Intelect Model: Its Uses and Implication, Reports from the Psychological Laboratory*, nr. 34, Los Angeles, University of Southern California Press, 1990, apud. [1, p. 110].
6. Un rezumat al relaţiilor dintre logică şi psihologie în raport cu procesele gândirii vezi Milton Meux şi B. Othanel Smith, „Logical Dimensions of Teaching Behavior", în Bruce J. Biddle and William J. Ellena, eds., *Contemporary Researches and Teachers Effectiveness*, , New York, Holt, Rinchart and Winston1964, pp. 161-162.
7. Maccia, Elizabeth, *Logic of Education and Educatology, Educational Theory Center Occasional Paper* 64-160, Ohio State University, 1964, pp. 5-6.
8. Pentru definirea conceptului de *retroducţie*, vezi E. Maccia, op. cit., p. 13 şi Georges S. Maccia, „Science and Science in Education", în G. F. Kneller, ed., *Foundations of Education*, New York, Wiley, 1964, pp. 364-367.

9. Bruner, J. S., *The Process of Education*, Cambridge, Massachusets, Harvard University Press., 1991, pp. 37-39.
10. Piaget, Jean, *The Psychology of Intelligence*, London, 1950, cp. 5 şi 6 şi *Logic and Psychology*, New York, Basic Books, 1997.
11. A se vedea în acest sens William Kessen şi Clementina Kuldman, *Thought in the Young Child*, Child Developement Publications, Purdue University, XXVII, 2, Serial 83, 1962 şi David Russel, *Children's Thinking*, Ginn, Boston, 1996, pp. 151-163.
12. Fischer, H., „The Psychology of Piaget and its Educational Implications, International Review of Education, X, 4, 1994, pp. 432-440.
13. Smith, B. O., Meux, M., J. Coombs şi G. Nuthall, *A Tentative Report on the Strategies of Teaching*, Verbona Bureau of Educational Research, College of Education, University of Illinois, 1994.
14. Amănunte legate de clasificare şi definire vezi Enescu, Gh., *Fundamente logice ale gândirii*, Bucureşti, Editura Ştiinţifică şi Enciclopedică, 1980, pp. 24-184.
15. Enescu, Gh., *Dicţionar de logică*, Bucureşti, Editura Ştiinţifică şi Enciclopedică, 1985, p. 70. Amăunte legate de tipurile de definiţii, vezi paginile 70-78.
16. Ennis, R. H., *A Concept of Critical Thinking. A proposed Basis for Research in the Teaching and Evaluation of Critical Thinking Ability*, în „Harvard Educational Review", XXXVII, Winter 1992, pp. 81-112

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

THE IMPLICATIONS OF METACOGNITION IN THE PROCESS OF SELF-EVALUATION

Junior Lecturer Florentina Mogonea, PhD student
TSTD, University of Craiova

Abstract

The efficiency of any activity undertaken by an individual is mostly ensured by the possibility to train and capitalize the metacognitive capacities. Most times, the success depends on the possibility to observe, control, set one's own activity. Representing a science of knowledge, knowledge of the act of knowing, metacognition accompanies the activity of learning giving the person who learns the possibility to reflect upon it and to gather the useful information for that activity and for the future ones as well. The metacognition does not involve only the knowledge the student gathers about his own cognitive activity, but also supposes the usage of certain mechanisms of control and setting.

Due to metacognition's role in the students' activity, through the practice of the processes of observation, control, setting, we consider necessary and useful to discuss the relation between metacognition and self-evaluation, the latter supposing self-analysis, self-control and self-setting. Therefore we infer that an important direction in the attempt to stimulate the students' possibilities of self-evaluation is represented by the training and stimulation of the metacognitive capacities. Within the activities with the students, the teacher can capitalize many situations in order to develop the metacognitive capacities of the students, and these, just as many other categories of capacities, can be formed and developed through exercise, by repeatedly placing the students in stimulating situations.

Key concepts: *self-evaluation, cognition, metacognition, self-control, self-setting, metacognitive strategies.*

1. What is metacognition? Definition and short history

The concept of metacognition is semantically related to cognition, the latter being the object of study for cognitive sciences, starting from 1940, at the same time with the developments in cybernetics, in the theory of information, in the mathematical logics, whose particular preoccupation is to describe and explain the functioning of the nervous system and of reason (Cerghit, 2002). Analyzed from the cognitive psychology point of view, cognition refers not only to the activity of building knowledge and the result of this activity, but takes particular interest in the

identification of that act through which the acknowledgement of the processes and the cognitive functions which encourage the construction of knowledge are accomplished.

Closely related to the above-mentioned concept is that of metacognition, initially used by Flavel in 1976, its meaning being that of "knowing one's own knowledge". From the first usage by Flavel, there have been numerous attempts to explain its essence or to substitute it with other concepts. I. Cerghit (2000, p.219) makes a synthesis of these attempts. Thus, the term can be encountered under the following form as well: "knowing the knowledge", "cognition of the cognition" (Cardiner); "knowing about knowledge", "thinking about one's own thinking", " the conscience of one's own thoughts", "knowledge about the functioning of one's own cognitive system" , "self-observation of knowledge", "possible acknowledgement of what you know" (Piaget), "possible awareness of one's own knowledge" (Neacsu) etc..

Due to the importance of metacognition in achieving self-observation of one's own activity, of self-evaluation, of self-control, self-setting there have been numerous concerns regarding the definition, explanation and analysis of this concept. Further on we present some of the attempts to define it without assuming exhaustively.

- Flavel, the one who used it for the first time, considers that the term designates the information each individual has regarding his/her own knowledge, structures and cognitive processes. For this author, metacognition refers as well to the active evaluation, setting and organization of these cognitive processes (Flavel, 1976);
- Barth (apud Cerghit, 2002), in 1983, defined the concept as "learning of the aware behaviour of thought";
- Gombert (1990) considers that metacognition refers to the introspective and conscientious knowledge an individual has regarding their own cognitive processes; moreover, the term supposes the abilities through which this individual deliberately controls and plans his own cognitive processes in order to reach a goal, a determined objective;
- Doudin et Martin (1992) consider that this term equally designates the knowledge a subject has on their cognitive functioning and that of others and the mechanisms of setting and control of this cognitive functioning.;
- For Ph. Meirieu (apud Cerghit, 2002, p. 219), metacognition "is nothing but the return towards the inner self, acting on the very act of learning .... is that interrogation on the meaning and importance of our actions, which allow the structuring of intelligence and the construction of one's own personality" ;
- Anne-Marie Doly (2000) considers that the term expresses "that reflexive detachment of the subject who acts and chooses what is necessary for their own evaluation and control, mostly using the knowledge they have on the personal ways of knowing";
- One of the Romanian authors who have approached the problem of metacognition is M. Miclea*;* according to him (1999, p. 323) metacognition refers to "the knowledge the subject has on the functioning

of their own cognitive system and which are able to optimize its functioning".

- A more general definition is given by the psychologist I. Radu (2000, p.23) "the term metacognition means (...) the process of withdrawal, of reflexive bending of the human subject on their own cognitive activity, which practically means not only knowing, being aware of the process of rewinding (= fact of consciousness) but also to evaluate the behaviour depending on the projected goal".

As it could be noticed in the definitions presented so far (some short, concise, synthetic, other detailed, some expressed in a specialized register of language, others in a language situated at the crossroad of science and literature), the authors believe that metacognition refers to that knowledge the individual has on their structures, cognitive processes, on their cognitive functioning, that it represents that interior feed-back each individual must accomplish in order to obtain information regarding their activity, in order to set, improve and optimize them. Present in almost all the definitions presented above, this regulating component is the one which insures the success of the individual in their activity, due to the acknowledgement of their own strong points, but especially of the weak points, the errors, the failures.

As a conclusion, we can consider metacognition as the total amount of information the individual has regarding his/her own cognition which would help him/her to be aware and to fix the knowledge concerning the inner self, compared to everyone else's knowledge.

2. The role of metacognition in stimulating students' self-evaluation possibilities

It's difficult to clearly separate the two processes, due to their interdependence. Nevertheless there must be an investigation on the relations formed between metacognition and self-evaluation, because of the implications they have in the didactic activity. It's obvious that between self-evaluation and metacognition there is a very close connection of inter-determination. Seen from the self-evaluation point of view, this relation supposes the capitalization of metacognition, of the metacognitive strategies within the self-evaluating process, metacognition being a necessity of accomplishing a correct self-evaluation.

From the perspective of metacognition we can consider self-evaluation as well as self-control and self-setting it supposes as a consequence of using metacognition in the activity undertaken.

Within this context we can say that an important condition in stimulating the students' capacities of self-evaluation is represented by the training and capitalization of metacognition. The capitalization of metacognition in the undertaken activity has obvious and immediate implications in fulfilling the self-evaluation because:

- It encourages the analysis and awareness of one's own cognitive approach;

- It allows the identification of the stages taken in solving a given task
- It ensures the identification of one's own inadvertences, mistakes, failures and of the causes that have generated them;
- It ensures one's own accomplishments, success and drawing conclusions concerning the operating system in future similar situations;
- It allows the comparison of the approaches undertaken in different subjects of study, setting similarities and differences;
- It creates the possibility to select the most efficient learning techniques starting from a concrete learning situation;
- It encourages the transfer of knowledge (interdisciplinary and interdisciplinary), their use in other contexts than those where they were acquired;
- It allows the anticipation of some obstacles and of some efficient approaches as well in order to remove or avoid them;
- It encourages the comparisons between the activity, one's own accomplishments and those of the colleagues.

3. Possibilities to use metacognition in working with students

Metacognition is closely related to the activity of learning, it represents a "guardian" (Joița, 2004*)* of this activity, giving the student the possibility to undertake, at the same time, the activity of learning and to monitor, set and control it. This reflexive attitude oriented on one's own activity gives the student information about the nature of the task, the activity undertaken in order to solve it, the methods that can make the activity efficient, and the possibilities of control.

The activity developed by the students offers numerous possibilities to use metacognition, regardless of the subject of study. To stimulate metacognition, the teacher in himself/herself should be a model to stimulate the students' attempts to capitalize metacognition. There is a multitude of situations when one can appeal to the students' metacognitive capacities. These can precede the learning activity, can be simultaneous with it or can succeed it. From the first category, we are going to present a few examples:

- Appreciation of the level and quality of previous knowledge of the student, necessary in solving the new task.
- Evaluation of the difficulty already encountered in similar activities of learning;
- Anticipation of the difficulty degree of the task the student is to solve;
- Anticipation of the necessary time to solve the proposed task;
- Appreciation of the attitude regarding the new work task/ activity in which he/she is going to be trained;
- The student himself/herself sets an objective in the activity that will be undertaken.

During the activity of learning, the metacognitive capacities can be trained in situations such as:

- Comparing the answer with the text given by the manual or by other supportive materials or those of the colleagues;
- Comparing the answer with the presented criteria by the teacher;
- Identifying the one's own errors or those of a colleague in a given answer;
- Summarizing, making essential a text, a document;
- Identifying the key-words within a text;
- Formulating ideas, thesis, theory in a very own style;
- Explaining the given answer to a colleague;
- Making, during the activity, a sketch that would synthetically render the stages covered
- Explaining, bringing arguments for an idea, thesis, etc.

At the end of the learning activity, the students can practise their metacognitive capacities in situations such as:

- Appreciating the level of difficulty of the task
- Identifying the difficult moments as well as those they have overcome easily in solving the task;
- Appreciating the level of knowledge acquired in the finalized learning
- Setting beyond any doubt the inadvertences in acquiring the new information;
- Identifying the aspects and elements that should be repeated in a future learning activity in order to insure their complete and correct acquirement
- Identifying the usefulness of the acquired knowledge;
- Identifying the possibility to integrate the new acquisitions within the already existing notional systems.

Other situations can be added to the ones presented so far, depending on the nature of the learning situation, the students' previous experience, the teacher's personality. Also, these can be adapted and completed depending on the peculiarity of each subject of study.

REFERENCES:

1. Cerghit, I. (2002). Sisteme de instruire alternative şi complementare. Structuri, stiluri şi strategii. Bucureşti: Editura Aramis.
2. Doly, A-M. (2000). La metacognition pour apprendre a l'ecole. În Cahiers Pedagogiques, Paris: 381, 40-41.
3. Doudin, P.A. & Martin, D. (1992). *De l´intérêt de l´approche métacognitive en pédagogie. Une revue de la littérature.* Lausanne: Centre vaudois de recherches pédagogiques: http://metacognition.com.ifrance.com/regulation.htm
4. Flavell, J.H. (1976). Metacognitive aspects of problem-solving. In L.B. Resnick (Ed.), *Perspectives on the development of memory and cognition* (pp. 231-235). Hillsdale; N.J.: Lawrence Erlbaum Associates.

http://metacognition.com.ifrance.com/regulation.htm
5. Gombert, J.-L. (1990). *Le développement métalinguistique.* Paris: Presses Universitaires de France, Collection Psychologie d´aujourd´hui: http://metacognition.com.ifrance.com/regulation.htm**.**
6. Joița, E. (2002). Educația cognitivă. Fundamente. Metodologie. Iaşi: Editura Polirom.
7. Joița, E. (2004). Metacogniția-valorizarea ei pedagogică. În Analele Universității din Craiova, seria Psihologie-Pedagogie, 5-6, 119.
8. Miclea, M. (1999). Educația cognitivă. Modele teoretico-experimentale. Iaşi: Editura Polirom.
9. Radu, I. (2000). Strategii metacognitive în procesul învățării la elevi în Studii de pedagogie aplicată, coord. Ionescu, M., Radu, I., Salade, D. Cluj-Napoca: Editura Presa Universitară Clujeană.
10. http://weco.csriveraine.qc.ca/cemis/meta/meta.htm#Haut.

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

RESEARCH LABORATORY

USING STUDENTS AS OPERATORS FOR FIELD ENQUIRES – ADVANTIGES AND LIMITS

Junior Lecturer Eugen Avram, PhD student
University of Bucharest
Reader Iuliana Armaş, PhD
Faculty of Geography, University of Bucharest

Abstract:

Since *field studies have become ever more important for the market and academic research in Romania, the present study aims to highlight and evaluate from a cause-explanatory point of view the error sources induced by student-operators. It is more important since many academic research and not only resort to students for field-operators.*

The evaluation of the operators' impact on the enquiry's efficiency took into consideration the processing of data from a survey on the seismic vulnerability feeling of Bucharest's residents, conducted in 2001-2002.

There resulted four types of errors (omissions and frauds) according to data categories of the instrument: type 1 errors – omissions/frauds of the operator's identification data, type 2 errors – omissions/frauds at the 'passport' data of the studied subject, type 3 errors – omissions at the items on objective 1 of the research, type 4 errors – omissions at the items regarding objective 2 of the research.

The data indicate that girl teams have better results compared to mixed teams and to the subjects that operated individually, with fewer omissions in questioning for the items referring to objective 2 of the research.

Key concepts: *field enquiry, enquiry operators, error factors, error analysis*

1. Introduction

Field studies have become ever more important for the market or academic research in Romania. The enquiry is usually achieved with auxiliary personnel, enquiry operators, while the interview can only be conducted by persons especially trained for that (Rotariu, Ilut, 1997, p. 51). The research and study experience have shown that data can be severely altered by a series of error-inducing factors. The errors are behavioural deviations from work norms, causal results of some inconsistencies between the work tasks or standards and activity (Pitariu, 2003, p. 71). Error detection and interpretation imply a methodological strategy, differentiated according to the characteristics of the studied system (Pitariu, 2003, p. 71). The error analysis aims at revealing a negative aspect (what was not done, what was missed) that would show what must be done as well as a positive aspect (what was done), revealing a disturbing mechanism that is exterior to the task (Faverge, Leplat, Giguet, *apud.ibid*).

The efficiency of the field enquiry depends on obeying the methodological norms and standards. There are numerous factors that can induce losses in the enquiry's resources: factors related to the researcher, to field operators and enquired subjects. Especially the last two factors lead to losses of the material or information that could be included in analyses.

The operator is the most important error-inducing factor in the case of oral enquiry. The operator's presence, his attitudes or actions may influence the subjects' answers, the errors may be unintentional – due to the lack of attention, not understanding the sense, anticipations, accent laid on some emotional aspects of the items, or deliberate.

A first category of error-generating factors includes the following: *operators traits:* physical appearance (pleasant/unpleasant), voice characteristics (tone, rhythm etc.), temperament, moral traits, knowledge level. The negative effects are visible in: the high number of refusals from the subjects (non-answers), the high frequency of codification errors due to lack of attention, superficiality; fraud, that is questionnaires filled in by other persons than those hinted by the research or even faking the questionnaires. These aspects are very important in the case of occasional research, by persons or institutions that do not have a network of operators. As a matter of fact, in auctions, one of the evaluation criteria used by the enquiry benefactors is the quality of operators network. A second important category of errors connected to operators refers to the *correlation between the enquiry's theme and operator's attitude towards or opinions on the studied issues.* The effects are: results distortion according to values, opinions, attitudes (frequently the case of enquiries on political matters). The third category of errors results from the enquirer's anticipations, caused not only by attitude and characteristics, but mostly by the concrete conjuncture of the enquiry. The operator's anticipations may be: *structure-attitude anticipations* – labelling/classifying the interviewed subject after the first answers, followed by the operator's interpretation of vague, ambiguous, hesitating answers of the subject and movement of the answer towards one of the answer variants; *role anticipations* – resulting from the

image the operator has on the subject based on factual data (profession, function, income level) and direct observations (age, material situation visible at one's home; thus, the operator will try to shape the answer accordingly to the deducted category; *probability anticipations* – operator's suppositions regarding the distribution expected for the answers to particular questions; if while filling up the questionnaire, the operator finds out that his hypothesis is not correct, he will try to tick the categories that are not chosen frequently enough; in other situations, the operators, seeing that the first subjects answered in a way to an item, will not ask again and fill in ex officio (Rotariu, Ilut, 1997, p. 112-114). Other error-generating sources for the operators are: field operators' lack of training, leading to incorrect or insufficient filling in of the questionnaires, insufficient motivation of operators may be associated with filling in fakes.

2. Frame issue

In many academic researches, students are used as field operators. The evaluation of operators' impact on the enquiry efficiency was based on a study regarding the feeling of seismic vulnerability of Bucharest residents, conducted in 2001-2002. The research of people vulnerability to seismic risk had two objectives – perception-attitude and adaptation-behaviour. From a methodological point of view, the enquiry based on standardised questionnaire was used, applied on the field. The questionnaire had four categories: identification data of the operator (2 items), 'passport' data of the interviewed subjects (10 items, including the characteristics of flats they lived in), data regarding objective 1 of the research (21 items), data regarding objective 2 of the research (3 items).

The relatively high number of questionnaires defectively filled in has lead to the systematisation of information regarding the quality of students' activity. The following categories of operators' inefficiency were obvious: omissions (not filling in all the 4 categories of data required by the questionnaire) and frauds.

The decision weather to consider a questionnaire as false took into consideration three criteria: 1. the lack of operator's identification data; 2. the existence of more than one omission in the subject's identification data, admitting that only the street name may be avoided by the subject and assuming that the student that made the forgery did not invent addresses and characteristics for flats; 3. just one omission, but systematic (to the subject's identification data) at the same operator or team of operators.

3. The objective and sub-objectives of the research

The research objective is defined by the effort to highlight and causal evaluate the error sources induced by student-operators, in the perspective of rendering more efficient the method of field enquiries for vulnerability studies.

The sub-objectives may be summed up to four aspects:

Revealing the categories of errors made by student-operators;
Descriptive analysis of data regarding the operator's errors;
Evaluate the costs of using students as operators for field enquires;
Revealing the possible ways for avoiding errors in academic research using students as operators.

4. Subjects and used method

As field operators, 89 students participated (16 boys, 73 girls), 57 worked alone, 32 in pairs (4 teams of girls, 4 mixed teams).

The operators were explained the study utility, their participation role for the study and way of application and filling in of the questionnaires. They had no benefits what so ever for conducting the field enquiries. The students were given standardised questionnaires, with 19 closed and semi-closed questions. They were distributed on districts in order to fill in the questionnaires, after interviewing people on the street. Reading the items to the subject and ticking the answers by the operator or writing the answers to the items with semi-closed answers made the filling in. The research had many phases, following the dynamic in time of studied phenomena. Thus, studies were conducted in 2001 ans 2002. 368 questionnaires were filled in.

5. Results

The authors have systemised the types of errors (omissions and frauds) accordingly to the categories of data of the instrument: type 1 errors – omissions/ frauds of the operator's identification data, type 2 errors – omissions/frauds of the 'passport' data of the subject, type 3 errors – omissions at the items on objective 1 of the research, type 4 errors – omissions at the items on onjective 2 of the research.

a. Percentage data

a.1. type 1 errors – omissions at the operator's identification data:

- 35 questionnaires (9.6 per cent) classified as false;
- 0 omissions at this data category – the remaining 329 questionnaires (90.4 per cent).

a.2. type 2 errors: omissions at the items for the identification of the studied subject:

- total omissions (10) – 16 forgeries (4.4 per cent) to the questionnaires that had the operator's identification data, 25 (6.9 per cent) forgeries at the questionnaires that had no identification data of the operator;
- 4 omissions – 3 questionnaires (0.8 per cent);
- 5 omissions – 1 questionnaire '(0.3 per cent) with 5 missed items.

In total: 20 (5.5 per cent) forgeries due to omissions to the questionnaires that had the operator's identification data.

- 2 omissions – 5 questionnaires (1.4 per cent);
- 1 omission – 7 questionnaires (1.9 per cent).

Correctly filled in questionnaires: 307 at the subject identification (84.3 per cent).

a.3. type 3 errors: omissions at the items regarding objective 1 of the research:

- 1 omission – 25 (6.9 per cent);
- 2 omissions – 1 (0.3 per cent).
- Total: 26 questionnaires (7.2 per cent).
- 0 omissions – 283 (77.7 per cent).

a.4. type 4 errors: omissions at the items regarding objective 2 of the research.

b. Analyses regarding the questionnaire omission situation compared to operator's work style (alone / team)

b.1. Differences regarding type 2 omissions at the questionnaires filled in by students, compared to work style (alone / team)

there are more omissions at the subjects' identification data at the questionnaires filled in by teams (m=1.5, AS= 3.37) compared to those filled in individually*(m=0.24, AS=1.33) (t=-4.7, df=307 sig. 2-tailed= 0.00)* .

b.2. *differences regarding type 3 omissions, compared to work style (alone/team)*

there were no differences regarding the omissions for the data on research objective in the questionnaires filled in by teams or individuals ***(t=1.42, df=307, sig 2-tailed=0.15***

b.3. *differences regarding type 4 errors, compared to work style (alone/team)*

there were no differences regarding the omissions for data regarding the research objective between the questionnaires filled in by teams or individuals (t=0.64, df=307, sig 2-tailed=0.54).

c. Analyses regarding the omissions at questionnaires compared to the operators' gender (alone/team)

With the data we had, we could not show behavioural differences of operators of different gender, compared to work style (alone/team). In order to follow the effect of *operator's gender* variable, we considered that operators' behaviour differ when working in pairs. An operator working together with a person of same or other gender might have a different behaviour when filling in the questionnaires. That is why, for this variable, we took into consideration four gender categories, according to the operators' real situation: female, male, female unisex (a pair of two girls), mixed (boy and girl pair). Thus, there is a cumulated effect of work style and gender when analysing the operators' behaviour.

c.1. Questionnaire differences regarding type 2 errors on sexes:

There were significant statistic differences (ANOVA one way, F= 19.35, df=328, sig.=0.00). The questionnaires filled in by mixed teams (m=2.60, AS=4.13) have more omissions at subject identification items than those filled in by subjects themselves, girls (m=0.30, AS=1.47; differences average=2.30, sig.=0.00) and boys (m=o.oo, AS=0.00, differences average=2.60, sig.=0.00) or by girl teams().

c.2. Questionnaires differences regarding the number of type 3 errors on sexes

There were no differences regarding the omissions at research data regarding objective 1 on sexes.

c.3. questionnaire differences regarding the number of type 4 errors on gender

There were significant statistic differences (ANOVA one way, F= 19.35, df=328, sig.=0.00).

The questionnaires filled in by one male operator (m=1.24, AS=0.99) have more omissions at the items of objective 2 than those filled in by girl teams (m=0.39, AS=0.62; media diferențelor=0.85, sig.= 0.00).

Questionnaires filled in by one female operator (m=1.14, AS=1.01) have more omissions at the items regarding objective 2 than those filled in by girl teams (m=0.39, AS=0.62; media diferențelor=0.75, sig.= 0.00).

Questionnaires filled in by mixed teams (m=1.77, AS=0.62) have more omissions at the items regarding objective 2 than those filled in by girl teams (m=0.39, AS=0.62; media diferențelor=1.38, sig.= 0.00).

6. Discussions and implications for improving the quality of enquiries with student-operators

In general, it may be said that team work affects the quality of operators' activity for filling in the items for subjects identification. Most probably, there are psychological phenomena, the communication between operators affecting concentration; the effect is most obvious in the case of mixed teams. However, the behaviour of operators working in pairs does not differ from that of individual operators for the items regarding the research objectives.

Data indicate that girl teams have better results than mixed teams and individual operators, with fewer omissions at items for objective 2. The high number for these omissions is probably due to the fact that the operators considered them less important.

Although our study did not analyse explicitly the factors that influenced the operators' behaviour; still, given the conditions and circumstances, it seems that the most relevant factors were: poor knowledge on research standards for enquiries; lack of experience; the idea that last items are less important; tendency to avoid identification items that troubled the subjects; economy of time/resources, materialised in the desire to "get rid of it"; superficiality – insufficient evaluation of the losses they cause; character/personality (poor responsibility) – intentional fraud for revenge, for being "involved" in the enquiry.

Taking into consideration the research data and literature, for improving the quality of enquiries that use students as field operators, we have some recommendations. The coordinators role is decisive, having a great responsibility for:

1. operators selection: present scientific or other interest in the subject, selection modalities: volunteer participation; compensatory participation (come to final exams).

2. ensuring the information support: being informed on the theme and objectives; explanation of phenomena;
3. preparing/training operators: how to get appropriate verbal reactions of the subject, avoid refusals, correctly note the answers of the interviewed subject; sharing former research experiences; develop abilities for auto-analysis of operators by the auto-evaluation of their own results.
4. organizing the activity: negotiate the work quantity (each one is given a task that corresponds to his capacities, avoiding the tendency to "get rid of it sooner"; the existence of a schedule specifying the time to leave on the field and come back, reporting the results, ways of control (direct or retroactive surveillance, such as checking immediately after the session ended), feed-back; at the end of the activity, the coordinator analyses together with the operator the extent to which the task was fulfilled, emphasizing the errors and possible ways to avoid them;
5. positive motivation: volunteer certificates, using part of the data for the final paper;
6. negative motivation: sanctions associated with inadequate filling of the questionnaires.

The methodological demands that researchers must meet should also be taken into account (Marginean, 2000; De Singly et.al. , 1998).

7. Conclusions: Evaluating advantages and limits of using students as operators for field enquires

The analysis of data presented in table 1 indicates that only 110 (30.2 per cent) of the 364 questionnaires were completely filled in, while 55 were forgeries (15 per cent), 5 (1.4 per cent) – had the items from objective 1 partially filled in, 177 (48.6 per cent) were incomplete for the objective 2, 14 (3.8 per cent) for objective 1 and 2, and 1 (0.3 per cent) for the items regarding the subjects identification data and objective 2 (so 69.8 per cent of the questionnaires were incomplete).

completate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	total	110	30,2	30,4	30,4
	partial la o1	5	1,4	1,4	31,8
	partial la o2	177	48,6	48,9	80,7
	falsificat	55	15,1	15,2	95,9
	partial la 1 si 2	14	3,8	3,9	99,7
	partial la id si o2	1	,3	,3	100,0
	Total	362	99,5	100,0	
Missing	System	2	,5		
Total		364	100,0		

Table 1 *General situation regarding the quality of questionnaires*

If we were to determine the price of a questionnaire (including paper, copying and time to conceive it), it would be clear that financial loss is rather significant (grants usually allocate small amounts of money), and the researchers are deceived since they invested time, physical and psychological effort to achieve the enquiry. However, the present study may be considered 'normal', since a third of the questionnaires were entirely filled in. Commercial enquiries usually collect only 30-40 per cent of the answers, and those sent by mail even less (Rotariu, Ilut, 1997, p. 105).

As a general conclusion, we may say that there are some limits when using students as field operators, proven by the present study. However, the positive aspects and the necessity for finding means to raise the enquiries efficiency while using student-operators should not be neglected.

REFERENCES

1. Calder, B. J., Ross, M., & Insko, C. A. (1973), Attitude change and attitude attribution: Effects of incentive, choice, and consequences. *Journal of Personality and Social Psychology, 25,* 84-99.
2. De Singly Fr., Blanchet A, Gotman A, Kaufmann J-Cl. (1998), *Ancheta şi metodele ei: chestionarul, interviul de producere a datelor, interviul comprehensiv*, Polirom, Iaşi.
3. Festinger, L. (1957), *A theory of cognitive dissonance.* Stanford, Calif. : Stanford University Press,.
4. Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.

5. Mărginean I. (2000), *Proiectarea cercetării sociologice*, Polirom , Iaşi.
6. Pitariu H. D. (2003), *Proiectarea fişelor de post, evaluarea posturilor de muncă şi a personalului*, Casa de Editură IRECSON, Bucureşti.
7. Popa M. (2004), *Statistică psihologică cu aplicații SPSS*, Ed. Univ. Bucureşti (maianpopa.tripod. com, 2005)
8. Roşca Al. (1963), *Tratat de psihologie experimentală*, Ed. Acad., Bucureşti.
9. Rotariu T., Iluț P. (1997), *Ancheta socilogică şi sondajul de opinie - Teorie şi practică*, Polirom, Iaşi.
10. Sherman, S. J., & Gorkin, R. B. (1980). Attitude bolstering when behavior is inconsistent with central attitudes. *Journal of Experimental Social Psychology*, 16, 388-403.
11. Wicklund, R. A., & Brehm, J. W. , (1976), *Perspectives on cognitive dissonance.* Hillsdale, *N.* J.: Erlbaum.
12. Zlate M. (1999), *Psihologia mecanismelor cognitive*, Ed. Polirom, Iaşi.

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

BEHAVIORAL DISORDERS IN INTELLECTUAL HANDICAPS- PSYCHO-THERAPEUTICAL IMPLICATIONS

Senior Lecturer Corneliu Novac, PhD
TSTD, University of Craiova

Abstract

The current study analyzes the process of psycho-pathological disorganization in the personality of pre-adolescents diagnosed with mental disabilities. In this sense, the author conceives an etio-psycho-pathogenesis of behavior disorders based on intellect disabilities.

Three directions of psychopathic structure in the personality of the mentally challenged are analyzed on 50 subjects with this diagnosis. By means of case studies, psycho-social inquiry, and W.M questionnaire, 12 subjects with behavioral disorders were selected and included in a psycho-therapeutic recovery process. The conclusions of the study point out an improvement in behavior and formation of social skills in all 12 subjects.

Key concepts*: intellectual handicap, mental disability, severe intellectual handicap, behavioral disorders, psychopathic structure in personality, corrective-recovery activities, suggestive psychotherapy, relaxing psychotherapy.*

1. The theoretical and practical importance of the research

This research tackles a particular aspect of the problems of psychology, resulting from the interference between oligophrenopsychology and psychopathology, to what extent we associate mental handicap with specific behavioral disorders, or it can be a symptom of personality disorders. We have also tried to test an educational therapeutic methodology regarding these matters seen from the point of view of time and of education bearing an overwhelming importance in the formation of the personality in mentally handicapped students as well as in their adequate integration into society.

The psychology of behavior in mentally challenged pupils, according to empirical observation, draws the attention of the practicing psychologist by its wide nuanced manifestations, ranging from slight exteriorization- interiorization tendencies

to severe psychopathological disorders, which can easily degenerate into deviant criminal behavior.

Even a browse through the bibliography dedicated to mental handicaps would reveal a low level of preoccupation for the study of psychological disorders accompanying it or that may appear as a result of the troubling of this cognitive-operative aspect of personality. Even when the relation between psychopath and mental disability was studied, this relation was considered from the perspective of sociopaths, observing the number of mentally disabled in this category, but without attempting to describe the psycho-pathogenesis mechanisms of their personalities.

Even in the case where the problems of psychological distress associated with mental disabilities were studied, the research revealed some statistic knowledge, almost ignoring the genetic issue. For example, according to the statistics of L.S. Penrose after the close observation of 1280 institutionalized mentally deficient people, approximately one third showed some personality disorders.

By confronting the nozological categories in psychiatry (neuroses, psychoses, psychopathies, categories of oligophrenology (idiocy, imbecility, mental disabilities, limited intellect) we shall extract as object for research only mild disability behavior disorders, with an IQ varying between 50 to 85. We have chosen this strategy because, on the one hand, neurotic and psychotic disorders in olygophreniacs do not display specificity in cognitive destructuralization, and on the other hand, their behavioral manifestations of idiots and imbeciles do not have a practical interest in point of recovery.

2. Directions of investigation. Work hypotheses

At this level we have imagined an etio-psycho-pathogenesis model of behavioral disorders in mentally disabled patients meant to become a hypothesis and a theoretical and practical principle of the present research.

We have considered that the psychopathic structure of personality of the mentally disabled is built on three etiopathogenetic directions:

- a constitutional process of disorganization, generated by the malfunctioning of the cognitive level;
- a psychogenetic process determined by the position in the social system of the ego;
- a psychogenetic process determined by factors that are not related to the state of mentally disabled of the subject in question.

These three processes are to be found in a synergetic motion, varying from case to case. We have considered that especially directions 2 and 3 can be both prophylactic and therapeutic.

3. The Experimental Model

The present research was conducted under the form of a natural experiment. Throughout an entire year, 50 puberty pupils diagnosed with mental debility were

questioned, observed and tested. We have observed the extent to which we could identify the three hypothetical models for the constitution of the disharmonic personality of the mentally disabled.

For the first process we were interested in the degree in which cognitive disturbance is correlated with disorganization of the personality, the extent in which behavioral disorders arise from:

- lack of correct analysis of the situation;
- the confusion of the possible with the real;
- the impossibility of structuring social conduct and of logical behavioral strategies;
- the difficulty of discerning some conscious moral aspects.

For the second process we were interested in the degree in which the mentally disabled have suffered the influence of a psycho-pathogenetic environment that would have anyway been unfavorable for the construction of a personality, even without the handicap. Such cases are rather rare.

Taking an interest in a etiopathogenetic model of behavioral disorders, the tests we have used (Cohs, vocabulary trials, absurd utterances, image arrangements, proverb interpretation, comparing items based on their essential features) addressing, like any other tests, the symptoms, have had an orientating role, since our study was mainly based on case study leading back to the etiological roots on which to found our therapeutic act.

4. The interpretation of results

4.1 On the basis of the results of these psycho-diagnostic trials we have retained a number of 42 subjects whose cognitive disorder ranges from limited intellect and mental debility (according to Binet). By means of a psycho-social inquiry, case study and W.M. neurotic-tendency questionnaire, 12 subjects were found to display behavioral disorders, as follows:

- 4 excitable psychopaths (explosive);
- 2 asthenic psychopaths;
- 2 euphoric;
- 4 impulsive, maniac psychopaths.

We haven't obtained an exclusive connection between I.Q. and behavior disorders, which confirms the existence of psychogenic features in the behavior disorders of mentally disabled, characterized precisely by the specific connections of the patient with society. We draw attention that the French psychiatrist H. Ey. proved that basically the mentally disabled become more adapted in poorly developed societies and in rural areas and they acquire the status of psychopaths more slowly in the sense of insufficient adaptation to family, social or professional environments, which the French researcher has taken into consideration in the psycho-socio-genetic process of the construction of disharmonic personality in the mentally-disabled.

We would also like to mention that apart from clearly structured disharmonic personalities, we have also encountered some spontaneous forms of disturbed

behavior, resulting from a similar etio-pathogenesis, but that are unable to pass the criteria of the four principles established in the practice of psychopathological treatment:

- the principle of totalness requiring that destructuralization affect the entire personality and character;
- the principle of consistency postulating the fact that pathological features are permanent and are manifested throughout the person's life;
- the principle of intensity referring to the fact that the psychopath is at the borderline between health and illness;
- the principle of dynamics, referring to the succession of stages of compensation and de-compensation. (P.B. Gannuşkin, 1964).

4.2. Taking into consideration the principles of educational therapy we have sought in the following stages of our experiment to obtain an increasingly spontaneous expression on the part of our subjects as well as the formation of social conduct skills. The spontaneous expression of the psychic in its significant, communicated and spoken unfolding is a key factor of mental health (Moreno). In order to attain such an objective, we have enrolled the 12 pupils with behavioral disorders in a psycho-therapeutic process including: playful and occupational psycho-therapy, awarding roles and status. This psycho-therapeutic attempt has emphasized the tendency for affirmation of the pupils in their pre-adolescent years, the moment in which their disharmonic tendencies are manifested at their fullest. We have accomplished an improvement in conduct and the formation of social skills in all 12 subjects after a psycho-therapeutic activity unfolding in the course of two school semesters.

5. Conclusions

The personality of the mentally-disabled can sometimes take the form of a destructuralization of psychopath intensity and duration. The etiopathogenetic process is structured in a endogen manner and in a psycho-socio-genetically exogenous manner, according to the model we have forwarded and experimentally verified.

The prognosis in the difficult social and professional adaptation of mentally handicapped persons should be based as much on the consideration of personality disorders as on the reconsideration of the process of destructuralization of cognitive functions.

The instructional-educational and recuperation process in learning institutions for mentally handicapped children is oriented especially on the recovery of their global cognitive abilities and less on the education and re-education of the personality, being unjustifiably considered that the disturbance of cognitive functions is responsible for the state of the mental disability diagnosed child. It is often ignored or minimized the influence of associated disturbances as those previously mentioned in the present research. When these disturbances do occur they are justified as belonging to the disorganized influence of the cognitive immature function, thus ignoring the endogenous and exogenous multitude of factors of etiopathogenesis of behavior disorders.

Psychiatric assistance in special schools we have investigated proves itself to be deficient both at ambulatory as well as at the statistic-prognostic level.

Also, the recovery of the subjects with limited intellect or with a mild intellect handicap (mental disability), through psycho-therapeutic methods is less used in institutions dedicated to these types of subjects. The therapeutic methodology we propose in our experimental attempt emphasizes the positive aspects of using suggestive psycho-therapy and relaxation psycho-therapy in the case of subjects presenting mild to medium intellect deterioration. These forms of psycho-therapy, when applied correctly and constantly by teachers and medical personnel, can lead to the improvement of disharmonic behavior, as well as to the formation of a positive attitude to learning and to social integration.

The above mentioned recovery methods will prove useful under the conditions of the organization in our country of an inclusive system of education.

REFERENCES

1. Daunt.P., Vrasmas, T. (1995). *A Taxonomy of Educational and Social Integration of Children with Special Needs in Romania.* Journal of Rehabilitation Science, no.3
2. Detraux, J.J. (1986). *La normalisation: unce chance pour les personnes atteintes de deficience mentale.* Synthesè du premier colloque Européen de la Ligue Internationale des Association pour les personnes handicapées mentales, 14-18 octobre 1985, în " Les Pages du C.E.F.E.S., Janfier, 1986
3. Reurstein, R., Rand, Y., Hoffman, M.B., Miller, R. (1980). *Instrumental enrichement.* Baltimore: Universitz Park Press
4. Jaume, J. (1991). *L' enfant handicapé et le milieu scolaire ordinaire*. Provence: Université Aix
5. Lambert, J.L. (1986). *Handicap mental et société. Un défit pour l'éducation.* Fribourg: Del Val
6. Monttreuil, N. (1987). *Pour une integration active.* „Seminaire destiné aux instituteurs intégrant un enfant handicapé mental dans leur classe maternelle ordinaire". Verviers: A.P.E.M novembre. 1987
7. Montulet, I. (1988). *Le parteneriat parent-professionels de l'aide éducative précoce: illustration par la référence à l' enfant handicapé mental et sa famille.* Bruxelles: Recherche Scientifique
8. Nirje, B. (1976). *Normalisation et integration: Concepts de basse*. "Ameliorer la qualité de la vie: un symposium sur les principes de normalisation et integration. Virginia: Airlie House
9. Preda, F. (1995). *The Principle of Normalization and the Ethics of Early Intervention on Children with Special Needs. The Recuperation And Integration Of Handicapped Children*"
10. Sack, M. (1992). *École ordinaire et handicap*. Bruxelles: Commission Communautaire Francaise
11. Şchiopu, U., Verza, E. (1995). *The Psychology Of The Ages. The Cycles Of Life*, Bucureşti: EDP
12. Vrăşmaş, T., Daunt. P., Muşu, I. (1996).*The Integration into Community of Children with Special Educational Needs*. The Ministry Of Education: The UNICEF Representation In Romania

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

THE OPTIMIZATION OF COGNITIVE STRUCTURES AND THE LOGICAL AND PSYCHOLOGICAL HIERARCHY OF THE LEARNING PROCESS

Senior Lecturer Aurel Pera, PhD
TSTD- University of Craiova

Abstract

Contemporary researchers on the theory of learning have delved on establishing the measure in which the cognitive dimension of educational variables (cognitive structures, psychic development, students' intellectual capacity, verbal capacity, problem solving abilities) influences the practice and particularities of the educational devices in use. Even though motivational factors regarding student personality and groups *have been noted during the learning process in the educational environment and have been mentioned by D. P. Ausubel (aspiration for knowledge, need for self-affirming, interest, personal adaptation, motivational type, degree of anxiety), they have been less studied and considered in learning management.*

The following paper aims to reveal several ways in which cognitive structures can be optimized and the role that these structures play in increasing personal efficiency in the vast context of the logical and psychological hierarchy of learning.

Key concepts: *motivational factors regarding student personality and groups, self-learning, learning strategy, learning styles, self-observing, self-asserting, self-reaction, cognitive strategies, cognitive style, educational degree, learning motivation, knowledge structure.*

The concept of "school learning" has a particular meaning which separates it from the general concept of learning, even though students' activities in school are designed to be, according to C. Moise, "in their essence, human knowledge in general, condensed into a school curriculum" [4].

According to an analysis by D. P. Ausubel, "school learning" consists of the behavioral changes occurring during educational experiences which are sketched and detailed by specialized factors in accordance to certain goals and ideals. It can be researched and described by the following variable types:

- educational environment variables, also referred to as independent variables;

- student behavior variables, i.e. dependent variables, consisting of cognitive, affective and motional phenomena [5].

Contemporary researchers on the theory of learning have delved on establishing the measure in which the cognitive dimension of educational variables (cognitive structures, psychic development, students' intellectual capacity, verbal capacity, problem solving abilities) influences the practice and particularities of the educational devices in use. Even though *motivational factors* r*egarding student personality and groups* have been noted during the learning process in the educational environment and have been mentioned by D. P. Ausubel (aspiration for knowledge, need for self-affirming, interest, personal adaptation, motivational type, degree of anxiety), they have been less studied and considered in learning management, as Valeria Negovan also states [1, p. 134].

Researchers and teachers convene that "school learning" also consists of:

- knowing to search and identify information within a certain curriculum;
- being able to identify alterations of the projected course of learning;
- being able to make changes in the learning strategy, taking into consideration as many strategies as possible;
- knowing how to review curriculum information and trusting your own competences;
- being able to reevaluate the motivations and intentions sustaining your goal;
- being able to control the affective background of these changes etc.

These aspects of the learning process have brought forward the need for an in-depth reflection over several new concepts: *self-learning, learning strategy, learning style*.

P. H. Winne notes that self-learning has become the central concept in contemporary researches on the efficiency of "school learning". According to Winne, this model refers to students who find the information they need at a library, who are aware of what they know, of what they think they know and of the difference between these two separate kinds of information within the learning process. Students become organized, are aware of the individual impact of learning, understand their own motivation, "reflect on both particular tactics and global strategies and use them according to how either one could aid them in reaching their goals" [6].

Based on several researches conducted by Bandura (1864), D. H. Schunk describes the process of *self-regulation* as a process which involves *self-observation* (deliberate observation of one's own behavior), *self-assessment* (as well as a comparison between a single performance level and one particular goal to estimate the progress reached) and *self-reaction* (evaluating one's own performance as satisfactory or non-satisfactory). All these are involved in students' perception on their own efficiency and characterizing students' personal conviction regarding their *learning capacity* [7].

A major goal of school learning is to lead the students towards self-learning. In this concern, R. Hamilton and E. Ghatala estimate that one of the most useful things a teacher can do for their students is to guide them towards learning independently.

"In the nowadays society, information becomes obsolete in 10 years or less, but learning abilities can be used throughout one's whole life. (...) Teaching strategies are efficient only if they help the students to find their own learning methods" [2, p. 137].

In the study previously quoted, Valeria Negovan justly synthesizes that *learning* has been described in school practice in terms characteristic for thought activity (conceptualization, understanding, problem solving) or mnesic functions (knowledge recognition, storage and reproduction), whereas *learning strategies* have been deemed similar to the strategies of these cognitive mechanisms.

As a result of correlating learning with intelligence, knowledge or problem solving, learning strategies have been defined by references to either cognitive strategies, thought strategies, or problem solving [1, p. 136].

Theoretical works draw a clear line between the concepts of "learning strategy" on one hand and "thought strategy, cognitive strategy or metacognitive strategy" on the other. Therefore, R. Gagné analyzes "cognitive strategies" as one of the five main "categories of results produced by learning processes within educational programs" or "types of capacities that the learning process aims to form", the other four being: knowledge, intellectual abilities, attitude and motional abilities [8]. R. Gagné also includes "the ability to self-manage the learning process" during studying, seen as "activating learning and memorizing strategies". These strategies take part in the complex stimulation of *selecting* and *coding information*, of *problem solving* and of *remembering* an information previously studied. According to F. H. O'Neil, by acquiring and perfecting these strategies, "the student gradually becomes a person that learns and thinks independently". Other authors, like R. Singer, distinguish between *learning strategies* and *cognitive strategies*, whereas others, like J. W. Rigney, define the concept of "cognitive strategy" as being used "to denominate the operations and procedures which a student makes use of in order to acquire, memorize and remember different kinds of knowledge and acts. These operations and procedures can consist of a cognitive processing of information, as is the case for mental depicting, or can be controlled cognitively, as is the case for skimming through a book in order to identify its main points" [9].

Theoretical works divide learning strategies into two categories: *primary strategies*, which operate directly on the available material, and *supportive strategies*, which operate on one's behavior and intentions in order to maintain a proper mood for learning. Because they have a direct influence in gaining and processing information, primary strategies bring forward changes in cognitive structures and processes, while supportive strategies exert an indirect influence over information processing, making primary strategies more efficient, as demonstrated by D. Danseau, quoted by O'Neil [9, pp. 2-5].

Another researcher, E. Lehtinen, leader of a research group at Turku University in Finland, mentions a team-developed theoretic model which describes the patterns of adapting strategies or *coping* strategies which students make use of in various situations. Their studies have lead to identifying *three types of coping strategies* which depend on students' attitude towards the learning process: *task orientation; self-orientation; group orientation.*

Other authors, like P. Meirieu, distinguish between five types of variables within a learning strategy: *learning instruments, studying efforts, coordination level, social and affective inserts* and *time management*. In regard to *learning instruments*, these authors have identified: the main type of materials used in the learning process, the educational pattern in use, students' perception on the learning task. As for *studying efforts*, they have mentioned: approach type (analytical or global), understanding type, and means of retaining notions. [10]

Specialists reveal the importance of making a difference between cognitive and learning strategies. This fact has had a strong influence on drawing a line between the *learning style* and the *cognitive style*. The latter was first used at the beginning of the 1960s and defined by Witkin, as "a complex dimension of individual functioning manifesting itself in regard to perception, intellect, personality and society and revealing that its development is strictly connected with the evolution of the entire organism" [11].

Other authors, like Biggs (1987; 1993), quoted by A. L. Leino [11, p. 20], more readily use the phrase "means of approach", which includes both the *situation* and the *individual*, while P. Meirieu talks about a "personal style of conducting the learning process", which is "a way to summarize a subject's cognitive activity starting with the instruments provided by systematic learning". This "denominates the way in which a person perceives, retains and communicates information" [1, p. 140].

Synthetically speaking, a learning style is frequently defined as a "combination of cognitive and affective traits, as well as other psychic factors which serve as fairly stable indicators of the means in which a student perceives, interacts and responds to a learning environment" [1, p. 140].

Recent researches in the psychology of education have pushed towards a new methodology of investigating learning styles [12]. Therefore, in 1975, Dansereau, Atkinson and Evans put together an instrument known as a "learning activities questionnaire" in order to determine how students use certain studying habits and cognitive strategies. According to the level of their learning experience, the instrument has allowed the evaluation of how much students acknowledge the methods and techniques they use.

Based on the fact that psychological and didactic works are based on learning models, Anita E. Woolfolk describes the main teaching models derived from the learning models identified [3, p. 329]:

- *a teaching model derived from a behaviorist perspective on learning*, which puts a strong accent on the learning subjects, *mastery learning* and direct instruction;
- *a teaching model derived from a cognitive perspective on learning*, useful when aiming to teach new concepts and relations. This model operates with paradigms such as: learning through discovery (J. S. Bruner); meaningful verbal learning (D. P. Ausubel) and gradual learning (R. M. Gagne).
- *a teaching model derived from a constructivist perspective on learning,* pleading for focusing on the student and on authentic learning tasks

inspired day-to-day life, a complex learning environment, a diversified learning curriculum, social interaction, social negotiation and personal responsibility.

As revealed by R. Hamilton and E. Ghatala, educational psychology has recorded theoretical modules and practical studies which plead for the introducing of new objectives to teaching processes, with the aim of helping students to form their own learning strategies in order to make them "experts" in learning. Therefore, Speer and Flawel (1979), Flawel and Kreuzer (1975), Flawel (1985), Kail (1990) have demonstrated that students can be taught since their first school years to:

- build a realistic representation on their working memory capacities;
- realize that understanding is easier than memorizing;
- realize that paraphrasing a story is easier than a learning it by heart;
- understand that the more time passes between learning and refreshing their knowledge, the more difficult the refreshing becomes;
- estimate the difficulties of their learning tasks;
- focus their attention on important details and neglect minor details of their tasks [2].

We may conclude that both psychology and educational sciences are making deliberate efforts to sort out the most efficient tendencies in refreshing teaching models.

Each science and branch has its own logical contents, structured in a specific hierarchy, which must be taken into consideration by the teacher. On the other hand, teachers must also keep a focus on student psychology in order to efficiently transmit a specific type of information.

G. F. Kneller considers that each *subject* belongs to both a studying field and "a learning type"; it is "a system of ideas (both theory and facts), as well as a means to understand them". As knowledge progresses, new subjects appear, as other subjects (like alchemy or natural philosophy) are abandoned. This means that "subjects do not stand for inherently perpetual means of thinking", but only for "means of investigating which mankind has found to be most efficient", being "susceptible of revision" at any given time.

Some subjects (like physics, for instance) pursue knowledge for the sake of knowledge, while others deal with putting the knowledge gained into practice. The latter are also known as "practical" subjects, which have their own informational structures and means of putting theory into practice. According to Kneller, practical subjects start with certain *logical principles* belonging to their theoretical area (for instance, marketing is subjected to economical principles) [13, p. 185]. Students will not be able to understand practical aspects if they do not make an effort to process the theory that they are based on, as well as certain psychological considerations, such as intellectual maturity, abilities or motivation.

The American researcher considers that each subject's specific information is organized *logically* when its elements are correlated deductively, as is the case for mathematics or certain theoretic aspects of physics and chemistry, or *pseudo-logically*, as is the case for social sciences, where information concords with its explicative

strength and within which "some ideas are more important than others". In such subjects, the hierarchy of concepts can be determined according to each concept's explicative strength rather than deductively. In this case, students will start by acquiring some simple concepts and developing them as their studies progress.

In conclusion, says G. F. Kneller, each subject has its own nucleus of fundamental concepts. In some subjects, these concepts are correlated logically, i.e. some can be deducted from others, while in others they are correlated pseudo-logically, i.e. some concepts "offer a structure of significations which leads to the stating and understanding of others". In regard to, the logical structure of a subject refers to the logical or pseudo-logical structure of its concepts, in relation to their applicability [13, p. 88].

G. F. Kneller also brings up the issue of subject sorting. Several researchers, like Joseph T. Tykociner and Phillip H. Phenix [14], have put forward their own classifications. According to the latter, there are nine generic categories of information, grouped in six main categories subjected to the various ways in which an individual can gain knowledge:

- *sinoectic*, or personal knowledge of another (philosophy, psychology, literature and religion in their existential aspects);
- *aesthetics*;
- *symbolics* (everyday speech, mathematics, non-discursive symbols, like music and paintings);
- *empiric* (physic sciences, biology, psychology and social sciences);
- *ethics and synoptics* (consisting of three generic categories: history, philosophy, religion).

According to P. H. Phenix, the nine generic categories of information can provide enough subjects for a general curriculum and they show which subjects can be switched with others at certain age levels and which cannot. A student can learn either biology or physics to understand the empiric way of learning, but can't replace physics with mathematics or history, because mathematics and history belong to other generic information categories [15].

The six categories are structured by Phenix in a "logical order". The author states that subjects based on symbolics should take priority, because all the other subjects, regardless of their category, make use of symbols. Natural sciences use mathematics, while ethical and humanist studies use non-discursive symbols. Subjects belonging to the empiric and aesthetic categories can only be studied after the student has acquired a vast vocabulary. These subjects are complementary and neither depends "logically" on the other. Although "logically" independent from aesthetics and empirics, human sciences and ethics cannot be understood properly without a strong base knowledge in empirics. Because they study concepts and situations belonging to other curricular areas, synoptics come last in this hierarchy, as does philosophy, which deals with the discoveries in all the other fields. But, Phenix states, it is not necessary to conduct an extensive research on the symbolic dimensions of language and mathematics before approaching history, which is a synoptic subject. A subject must be studied sufficiently in order to move to other curricular areas. Some

chapters of mathematics can be associated with certain chapters in natural sciences, and ethical concepts can be connected to relevant events in history. Generally, all subject types must be approached simultaneously, with an emphasis on mathematics and languages at first and a focus on synoptic subjects later on.

G. F. Kneller argues that P. H. Phenix's hierarchy, although based on the characteristics of an organized learning process, is neither formally logical nor pseudo-logical. At the same time it cannot be psychological in regard to the pedagogic concept of "learning order", because it "does not explicitly aim to develop students' intellectual and emotional abilities". In other words, says Kneller, "knowledge categories are sorted according to the type of information they include. Their hierarchy is established, although vaguely, in terms of what they contain, and in this regard it can be considered a logical hierarchy. The term of "logical", has never been more ambiguously used than in relation to the order of learning " [13, p. 91].

P. H. Phenix next argues that the logical priority of a discipline does not necessarily influence its temporal priority within the learning process [14, p. 285]. Even though a concept may be "fundamental" to a certain subject, it should not necessarily be the first to be studied. Some ideas can be studied at the beginning, while others can be approached gradually.

In regard to this aspect, G. F. Kneller makes an interesting comparison with J. Dewey's observation that learning must start off as a psychological chain and gradually become logical towards the end. J. Dewey claims that learning must begin with subjects which obviously interest the students, while an adept of logical learning will request that learning must emphasize the singularity of each subject from the start and build strong connections between new individual concepts and previously-known guidelines, according to their explicative strength. But, G. F. Kneller continues, the order that subjects are taught in schools can be neither entirely psychological nor entirely logical. To better explain his view, he analyzes the factors which influence the developing of students' learning abilities, not aiming to minimize the role of psychological, but "to reveal certain elements which can contribute to a better understanding of the logical order" [13, p. 93].

One of these elements is *biological maturity*. Learning can't be a successful process, says Kneller, unless students are neurologically and psychologically prepared for it. Another factor is previous knowledge. The student has reached a biological age which permits him or her to study, but is psychologically unable to do so due to lacking the basic knowledge required in order to understand new and more complex concepts. G. F. Kneller illustrates his theory by quoting the hypothetical case of a student who has missed school for one year and returns in time to start studying geometry together with the rest of the peers. This student lacks the *experience* needed to properly understand geometry, while all the others have gotten used to operating with relatively complex mathematical concepts during his absence. In regard to this aspect, the author issues an opinion that, psychologically speaking, previous knowledge needed to acquire and understand new concepts must not be mistaken as *previous learning*, which, educationally speaking, is logically necessary for ulterior learning. Logically speaking, students must have acquired the fundamental aspects of

the new information by either formal or pseudo-logical implication. Psychologically speaking, they must have operated with previous notions on the same level of difficulty as the new ones in order to efficiently acquire and process the latter [13, p. 94].

The author quoted brings up the concept of "preparation degree", defined as a combination between maturity level and previous knowledge. Since the *preparation degree* can only offer a normative check of the learning process, other factors must also be taken into consideration, according to G. F. Kneller. One such factor is *motivation*. Motivation is generated by temporary conditions, either internal or external, by rewards or by pedagogy. As proven by J. J. Schwab, fundamental motives result from the very personality of the student, which is still developing, and these motives are a strong indicative for the student's future studying goals [16].

Studies on psychological developments reveal that certain knowledge categories can be approached during specific stages of children's development. For instance, as children become self-aware, they aim to communicate their feelings and therefore to acquire a language. In conclusion, language must be one of the first studying subjects. As children think intuitively at first and rationally later on, the author demonstrates that, psychologically speaking, they must first study arts and later on focus on sciences. It takes time for children to become aware of their relations with other people and with society; therefore, G. F. Kneller considers that ethics, history and social sciences must come into the learning process later on [13, p. 96].

Recent developments in learning psychology have shown that children's abilities of abstraction and objectification come gradually, whereas learning is most efficient when starting with simple concepts and then moving towards more complex ones. In this regard, Ralph Beatley has demonstrated that teaching similar logical subjects, like algebra and arithmetics, requires different psychological methods. Arithmetics are studied as though rational numbers and fractions actually exist in the real world, since students can psychologically understand them easier in this way. If students are introduced to algebra and negative numbers, they are mature enough to acknowledge that both make use of conventions [17]. Modern researches indicate that, when taught adequately, the fundamental concepts of mathematics can be studied a lot earlier than it was generally thought.

There are two theories which reflect current tendencies in leaning the balance between the two factors which influence the order that subjects are taught in towards logics.

1. The first theory states that the basics of any subject can be acquired and understood regardless of age, and therefore the logical order is not opposed by any psychological circumstances. In other words, no psychological trait can become an impediment to students' acquiring the basic concepts of each discipline, sorted by their explicative power, on condition that they be adapted to students' learning capacities by making appropriate changes in vocabulary, sentence structure etc. As for *the essential contents of school curriculum*, H. S. Broudy, B. Othanel Smith and Joe R. Burnett assess that *the learning order* can resonate with *the structure of knowledge*, where the notion of "content" refers to *facts, concepts, laws and principles*, as opposed to the logical operations involved in their manipulation [18, ch. 6].

On the other hand, authors have demonstrated that acquiring logical operations is more strictly connected to students' maturity; their capacity to do these operations strongly depends on their preparation degree. Operations cannot be simplified enough to nullify the psychological impediments posed by learning them at an inappropriate age. Therefore, it is said that the learning order must be assessed psychologically. Instead of trying to adjust complex logical operations to student mentality, says G. F. Kneller, we must postpone their learning until students become able to understand them [13, p. 100].

The three authors quoted suggest that each subject be dealt with according to the *atomic structure* model. At first, children can understand a rudimentary vision of the "atomic" concept, while later on, as their horizon widens, they will become able to understand theoretical physics. Henceforth, it is just to conclude that the evolution of understanding is a *cumulative* process, since its quality is not altered by developing new cognitive operations, therefore the learning order is logical because any concept studied is general at first and becomes more detailed later on. The psychological dimension insures the understanding and acquiring of the new concept, which then allows students to tackle the next step of the learning process with a minimal effort, hence the conclusion that learning the fundamental concepts of a discipline in their logical order provides an actual psychological satisfaction. There is a fundamental correspondence between logical concept hierarchy within each subject and psychological concept hierarchy in each student's mind [18].

The three authors emphasize two main types of guiding concepts which must be taught in school. The first applies to any kind of contents and is acquired in the study of both mathematics and languages; it is the concept of *direct proportions*, often derived from common experiences. Oh the other hand, the concept of *reverse proportions* is harder to grasp; students sometimes have difficulties in understanding that the volume of a gas varies in reverse proportion to the pressure applied to it, especially if the principle is expressed mathematically. Therefore, the concept of *reverse proportions* is dealt with more vastly in the preliminary stages of natural sciences [18, pp. 132-134].

G. F. Kneller also takes into consideration other wide concepts which apply to ordinary field practice and / or certain subjects: *truth* and *balance* [13, p. 101].

Another category of "organizational concepts" which must be caught in school are the basics of individual subjects – for instance, *shape, light, movement* in physics, *links and valences* in chemistry, *culture* in anthropology, *deficit* in economy. The authors quoted state three principles which apply to teaching scientific subjects in secondary school:

a. *the contents of each fundamental science must be narrowed down to a minimum number of fundamental concepts;*
b. *concepts must be taught to students of a smaller age than in the past*, although all of them cannot be acquired simultaneously;
c. *each student must be taught the fundamental concepts of elementary sciences at first, and more concepts according to their evolution and aptitudes later on* [18, pp. 190-192].

2. The second theory states that there is a sufficient resonance between natural and specific structures within each subject in order for a certain subjects' learning order to correspond with their specific structure, which D. P. Ausubel attempted to demonstrate [19].

According to this theory, the human nervous system is built so as newly-acquired ideas and information are understood and perpetuated only when they can be integrated or included into other concepts previously studied. Therefore, G. F. Kneller concludes, the way in which a student psychologically organizes a certain subject resembles its logical or pseudo-logical structure. On the other hand, in J. Dewey's view, the convergence between logical and psychological organizing must be the goal of teaching and not its starting point.

G. F. Kneller considers that there are at least two reasons for which mental organizing does not entirely correspond with a subject's default structure. The first reason states that, unlike a subject's inherent contents, learned concepts can be forgotten. The subordination which contributes to logical learning can also lead to forgetting. The second reason is that, in the early stages of learning, students' intellectual structure is less rigorous and less unitary than that of the subject itself.

Due to this analysis, the author distinguishes between the two subordination types which influence significant learning and which allow its entire contents to be sorted *logically* or *pseudo-logically: derived subordination,* which occurs when the concepts taught are part of a more comprehensive set of concepts previously studied (the new concepts are easy to acquire and easy to forget), and *correlative subordination*, which occurs when the concepts taught expand, enrich or qualify a series of previous concepts; correlative concepts tend to be forgotten gradually and then lost [13, p. 103]. Therefore, some pedagogues, like Jerome S. Bruner, state that learning must essentially consist of acquiring general ideas to which particular facts can be subordinated later on [20]. This view reveals that we can safely forget a series of specific concepts, provided that they can be deduced from the more general ideas if need be.

According to other pedagogues, what matters is not being able to recall detailed information based on general concepts, but, as D. P. Ausubel states, “the increased ability to learn and *retain* more detailed correlative information” [19, p. 236]. The question is, how can this be done? G. F. Kneller suggests that each student must clearly sort concepts, principles and information for every subject studied. If the mental hierarchy or cognitive structures are clear, new significations deriving from previous knowledge will also become clear, accurate and easy to memorize. If these are ambiguous and not structured rigorously, new concepts will be learned incompletely and easily forgotten. Therefore, G. F. Kneller concludes, both memorizing and efficient learning will greatly depend on the degree in which a student's cognitive structure can adapt to a particular subject. The author finds three factors which influence the measure in which new themes can be integrated and memorized:

a. the availability of afferent subordinative concepts;
b. the degree in which the theme studied can be separated from its subordinatives and memorized more easily;
c. the accuracy of the subordinative concepts [13, p. 104].

These have a series of didactic implications. Firstly, before introducing the new information, the teachers should do a review of the wider, more general and more abstract principles subordinating it. Secondly, each subject's leading concepts should usually be presented in order of their relevance. Thirdly, before teaching new information, previous information must be reviewed. Finally, subordinative concepts and their afferent information should be mentally integrated and interconnected at the highest level. Once this has been done, each new learning situation will ideally include a series of relevant information from the student's own cognitive structure.

These hypotheses have a common flaw, as G. F. Kneller admits, in that *neither one explores the inventive or creative side of learning*. The first hypothesis states that logical operations must be studied in psychological order, but does not specify which operations should be taught at a certain age. The second does not deal with learning new subordinative concepts, conveniently assuming that subordinatives studied at the beginning will provide an adequate basis for all ulterior learning. When put into practice, says the author, this premise would inhibit students' intellectual development, limiting their spontaneous thinking and their ability to verify their own suppositions. In regard to this deficiency, J. J. Schwab elaborates several remarkable ideas in the sub-chapters "Syntax of discovery" and "Floating research". The aim of floating research, says J. J. Schwab, includes pointing out incongruences and inconveniences in existing structures, changing or replacing them and *confronting* them with the subject as a whole in order to sustain or reject them. In this way, students are shown that science can be revised, knowledge is not permanent, and "the idea of deepening knowledge through reflexive verifying and renewing principles" [16, p. 311].

Analyzing the requisites of logics and psychology concerning the order of learning has generated numerous controversies which go beyond the boundaries of psychological pedagogy. This is a delicate matter and it is worthy of notice not only when analyzing the logics and psychology of learning, but also in the epistemology of education. In order to anticipate future works, but also to better understand the balance of the two factors influencing the order of learning, we feel it is necessary to clearly establish the role of logics in both teaching and learning, but more importantly, the part that logical operations play in the teaching discourse (the student-teacher dialogue), in school and in general, and the meaning of logical operations in educational practice.

REFERENCES

1. Valeria Negovan: „Tendințe de reconfigurare a modelelor de instruire în acord cu evoluția cunoaşterii despre învățare", în Mielu Zlate, coord., *Psihologia la răspântia mileniilor*, Iaşi, Editura Polirom, 2001, p. 130.
2. Hamilton, R., Ghatala, E., *Learning and Instruction. Educational Psychology*, New York, St. Louis, San Francisco, Toronto, McGraw-Hill Inc., 1994.
3. Woolfolk, A. E., *Educational Psychology,* Boston, London, Toronto, Sydney, Tokyo, Singapore, Allyn & Bacon, ed. a 7-a, 1998, p. 167.
4. Moise, C., *Concepte didactice fundamentale*, Iaşi, Ankarom, 1996, p.10.

5. Ausubel, D. P., Robinson, F. G., *Învățarea în şcoală. O introducere în psihologia pedagogică*, Bucureşti, Editura Didactică şi Pedagogică, 1981, p. 61.
6. Winne, P. H., „Inherent Details in Self-Regulated Learning", în *Educational Psychologist*, nr. 30 (4), New Jersey, Lawrence Erlbaum Associates Publishers, Mahwah, pp. 173-187, apud. Valeria Negovan, [13, p. 154].
7. Schunk, D. H., „Goal and Self-Evaluative Influences During Children's Cognitive Skill Learning", în *American Educational Research Journal*, vol. 33, nr. 2, Washington, 1996, p. 360.
8. Gagné, R. M., *Condiţiile învăţării,* Bucureşti, Editura Didactică şi Pedagogică, 1975, pp. 4-20.
9. O'Neil, F. H., jr. [ed], *Learning strategies*, New York, San Francisco, London, Academic Press, New York, San Francisco, London, 1978, p. 165.
10. Meirieu, P., *Apprendre… oui, mais comment*, ESF Paris, 1993, pp. 135-136.
11. Leino, A-L, „A Study of Learning Styles", în *Research Bulletin*, nr. 2, Helsinki, 1989, p. 10.
12. O prezentare amănunțită a acestor aspecte o oferă Valeria Negovanu în studiul citat [13, pp. 129-152].
13. Kneller, G. F., *Logica şi limbajul educaţiei*, Bucureşti, Editura Didactică şi Pedagogică, 1973, p. 35.
14. Tykocciner, J. T., „Zetetics and Areas of Knowledge", în Elam, Stanley, op. cit. [18, pp. 121-147] şi Phenix, P. H., „Realms of Meaning: A Philosophy of the Curriculum for General Education", în Elam, S., op. cit. [18, pp. 280-281].
15. Legat de acest aspect, G. F. Kneller făcea o serie de comentarii afirmând că există şi posibilitatea ca elevii să aleagă între latină şi matematică, pe motiv că amândouă educă disciplina intelectuală. În unele universități, spune el, studenții trebuie să aleagă filosofia sau matematica, singura rațiune aparentă fiind certitudinea că ei vor învăța ceva care-i va face să gândească sistematic, oricare ar fi semnificația acestui lucru (vezi [13, p. 90].)
16. Schwab, J. J., „Problems, Topics and Issue", în Elam, S., op. cit. [18, pp. 36-37].
17. Bertley, R., „Reason and Rule in Arithmetic and Algebra", în Scheffler, I., *Philosophy and Education*, Boston, Allyn and Nacon, 1998, pp. 205-210.
18. Vezi Broudy S., Harry, Smith, B. O. şi Barnet, J. R., *Democracy and Excellence in American Secondary Education: A Study in Curriculum Theory,* Chicago, Rand. McNally, 1964; Stanley Elam, ed., *Education and the Structure of Knowledge*, Fifth Annual Phi Delta Kappa Symposium on Educational Research, Chicago, Rand McNally, 1964; Philip H. Phenix, *Realms of Meaning: A Philosophy of the Curriculum for General Education*, McGraw Hill, New York, 1994.
19. Ausubel, D. P., „Some Psychological Aspects of the Structure of Knowledge", în Elam, S., *Education and the Structure of Knowledge*, op. cit, pp. 220-262.
20. Bruner, J. S., *Learning and Thinking*, Harvard Education Review, XXIX (1959), pp. 84-92; *The Process of Education*, Cambridge, Harvard University Press, Moss. 1990, ch. 2.

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

AN OPTIMIZER OF THE SELF-MANAGEMENT OF THE LEARNING AT THE UNIVERSITY LEVEL – PRELIMINARY RESULTS

Junior Lecturer Ecaterina Frăsineanu, PhD student
TSTD, University of Craiova

Abstract

We presented in this paper o part of the preliminary results obtained researching students` self-management of learning. For this purpose we used a questionnaire and with its help we identified the procedural knowledge of the students on managing their own learning. Our contribution consists in the capitalization of the obtained results applying the questionnaire in order to propose a supporting program for the self-management of learning of students.

Key concepts*: learning of students, self-management of learning, study skills, optimization of learning, self-management program of learning.*

The self-management of learning or the leading of own learning represents a subordinated concept and also a concept that in its turn subordinates other correlated concepts:

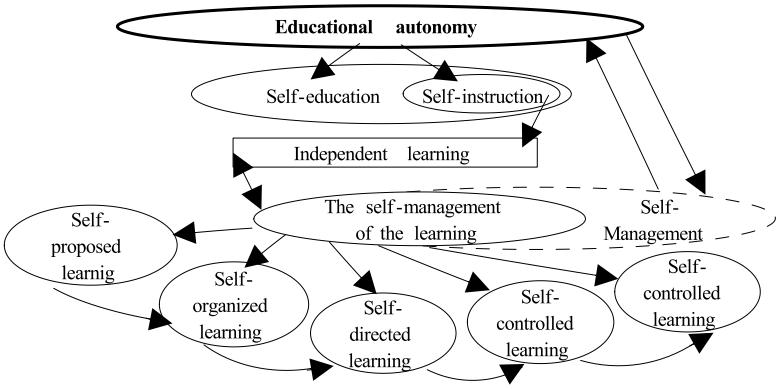


Fig. 1 The relations between the self-management of learning and other correlated concepts

An efficient learning on the basis of the *principle of the self-management of the learning* should fulfill the following criteria:

- self-structuring;
- using of an adequate resources (human resources: capacities, competencies, processes, will, motivation, effort, material resources; temporally resources);
- should be complete, lasting, well-grounded;
- should be consciously, voluntary, meta-cognitive;
- should combine self-experience with the data supplied by scientific research of the learning, should be adjusted, reflexive;
- should be correct/of quality.

For the success of learning in the university environment are also important the skills of studying concerning:

- time management;
- settlement of the priorities for studying;
- making-up the decisions on strategies, methods, techniques, useful materials;
- putting down and the use of notes;
- making of lectures, of documentation, of some works;
- preparing for taking exams.

In order for teachers to facilitate the students an efficient learning are necessary: active implication in this process, achieving some connections, using of the frameworks, of formal and informal situations, creation of some direct, stimulant experiences, granting of a frequent feed-back, creation of interactions and granting of the individual help, stimulating the reflection of the person who studies.

We proposed our selves to:

- appreciate the level at which the students apply the self-management of learning;
- find out the opinions of the students on the utility/effects that self-managed learning could have;
- propose concrete modalities to support students while moving from directed/controlled learning to the self-management of learning and also modalities to optimize the self-management of learning.

We consider that, proposing and unfolding some programs of self-management of learning by the students, it is possible that the results in learning should improve. The efficiency and efficacy of applying such a program depend on: explicit concern for improving the learning, experience in learning (knowledge, skills, habits, capacities, competencies, attitudes in leaning), regulation of the level of motivation, will, emotional control, competencies of self-evaluation, intra- and inter-personal intelligence and meta-cognition (at the level of students).

Concerning the activity of teachers, flexible, individualized teaching, active methods, stimulating and the feed-back granted to students in learning represent the core elements for applying the programs of the self-management of learning.

We present further the results of a questionnaire applied on this purpose on forty students from Geography and Informatics, second grade, first semester, 2006-2007.

Questionnaire of self-verification of habits, techniques, skills, learning competencies used by students

1) Do you enjoy learning?
a) Yes b) No
Motivate the choice:
2) Which are your goals in learning?
3) What did you do to get good results of learning?
4) It has ever happened to you not to succeed to learn?
a) Yes b) No
If yes, why?
5) How do you organize your own study?
6) How do you proceed:

- while putting down notes
- while elaborating learning records, reviews
- while elaborating essays, referats, research projects

7) Chose by checking the methods, proceedings and techniques of learning you use?

<u>For an efficient memorization:</u>

- the global method (memorization of whole material)
- the part method (division into logically units)
- the combined method or the progressive learning

<u>The memorizing procedures:</u>

- the strengthening of the initial perception of information with other perceptive elements
- the grouping of information
- the association by creating certain words for a more rapid learning
- the association by pair chains or rows of senses
- alphabetically arrangement
- localization
- counting, substitution

<u>Methods and techniques of learning:</u>

- learning by conversation
- learning by reflexive interrogation
- learning with the help of plotting (diagrams, representation by curves, graphic profile, by drawings, by visual maps)
- lecture (critical, of interpretation, parallel, explanatory, analytic, of informing, of completing)

<u>Lecture techniques:</u>

- generally exploring
- interrogation/questioning
- unfolded reading
- review
- reviewing on the lecture
- full rapidly lecturing

- achieving of certain study records (individual, of lecturing, of quote, of ideas)
- collecting and graphical organizing of information: maps, notes, synthesis, essays, reviews, papers
- reciprocally interrogation
- taking part to debates, the using of reasoning
- investigation, solving problem-situations, case study, project of research
- exercises of reflexive writing
- Others…….

8) Do you consider you need to learn how to learn?
Motivate your answer……
9) How do you proceed to prevent the forgetfulness of what you learned?
10) How do you organize the reviews?
a) phased
b) amalgamated
11) How do you prevent from tiring in learning?
12) How much do you make your homework?
a) very much
b) much
c) less
d) at all
13) How much time do you learn (approximately, during a day)?
a) during semester
b) during exam sessions
14) What measures could you take to watch your own learning?
15) Verify with the help of the following list (by checking) what qualities, skills, particularities do you have in learning and which of them can be developed by practicing:

Skills, particularities, habits of learning	**At present**	**Can be developed**
1. I know to elaborate a personal plan for studying I follow a personal plan of studying		
2. I settle phases of studying, objectives and priorities		
3. I infer the obstacles for learning and I take measures to pass them over		
4. I define and use correctly the concepts that I learn		
5. I have synthesis, selection, scaffolding capacity of the learning material		
6. I am an orderly person, I organize well the learning material		
7. I am able to make prolonged effort		
8. I put down good notes		

9. I plan well the activity		
10. I know to create a favorable learning environment		
11. I can focus, to keep my attention while learning		
12. Stress resistance		
13. I adapt myself to new situations		
14. I can solve practical problems/I can connect the theory whit practice		
15. I am a consciousness person I meet the deadlines		
16.I know how to measure my effort in learning		
17. I know how to teach others and I propose this to myself		
18. I can use what I know		
19. I know who/what to resort to when I need support to learn		
20. I am enough motivated to learn		
21. I know how to check my self		
22. I can correctly appreciate the grade of difficulty of the learning material		
23. I Know my skills and my flaws for learning		

Surname and first name of the student:
Age: Sex:
The last graduated school:
Faculty: Grade:
Parallel professional activities with universitary attendance (if case):
Known foreign languages: Level:
I use/don't use the computer to inform myself

The preliminary results are presented below:

By formulating the **item no. 1** we followed to know the emotional situations which join the learning. The most of the students answered they like to learn, motivating this choice as follows: they have chosen a specialty that they like, learning material is interesting, the learning is closely linked to the future profession. Some students mentioned they propose themselves to control the environment they learn in, in order to do this activity with pleasure. From the forty students, very few (six) considered they don't like to learn, as it is an external requirement, sometimes, they cannot see the usefulness of the information, not all courses are interesting (an important role has the teaching style of the teacher).

The item no. 2: Concerning the skill of the students to specify their goals of learning, we established they formulated a few general goals. The students propose themselves to:

-assimilate the data (to understand and retain as much as possible data);

-to use knowledge and apply in the future profession;

-to develop their all-round education;

For the leading of the learning it should be necessary for students to specify specific goals, being guided by the goals that their teachers communicate them, either by the goals presented in programs.

The items no. 3, 4: The assignment of the success or the failure in learning is internal and this is favorable for the self-management of learning at the conceptual and attitudinal level. The students considered they managed as they were tenaciously, they studied profound, they made effort, they were motivated, they proposed themselves to study thoroughly, they learned logically, they allotted time (necessary, enough) for learning, The failure in learning was determined by the reverse of the above – mentioned reasons: the lack of interest, of motivation, the accumulation of the gaps, the shortage of time (more correctly, the faulty management of the time), but also by other factors/reasons: tiredness, stress, the teaching was illogically, the course was difficult, incompatibility with the teaching style of the teacher, informational overload, unfavorable environment, personal problems, the lack of the necessary mood.

The item no. 5: By this question we tried to find out how the students organize their own learning. The modalities indicated by the students were ill-assorted and little quantitative: the planning of the time, the proposal of a study program (own schedule), the preparation of the material, achieving and using of a certain maps, graphs (in the case of the students of Geography), assimilation and applications of the knowledge (the students at Informatics).

The items no. 6, 7: By this items we wished to know if students use methods and techniques of intellectual work while taking notes or elaborating some applicative works propose at the Pedagogy seminary (for this purpose we shall analyze in the future the works, the results of the activity).

The most known modalities are: the structuring, the selection, the legible writing, the varied documentation. Of the specified modalities, we considered as valuable for the leading of the learning: the activation of the attention situation (at course, seminaries, achieving of a “structure” of the ideas which are developed later), the requirement of some guidance of the teachers, the varied documentation, the formulating of new ideas and reflections. We proposed to the students to choose from a list, the methods they use frequently, but the very varied choices covered the entire proposed methodological repertory, which can be explained by the diversity of the situations and of the learning styles. From the given list, the most of the choices were for the learning with the help of plotting (according to the specialization of the students). The students declared they didn’t know the methods/the names, but they use them intuitively.

The Item no. 8: the central element of the questionnaire was the item no. 8. We wanted with the help of this item to find out the opinion of the students about the opportunity of a guidance of the learning. The students appreciated almost in unanimity the necessity of such a program, which would help them to know themselves, to find out other modalities (methods, techniques) of learning, to manage to learn faster, easier, more, to discover how to use the memory, how to measure their effort.

Only two students considered they don't need to learn how to learn as their own learning style is efficient. In their answers, the students used the specific terms of learning correctly, and that already confirms one of the initial supposition: the students who attend the courses of Psycho-pedagogically training form themselves by transfer not only didactic competencies, but meta-cognitive skills, self-examination and self-formation competencies.

The Item no. 9: In order to prevent from forgetting, the students indicated just a few modalities, the most frequent being indicated the review. Only three students showed they manage to avoid to forget by a logical learning, by using the associations among data, by using visual memory (the use maps, graphs, drawings).

The item no. 10 was used to verify the styles, the preferences for global or analytical approach.

The item no. 11: Preventing the tiredness in linked to the pauses and to alternating with relaxation activities, with rest, with other learning activities (for other courses).

The Item no. 12: The measure of solving homework of the students also shows the attitudes, their constantly implication in learning activity: thus the most students declared they solve the home works much, and the rest of the students solve the home works little.

The item no. 13: The allotted time for learning during the semester is very little (1-2 hours), and during the exam session is different, between four and ten hours (the most using seven-eight hours).

The item no. 14: The answers of the students to this item concerning the monitoring of their own learning were very few, and thus we consider this aspect must be watched, being related to the existence/the development of the meta-cognitive skills. The monitoring modality can be the verification (with the help of teachers at seminars either the help of the mates) and the self-verification. One of the students showed he uses a "statistics" – a graph of the activities and obtained results.

The item no. 15 was an item within we wanted to establish if certain features, conditions of the self-management of learning are presented or should be developed.

We shall verify this self-appreciation made by the students with a general evaluation made by their teachers and we shall compare it with subsequent self-evaluation.

For each indicator we calculated the appearance frequency and such establishing that the array is easy to be applied.

The present conditions (which we can rely on) which received the most choices were: “I know how to use what I know”, “I put down good notes”, “I have the synthesis skill” and the conditions which students wish to develop were: “I know my qualities and my deficiencies in learning activity”, “I respect a study planning” (students specified they can realize plans, but they don’t follow them all the time).

Although with this questionnaire we found out only the procedural knowledge on the way in which the students lead their own learning, we consider this instrument was useful in diagnosing of the initial level the students have for each of the components previous analyzed.

Among the goals of a learning self-management competence forming program we can count:

- the mobilization of all psychic functions implicated in learning;
- the stimulation and maintenance of the interest for studying;
- the guidance of the learning activity;
- encourage the personal and collective reflection related to the own activity of learning;
- the stimulation of the interrogative and critical attitude;
- supporting the efforts of gaining educational and cognitive autonomy.

In order to realize the self-management of learning, the students can apply the following strategies, methods, procedures:

- the self-evaluation of learning;
- the documentation about the unfolding and mechanisms of learning;
- the participation to discussions and proposing certain personal learning programs;
- developing of a certain habits and skills of intellectual work;
- asking guidance for the learning problems.

The optimization of the learning refers to the balancing of the main components which intervene in the self-management of learning:

A) <u>at the level of activities, processes, psychic phenomena</u> – especially through meta-cognition: the appropriate choice/application of the operations of thinking, productive using of the regularities of memory, the application of the learning regularities and principles, the motivational optimum, the balancing of own expectations with the external ones, the emotional, attention, volitional optimum, the appropriate capitalization of the own learning style/even the modification of it according to the requirements.

B) <u>at the level the activities involved in the leading of the own learning</u>: the adjustment of the planning (especially the correct precise establishing of goals, the allocation of time), the rationalization in making the decisions, the organizing the learning activities, the self-evaluation by reporting to external criteria and also to efficiency, efficacy, the requirements – possibilities ratio.

As the learning is recursive, it needs guiding (planning), organizing and execution (unfolding) and checking (evaluation) and that is why the students should act in relation with their own learning like the teachers who realize the instruction.

In order to get to an efficient learning through the self-management of learning, there are aspects that can be guided by the teacher and aspects controlled by each student autonomously.

The steps/stages than can constitute a learning self-management program can be:

a) the elaboration of a personal plan for study the establishing of the stages of studying, of the goals and priorities, the establishing of the temporal, material, spatial resources;

b) the following/respecting/application of the personal plan for studying;

c) the capitalization of the learning guided by the teachers, the co-operation with other students:

- putting down good notes;
- focusing of the attention during the course;
- the empathy with the teachers and colleagues;

d) the capitalization of the informal and non-formal learning contexts;

e) the exposition/using of the previous experience;

f) the intuition of the obstacles for learning and taking up measures in order to pass them over, the identifying of the persons who can grant support in learning and the reception of consultancy);

g) the creation of a favorable environment for learning, the self-motivation for learning;

h) the determination of the difficulty degree of the learning material, the synthesis, the structuring, the selection of the learning material, the correct defining and using of the key-concepts, the solving of the practical problems/connecting theory with the practice;

i) the focusing, the maintenance of the attention while learning, measuring the effort while learning;

j) the meeting of the established terms

k) self- verification, the knowledge of the strength and weak points for learning;

l) the preparation (intellectually, motivational, emotional, attitudinal) for taking exams: reducing anxiety, self stimulation, emotional self-control);

m) the use of learning (practicing exposition of the learned things in the front of other people);

n) the assessment of the efficacy of the studying plan and its improvement.

REFERENCES:

1. Covey, S. (1996). *Eficiența în 7 trepte sau un abecedar al înțelepciunii.* Bucureşti : Ed. Al
2. Neacşu, I. (2006). *Învățarea academică independentă – ghid metodologic*. Bucureşti: Credis
3. http://www.coun.uvic.ca/learn/program/hndouts/reinf_ho.html

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

CONDITIONS AND STRATEGIES OF PREVENTING THE EMERGENCE OF LEARNING DIFFICULTIES

Junior Lecturer Florentin-Remus Mogonea, PhD student
TSTD, University of Craiova

Abstract

Learning difficulties - a fact of life that has recently attracted experts' attention – represents a phenomenon not only children are dealing with ,because they feel its effects, but also their parents, their teachers and other experts who try to counteract its effects. The primary school years represent the period when this phenomenon generally takes place, leading to low results in the school activity. However, this period can be prolonged to college years and even to maturity years.

When these learning difficulties emerge, when they have to be prevented from happening or their effects have to be reduced, certain improvement and formative strategies are applied and the children with difficulties can develop in the same rhythm as the other children in the classroom. This study is about certain sets of minimum conditions and strategies that have to be fulfilled in order to prevent the unwanted effects of learning difficulties from emerging.

Key concepts*: learning difficulties, preventing conditions and strategies (conditions related to teacher, to pupil, to parents, curriculum, the organization of training, ergonomics, the psycho-hygiene of the intellectual work)*

The collocation "learning difficulties" refers to a certain number of deficient ways of organization learning activities that can affect acquisition (perception, reception), organization, retention, understanding, the use of verbal or nonverbal information, more exactly problems in expressing the information, in communicating it. In other words, these chronically disorders in the learning process of the pupil affect the input , the actual processing and the informational output, and also the metacognitive aspect, in persons who, otherwise, have basic intellectual capacities of thinking and reasoning. This way, a distinction is made between learning difficulties and mental deficiencies, the former referring to "normal" children considered as such due to their normal intelligence.

It is not enough to adopt some strategies of improving the learning activity to diminish the effect of learning difficulties, according to some theories of efficient learning and observing the laws, the principles, the standards and the rules of efficient

learning. The correct and practical application of these strategies also implies respecting conditions for learning difficulties prevention and for diminishing the bad consequences in the child's school activity, in case these difficulties do emerge. These conditions, premises, are connected to some factors such as : the person who learns (the pupil), the one who teaches (the teacher) , the organization of training (curriculum , school policy) , the ergonomics of learning and the proximate, distal, natural environment, the forms , the influences and the real effects of manifestation of non-formal and informal education.

As for the conditions the pupil has to observe, here are some of them:

- A good physical – physiological health as well as a good mental health
- The capacity to learn, accompanied by e strong will, by emotional – affective stability , by effort resistance, stress resistance , adequate motivation, frustration resistance, positive attitude towards the complex reality of the school environment
- The invigorating motivation of learning (see also the law of motivational optimum) that assures the energetic support of learning. The important fact is that this invigorating motivation (like the positive attitude for learning, the strengthening of will, the resistance to physic and psychic effort) can be acquired and practiced through and during the learning process, through the cultivation of the will to succeed, of the will to compete with yourself and with others, of the perspective of intellectual, professional, cultural self achievement, and not only.
- A fixed rhythm, periodicity, systematization, continuity, modularity are important conditions in learning. Without them it is impossible to reach for the performance of an efficient learning
- Emotional intelligence, self control , a psycho-affective balance

Apart from the conditions of the pupil, there is a series of conditions belonging to the teacher. Many of these conditions are related to his/her personality, to his/her pedagogical capacities and skills, to his/her diplomacy and pedagogical excellence.

Numerous teaching difficulties emerge due to the so- called dis-pedagogies, disorders in teaching that emerge due to the lack of or insufficient training of these capacities and skills. Here are some of these conditions required for eliminating the teaching disorders:

- The teacher's capacity to adapt, individualize, and make more accessible the assignments and the material to be taught, through the adequate usage of didactical methods, means, strategies and ways of organization. ;
- The ability to communicate (verbally, nonverbally, Para verbally, figuratively using images, musically, by means of icons) with the pupils. A real communication, without obstacles, is a premise for an efficient learning;
- Creative and imaginative capacities;
- The capacity to influence the learning progress , to orientate it and support it;

- The positive stimulation of the pupil-teacher relation by eliminating the obstacles in communication, by transforming the pupil-teacher relation in an open and co-operant partnership;
- General, specialized, psycho pedagogical, methodical culture;
- An attitude open to new things, an innovative spirit, adaptability ;
- Decent clothing, likeable appearance, good taste in his/her choices, an open personality, communicativeness, an honest character, perseverance, emotional stability , abnegation.

All these qualities and capacities make out the competence profile of the ideal teacher, a true model.

The average time a child spends at school is one quarter of a day. The rest of the time is differently distributed between familial activities and other activities that have to do with the group of friends, the entourage, and his frequent or sporadic daily preoccupations. This is why parents play an important role in forming an adequate way of life and learning. Parents have to be integrated into the educational teacher-pupil dyad, forming this way a triangle in which each component (inter)acts with the other component. The informational exchange between these educational partners is more than advantageous to each one's activity. Family is an important factor in diminishing the learning difficulties children experience in school, and, by extension, at home, in doing the homework or the individual learning tasks.

S. Danforth and T. Jo Smith (2005) think that family has to show care and interest in the complexity, dignity, sufferance and hope of children with learning problems, and, at the same time, others have to show tolerance and understanding for these children's parents.

The authors consider that parents have to be educated in order to be responsible, and this can be done by considering the following three situations: one in which parents are considered "owners" of information and skills, another in which parents are considered "participants", and the third in which they are considered "authorized persons".

The first situation is based on the idea that parents do not have enough knowledge and skills to help their children in a professional manner. The educators, therefore, must advice and train parents in the matter of educational problems in order for them to be able to help their children. Therefore, educators play the role of experts who help parents understand what knowledge, skills, habits, intellectual-working techniques, and attitudes their children need in order to remove the obstacles raised by school learning. This means that parents have to approve the teachers' initiative which offers them solutions in helping their children. However, we must admit that this first initiative is, if we think of the way it is put into practice, a little limitary and little experimented.

The second situation, the one in which parents are considered "participants", refers to parents' involvement in activities that imply more than those in the position of "owners" of information and skills. They have to be involved in school activities such as sports, voluntary activities, activities that imply the implication of those parents who are not yet involved, in order to organize them in groups, to have

conferences and so on. However, even this initiative encounters many obstacles: parents have a job (or more than one) and this is why they cannot participate to the events organized by the school or be themselves the organizers of some events in school; they do not have the means of transportation which are necessary (let us consider the fact that schools are situated far away from home), or, in some cases , parents do not worry so much about the educational situation of their children; the feeling that school blames parents for their children's problems or, on the contrary, the feeling that parents blame school for their children's problems, problems which they are not able to solve. All these obstacles impede an effective communication between family and school and the actual impersonation of parents in the role of "participants".

The last situation, that of parents as "authorized persons", implies making a partnership between school and family, so that both parts are involved in diminishing the causes that lead to children's problems at school, and not only there. Teachers and parents work together to find solutions in improving the school performances and the social relations of the pupils. In this situation, parents need a strong sense of responsibility for the choices they make for their children, along with the teachers. This idea is welcomed, considering the fact that the distance between the familial patterns and the school high requirements is often too big. The contrast between the children's experiences at home and the school requirements (based, obviously, on children's former experiences) affects profoundly their psychosocial development and this can alter the ways of school acquisition. If parents are implicated in the activities of the school community, they can make themselves heard and listened by teachers and children alike. We must admit that this initiative, too, is rarely put into practice, due to well-known reasons.

The role of the parents is often frustrating and difficult and implies self-control, a lot of patience with other members of the community and, of course, with the children who have learning problems. Parents must be understanding and must generate many occasions and moments that could bring satisfaction to the children. This can be put into practice by implicating children in various activities that generate pleasure, without being preoccupied with the competences involved, with the failure in solving the tasks, or time barriers. Stories told by the parent before sleep or a song before dining or while making it are just few examples of such relaxing activities that create a physical comfort.

Parents have priority in requiring a constant and active support in the case of children with learning problems. They are the ones who have to give a helping hand when children have successes and difficulties, other than those related to school, and it is up to them to also make children live positive experiences at home and with their friends. By helping the child develop or rectify/ compensate his capacities, as much as it is possible, the parent contributes to increasing the child's self confidence, to increasing the trust in his powers, as well as to building-up a positive image of himself (Denise Destrempes-Marquez and Louise Lafleur, 1999)

Vigotsky was, undoubtedly, among the first people who emphasized the social nature of learning and acquiring knowledge. In other words, he emphasized the importance of

cooperation, of interpersonal collaboration and interaction, of the development of the psychical superior functions. In his point of view, the functioning of superior psychical processes is determined first by a social or an interpersonal plan and, second, by a personal or an intra-psychical psychological plan. Therefore, what a child does "today" with another person's help, he will surely do it by himself "tomorrow". This means that the adult's intervention is not only a factor which facilitates the development of psychical functions, but it is also an important part of this development. The exchange, the relation with the other, including the relation with an adult, is the essential support in the acquisition process and in the access to knowledge.

We present below some conditions and strategies parents have to fulfill in order to help children diagnosed with learning difficulties and to increase their self-confidence and the confidence in their own strength:

- creating a revigorating friendly work atmosphere (through conversations, discussions, games);
- stimulating a positive discussion by avoiding some aspects such as punishments and an authoritarian attitude;
- stimulating the decision taking and giving arguments in its favor
- stimulating the will to assert themselves, to get involved in domestic activities;
- extracting benefits from errors, mistakes
- correcting some behaviors , attitudes (towards the self and towards others)
- giving help when needed , when the task requires more than what children can do;
- brothers/ sisters also have to give help
- stimulating brothers/sisters not to dramatize the failures of the child, to deal gently with the child's feelings
- giving indications , support , in solving homework, when needed (this does not mean parents have to solve the homework entirely);
- encouraging other persons, apart from those who are members of the child's family, (mother, father and their children) to help, stimulate , establish contacts with the child (grandfathers, family friends, neighbors etc.);
- stimulating the child's trust in his own capacities, strength;

Besides these conditions, we must add the fact that a parent, above all, has to realize the gravity of his child's problems, to accept it, and not to consider it ''curable'' in time, then to intervene in diminishing / eliminating it, after he had previously consulted some experts first. The child's situation in school does not have to be considered of less importance than it really has but, on the other hand, it does not have to be dramatized either. A prompt, firm intervention can be made in solving the problem if the parent gets involved in an active manner and if he is willing to collaborate.

Along with the conditions that are related to the persons charged with the child's education (teacher and family), there can be added some conditions related to the organization of the process of studying, of training (curriculum, school's policy, organizational policy):

- selecting, organizing, structuring , adapting the material to be taught and making it more accessible ;
- clearly establishing the intentions, the result (purposes and objectives) on thematic units , themes, sub-themes, chapters, lessons;
- assuring the quality of studying by the diversification of evaluating and self evaluating means;
- diversification of the methodological and technological ways of teaching-learning- evaluating;
- the prevalence of quality and not of quantity;
- the prevalence of formative tasks and information and not of the informative ones;
- treating the content in an inter-, multi-, trans- disciplinary manner;
- assuring transfers, generalizations, connexions, the link between theory and practice;
- assuring an invigorating, encouraging, co-operant and stimulating environment;
- eliminating blanks, stress factors that cause exhaustion, eliminating monotony, overcharge (these are the result of multiple factors such as ((I. Neacşu, 1990, p. 142): great quantity f information, not enough sleep, and not enough good-quality sleep, bad conditions, noise, an intense rhythm of performing activities, lack of brakes, not enough time for rest, permanent conflicts, bad free time economy, lack of or too much of affective reactions, an improper rhythm and biorhythm, according to the rhythm of activity or the nature of the activity);
- making up internal rules for each school and for each classroom ;
- watching over the way the school policy and organizational rules are respected ((E. Macavei, 1997, pp. 288-290);
- respecting the work rules inside the group and inside the whole team as well

The school ergonomics and psycho-hygiene of the intellectual work (learning) imply other conditions for preventing and diminishing the learning difficulties. These conditions are added to the previous ones and come with a series of conditions referring to the environment where the learning activity takes place:

- assuring the necessary environmental comfort (temperature: summer between 22-24^{0}C and winter between 18-21^{0}C; humidity between 30-70%, with an average air circulation of 50% : the average being approximately 4-8 m/s; radiations: thermal , infrared, solar, electromagnetic , ionized radiations; luminosity : as much natural light as possible , artificial light of approximately 40-60 w and to come from the

left side (or from the right side – for the left-handed) sound : 20-60 decibels with a frequency of 250 to 4000 Hz) (I. Neacşu, 1990, p. 140);

- sitting in a chair while studying in better than sitting in other postures;
- the correct sitting position : the vertebral column has to be in a right position, the back supported by the back of the chair, shoulders in right position, hands on the table ; the writing –table has to be adjustable, the chest doesn't have to be stuck to the table;
- the studying material has to be inclined at 45^0
- optimal distance between the eyes and the reading source has to be of approximately of 35-45 cm; the distance from the eyes to the superior part of the page has to be equal with the distance from the eyes to the inferior part ;
- The walls of the study room or of the classroom have to be painted in a relaxing color (cream colored, light green etc.);
- After 30-40 minutes of intellectual effort, a pause of 10-15 minutes is recommended (P. Mureşan, 1990, pp.33-55).

Other requirements (I. Neacşu, 1990, P. Mureşan, 1990, S. E. Bernat, 2003) related to learning efficiency and diminishing learning difficulties refer to respecting some conditions and rules of learning organization: techniques of fast memorizing , techniques of extracting information from books, dictionaries, internet, encyclopedia, fast high quality reading techniques, "reading" historical and geographical maps, using bibliographies, making and reading notes with extracts from books, annotated notes, quotation notes, synthesis notes, terminological notes, preparing an idea plan, elaborating written works (dissertations, theses, essays), making summaries, abstracts, acquiring argumentation and persuasion techniques, and, of course, counter persuasion techniques etc.

R. Dăscălescu (1975, pp.98-100) presents some indicators of evaluating the efficiency of the learning system. These indicators refer to: the classroom and what is related to it (light, the air system, temperature), the furniture (luminosity, pupil's visibility at the blackboard, making sure pupils are in a correct posture, multiple functionalities, desks height and inclination), didactic material (order, the way it is kept, the pedagogical value of the material, sufficiency, quality), teachers (clothing, way of speaking, attitude, punctuality, character, professional and pedagogical training etc), pupils (the arrangement of pupils in desks, behavior, their attitude during class and outside the classroom), the lesson (scientific level, the degree of accessibility, of originality, accuracy, pupils' reaction to the lesson, interest, apathy, teacher's dialogue with the pupils, the individualization of teaching, the feed-back of the lesson, evaluation, homework), techno- productive activities , discipline, the relation between the class and the school collective (performances, organized school life etc).

These conditions are strengthened by the premises of learning efficiency – of learning in general and of learning in school in particular. These premises come from the domain of non-formal and informal education. At the moment, integrating the three types of education (formal, informal, non-formal) in the system represents an important preoccupation in pedagogy because it has come to the conclusion that

education can't be limited to education in school. In fact, the learning difficulties a child encounters in school can also be general learning difficulties, and this means an individual can have learning difficulties outside the school as well, in forming his/her own life experience etc.

The pedagogic literature suggests concrete means of integration, of combining the types of education (E. Joița, 2003, p. 30):general thematically lessons, initiation in observation and capturing information, in filtrating information ,in appreciating the value of the information received from the non-formal and informal sources, education lessons on extra-curricular activities , group and small group activities, synthetic lessons on present world-wide subjects, activities on themes suggested by the pupils, optional subject matters, textbooks with supplementary information from the non-formal and informal sources, an interdisciplinary approach, implicating the community in school's activities etc.

As an organized, planned, evaluated, adjusted type of education, the formal education has, among its fundamental objectives, the counteracting of the eventual effects and negative influences of the non-formal and, especially, of the informal education. This aspect has to be taken into consideration for the person's orientation towards a system of authentic values and for stimulating the person to reach a personal educational ideal which has to be a reflection of the big educational ideal.

The third millennium starts with the pedagogy of diversity because the actual schooling has to admit the diversity of the human being and the inter-individual differences. To live together, to be together, and to learn together does not mean living, and this applies for *to be* and *to learn* as well. It means, instead, to let "feelings", "learning" flow, to let it out according to each one's interests, desires, capacities, rhythms. The highly gifted children pedagogy, the inclusive pedagogy, educational alternatives, are evolutionary orientations of a pedagogy of diversity, differentiation, individualization, considered in the context of a democratic, non-discriminating society and of equal chances of training and education. The pedagogy of children with learning difficulties (curing education) adds to the other forms of education. It represents a new orientation based on studying the psycho pedagogical problems of these children who are not yet sufficiently investigated. It also represents an extra reason for supporting financially the pedagogy of differentiation and individualization and for making sure it works.

REFERENCES:

1. Bernat, S.E., 2003, The Technique of Efficient Learning, The Universitary Press From Cluj, Cluj-Napoca
2. Danforth S., T. Jo Smith, 2005, Engaging Troubling Students. A constructivist Approach, Corvin Press, Thousand Oaks, California;
3. Dăscălescu, R., 1975, The Educational System From The Perspective Of Schooling Ergonomics, E.D.P., Bucureşti

4. Denise Destrempes-Marquez et Louise Lafleur,1999, Les troubles d'apprentissage: comprendre et intervenir, Éditions Hôpital Sainte-Justine; http://www.aqeta.qc.ca/francais/generale/role.htm
5. Joița, E., 2003, Education and curriculum, Universitaria Press, Craiova
6. Macavei, E, 1997, Pedagogie, E.D.P. R.A., Bucureşti
7. Mureşan, P., 1990, Învățarea eficientă şi rapidă, Editura Ceres, Bucureşti
8. Neacşu, I. 1990, Instruire şi învățare, Editura Ştiințifică, Bucureşti
9. Neacşu, I.,1990, Metode şi tehnici de învățare eficientă, Editura Militară, Bucureşti

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

SELF, SHAME AND CULPABILITY AT CHILDREN ARGUMENT

Junior assistant Moroşanu Bela
TSTD, University of Craiova

The contemporary world is too often the violence scene, throwing a somber light to the hope next to humanity.

Along the history there were always conflicts, but the appearance of some perturbance factors emphasize the risk grade.

Through mass/media the large public become the powerless beholder even the hostage of those who give birth or proliferate the conflicts.

The education didn't succeed until now to improve this state of things.

There are educational strategies in so much as to solve the conflicts in a peaceful way their solving in a peaceful way through the cultivation of the respect towards the other people, toward the culture and their spiritual values.

So, it seems that the education should follow two ways complementary on a side the discovery of the other step by step, and on the other side, the experience of the purposes fulfilled a long the life; a way apparently efficient of avoiding or solving the lateral conflicts.

To know the other, you have first know yourself.

The education should help to discover the own identity. Only in this way, they will be able to look the people through the eyes of the others and to understand their reactions.

The sociological research theme, of qualitative type"…" is a very good one, we were given the possibility, as practitioners to realize through this experimentation in the classroom, the way of a world in permanent movement, to put at the ensignement disposition, those instruments whose help, these should learn to live together with the others, to cooperate to get into relation with the medium to relation.

II. The study of the problem in the specialty literature.

Speaking about the factors who help the scholar success, the self occupies a special place, because for the human being it is very important to know her own physical and psychical disponibilities, to fix purposes in accordance with these, to fulfill the wishes, to live the satisfaction mood generated by these fulfillments and in this way assure the balance which he needs so much.

What is the self-knowledge or autoknoledge? D-tu Salade defines the autoknowledge or self knowledge so "autoreflection in the purpose of defining

ourselves t first those features which are essential the key element is the representation of the own facts and judgments" (1980).

"the personal reflections are directed to their own ideas, own feelings, own actions". (T. Prună).

"individual conditioned and social orientated to the organization and the evaluation of the own ego, the own capacities aspirations and actions" (1987).

G. Allport defines the extension of the ego and the self image of a person is composed from a self community, the other person being perceived, seen as a personal syntheses of other self and which, through the report at zones, discover the own self (J. M. M. Mair).

Hypotheses

Etymologically speaking, the word hypotheses derives from th Old Greek language: the term of "hypothesis" meaning the action of putting (thesis, theses) under (hypo).

Fred N. K. (1964, 18) defined the hypotheses so: "Ah. Is a context about the relation between two, or more variables".

J. G. (1967,) says: "ah is a sentence about the way in which a set of units is disposed in a space of variables x_1, x_2….for the children I proposed the following hypotheses " meaning the action of putting (theses, theses) under (hypo)

Fred N.K. (1964, 18) defined the hypotheses so: "A.h. Is a context about the relation between two, or more variables".

J. G. (1967), says: "A.H. is a sentence about the way in which a set of units is disposed in a space of variables x1, x2 ... research theme "..." for the children I proposed the following hypotheses:

Y1: if I offer the subjects the possibility to investigate the perception and evaluation way of the own behavior, then the shame and the culpability feeling will be in a close connection with the fulfill level of the ego.

Y2: it is possible the settlement of the same relation between the self fulfillment level and the psychical changes which take place being influenced by the social medium.

Objectives

1. The investigation of the perception and evaluation way of the own behaviors in accordance with the ego fulfill level
2. The settlement of some relation between the ego fulfill level and the psychical changes

The report between shame and culpability at pre-school age

As the child consolidates his connections with the others, the solidarity game remains an indispensable shelter for the all destroyed emotions after the hard periods with social contact.

When the pre-school child is in a new social situation, the first attitudes can produce his early behavior.

In the research study which I made realized that at children the shame and culpability are sometimes sometimes synonyms, even if they are playing creation games, drama tipotions or they are telling stories, the rule being the same. Other times it is different from the point of view of the moral value which it is given to it. Before anything the shame feeling appears followed by the culpability feeling. The kinder-garden child has in his mind this order of those two feelings and judges the things seen through his sensibility towards certain problems. The use of language implies the trying of making understood the point of view before acting as it.

I noticed after this research that the children associate the shame with culpability and the importance of the group has a benefic influence for the understanding of the two feeling semnification.

After the number of realized activities in this purpose has amplified the content, girls groups succeeded to learn some language expressions from the activities and to use them in their role games. The analyses the contents of these obtained results proves that almost all the 5 – 6girls succeed to take over their own thoughts and their own reasons presented in stories cartoons, movies.

Implied in a complex network of relationships with the other children, all the children from the researched group are in the same time observed and observants, judged and judges active subjects and agents who suffer an action.

The report between shame and culpability at preschool age depends also the social involvements of the child intellectual values.

Giving them the interaction possibility I developed the trust in their own forces, the getting out from passivity, succeeding to observe the difference attitude between those two feelings.

The metodology of the qualificative research of action type

The qualitative method is a succession of operations and of technical and intellectual manipulation which a researcher applies to an object or to a human phenomenen in order to understand the signification for himself and for the other people.

Among the used methods in the type research, the fulfilled action by me in the observation, the focus-group, the case study, the life stories.

The participative observation is the most qualificative from all research methods, producing information which are descriptive more than quantificabile?

The participative observation gave me possibility to discover detailed dates about the thoughts, feelings and behavior of the studied groups.

The collection of observations was realized in a month, having as elements the behavior of the following aspects: the frame participants; activities; interactions; frequency; duration; subtle factors.

Focus group – is a technique often applied in the practice of the qualitative sociological research.

It is defined as a people group in interaction, which have common characteristics, it is used to obtain information about a specified problem.

The sampler in the qualitative research of action type.

The sampler after a group of criteria move or less concrete is represented by the gradual strategies based more on the "theoretical sampler" elaborated by Slaver and Strauss (1967). Within of the type action research, self, shame and culpability at children the sampler includes a number of boys (16) and girls (10) – children present in the group B.

Through the exercises – game "who am I?" - the children defined their sex, age, their apparency at group.

As the "snowball" principle, I identified those interesting coses of subjects with rich informations about the study theme.

Another process used in the selection of the sampler members is that on the base of some mixed criteria, observing the following algorithm.

- I selected the participants on the typical case criteria.
- I chose a report criterion or that of the negative coses.
- I selected exceptional coses.

Conclusions

The research study "..." allowed me to make out, the formation mechanism the shame and culpability feelings seen with the eyes of the children from kinder garden.

The creation of new situation, the introduction of some changes in the unfolding of the educational action, having as purpose the checking out of the purposed hypotheses, approach to this problem, to the development of the children capacity of describing in their own words the signification of the two feelings for themselves.

The study allowed me to examine more details regarding this theme, to use the interpersonal abilities of the children to explore interesting ideas.

To the hypotheses proposed by myself it can be associate another that regarding the organization of psycho-social-pedagogical situations necessary situation for the relation of this theme.

I consider the hypotheses proved themselves the validity in practic, the study objective were realized and I remember the followings:

- the theme "..." contributed to the enrichment of the informational content of the curricular areas especially for kinder garden, education for society, the medium knowledge, the language education;
- the theme may be proposed as a project theme for a semester period;
- the theme is a opportunity for children for kinder garden
- through these theme, it are deeply studied the presented problems about shame and compatibility, are understood the values standards excepted by pre-scholarity

The empathy, the sensibility, the humor are important components witch are found in this research study for kinder garden children.

REFERENCES

1. Allport, G.W. (1991). *Structura şi dezvoltarea personalităţii***.** Bucureşti: Editura Didactică şi Pedagogică.
2. Chelcea, S. (2002). *Un secol de cercetări psiho-sociologice.* Iaşi: Editura Polirom.
3. Ionel, V. (2002). *Pedagogia situaţiilor educative*. Iaşi: Editura Polirom
4. Joiţa, E. (1999). *Pedagogia. Ştiinţa integrativă a educaţiei.* Iaşi: Editura Polirom
5. Neacşu, I. (1985). *Metode şi tehnici moderne de învăţare.* Bucureşti: Universitatea din Bucureşti, Facultatea de Istorie şi Filozofie.
6. Zlate, M. (1997). *Eul şi personalitatea.* Bucureşti: Editura Trei

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

COMPUTER ASSISTED TEACHING AT PRESENT

THE MOTIVATION OF THE STUDENTS CONCERNING THE LEARNING GIVEN THE TIC' S

Lecturer Cristea Boboilă, PhD
Faculty of Mathematics and Computer Science
University of Craiova

Abstract

The integration of TICs is a modern phenomenon. In this reason, the studies about the motivation of the students by TICs are not too numerous. In this reason, the studies about the motivation of the students by TICs are not too numerous. Moreover, there exists no theory that to be too comprehensive and developed in order to be able to explain all the aspects of this problems.

The computer is on the way to democratize the knowledge easing the access to the primary sources of information. The knowledge is only of those who learn. However, the real learning depends not only on the information: the students will need more than never the teachers, in order to direct them to study, to structure and to organize the data of the approaches which will open the way to a lasting developing of thinking and competences.

The witchcraft of the computer is to urge more and more teachers to change their teaching practices adequate to the new perspective.

This paper tries to demonstrate that more and more researchers will study the relation between the pedagogic practices and the impact to the cognition, motivation and the development of the students not only as persons but also as students.

Key concepts*: informatics' pedagogy, TIC, Internet, IAC*

1. Introduction

In all the areas of the human activities the concept motivation has a prevalent place, so that numerous researchers elaborated theories about the subject with a view to help us to understand better what motivate the human being to act and how is this motivation. In spite of the big number of theories of the motivation, it does not seem to us adequate to make a complete list, and less to elaborate a historical evolution of each of them. There are in this view documents easy to locate in the whole library of the university and on Internet.

However, we can't ignore them pretending that these theories are too numerous or that not all are applied to the integration of TIC in schools. On the contrary they can inspire and help us to understand what really happens with the pupil when the computer appears in the classroom.

That integration of TICs is a modern phenomenon. In this reason, the studies about the motivation of the students by TICs are not too numerous. Moreover, there exists no theory that to be too comprehensive and developed in order to be able to explain all the aspects of this problems.

The theory of some of these studies is sometimes limited and get us to a private and fragmental aspect. In spite of all these, because of theories about the motivation of the learning, these studies are serious and lucrative, as follow of many work decades about motivation in different contexts.

The new technologies appear in the majority of human activities. The urges are strong in order that calculation systems to become a learning instrument. This integration determines the teachers to revise their teaching approaches and to reconsider their conception of learning and education. The computer is on the way to democratize the knowledge easing the access to the primary sources of information. The knowledge is only of those who learn. However, the real learning depends not only on the information: the students will need more than never the teachers, in order to direct them to study, to structure and to organize the data of the approaches which will open the way to a lasting developing of thinking and competences. An excess of information does not guarantee a superior quality of learning and all the less a rise of the motivation of learning. The new theories of the motivation will have to be elaborated in connection with teaching practices accompanied by the integration of TICs, because the context of the education influences in an enormous way the motivation of the students: many theorists of the education consider that a specific pedagogy must precede the integration of TICs. In their opinion the computer has only the role of a change catalyser: the computer must be examined by the pedagogy and not conversely. The TICs are education methods that every teacher can use at his will.

Tardif resumes correctly the bend that could produce in pedagogy when he writes: "The new technologies of the information and communications will challenge the disappear of teaching aid which pretends that all students of a given age group are susceptible to learn in the same way starting from the same approach and in many cases, starting from the same exercises, the same pages and the same snapshot." (Tardif, 1998).

The integration TIC in schools asks the developing of a new relationship with the knowledge.

The majority of the theories of the motivation has their origins in psychology. These theories can help anybody who try to understand better how the integration of TICs in the classroom acts to the motivation of the students. The objective of the present documents not to examine how each of them can explain the motivation of the students in this context of integration: it would be very interesting work, but enormously. In the next years, the supporters of each theory of motivation will doubtlessly exploit, this new area, to use as experimental labor, in order to check and demonstrate the validity of the principles that subscribe that theory.

We would have wanted to discover a theory to explain what really happens with the motivation when students learn by means of computer. After some years, we find commendable efforts and concrete results in this way. It seems to us cautious to avoid the achievement of a process of the current theories of the motivation to determine those which explain better the motivation of the students in a classroom. Nothing prevents us, to isolate the factors which act over the motivation of the students when they use the computer for the daily learning.

First of all, we propose a classic definition of the motivation. This motivation differs from the constructivist conception of the motivation in which the main elements are the commitment, participation and the personal construction of the universe, among other things.

So as the constructivism is, to a certain extent, a philosophy of the education and learning and which eases the integration of the TICs, it is naturally to understand, that the definition of the motivation which the constructivists use, represent for us a precious source of inspiration. It is not surprising that our text tend to this approach.

2. The classic definition of the motivation.

In the majority of the definitions of the motivation, the following four components are frequently presented:

- ✓ Instigation;
- ✓ Selection;
- ✓ Direction;
- ✓ The maintaining of the behavior.

The motivation is conceived by the forces which make the individual to act, to choose a behavior, to direct his action and to maintain this direction. (Beihler & Snowman, 1993; Huitt, 2001; Franken, 1994). These forces which initiate the behavior were qualified in different manners in the human sciences.

Lengthways decades, the theorists of the motivation presented us the motivation as a result of the necessities, necessities which were included in hierarchical structures. The hierarchy of Maslow's necessities is among others an example: the physiological, security, social relationships, and respect for self and personal success necessities. Alderfer (1972) proposed a structure of necessities similar with that of Maslow's: primary survival necessities, interaction with the others necessities and personal

development necessities. That classification of the necessities proposed by Mc Clelland goes rather to cognitive elements: success, power and affiliation necessities.

In otherwise, that cognitive represents a theoretical general frame which seems to be suited to the study of the motivation of the students given the TICs.

After this approach, the behavior is the result of a perception made the individual himself and his medium, medium in which he tend to accommodate himself and on which he try to transform in order to get it closer.

After Jean Piaget's studies (1970), among others, different cognitive theories saw the light of the day and permitted, generally to understand better the motivation and the learning in different contexts. Look some of these theories: „The theory of equity", „Adams" (1964) „The theory of expectations", Atkinson (1964) and Vroom (1964) ; „The theory of attribution", Weiner (1967) and „The theory of the aim", Ames (1981) .

Each of these theories can help better to explain to the students the motivation of the learning through computer. So as nobody can give a complete and hermetic explanation, we will be content to enumerate elements which can appear in a particular situation. In the course of the next decades, many studies will inspire from the current theories and other theories will be elaborated in order to explain better the motivation of the students from the classroom.

3. Factors which act above the motivation of the learning

We have mentioned above, that in the absence of a complete theory about the motivation of the students to learn in a technological medium, we will appeal to the conception of an author to emphasize factors which could be included in this new learning medium based on computer. The next author just proposes a conception which we take in discussion. This conception represents a personal vision of the general motivation of the pupil and was not based on numerous empirical studies. Wlodkowski (1985) pretends that the motivation of the pupil is influenced by the next six factors: attitude, necessity, stimulation, emotions, competence and consolidations.

3.1 Attitude

The attitude is a disposition formed by knowledge and emotions. It guides the individual to act in a favorable or unfavorable manner to an object or a situation. The attitude of the pupil and the teacher to their new technological learning medium is in the other hand conditioned by the type of the experiences which they have lived in the contact with these technologies, their waiting and familiarity with these as well as with the other factors which are described above. So, Wlodkowski values two aspects of the motivation: cognition and emotions.

3.2 Necessity

The necessity is a state of the individual that makes him to have in view an aim. Of course that there are physiological necessities, but we refer now especially to cognitive necessities. For example, the collaboration with the others, the taking of the decisions, the finalization of an activity, the acceptance of the challenges, the satisfaction of his curiosity, his affirmation, the assumption of some risks are some

necessities which the pupil should satisfy using the computer in order that his motivation in learning to be maintained.

The manner in which the pupil will approach the ensemble of technologies depends on the measure in which he gets to meet again his cognitive necessities and to create others.

3.3 Stimulation

Stimulation refer to any change in the medium which keeps the individual actively. The presence in the classroom of the portable computer represents a stimulating change, because it takes place a chain reaction. The renewal teaching practices are initiated by the teacher, practices which stimulate a different social dynamics and which, finally creates other cognitive necessities to the students.

3.4 Emotions

Emotions are a kind of prism, where the motivation passes. The prism may guide or dissipate the energies. If the emotional life of the pupil is disturbed, he will have no motivation in school learning. On the contrary, when the pupil has an emotional balance and has a satisfying emotional life, he can keep easily his energies and his interest for school work can be maintained.

3.5 Competence

The computer can't have a positive effect to the motivation of the pupil, if the pupil is not able to manipulate him easily. The computer is a complex learning instrument on which the pupil must control. The pupil who does not manage to develop some examination of the computer, he loses his interest and makes no efforts in this way. The computer competence of the pupil influences his motivation, the persistence in using it. However, as we can see further the perception of his competence can be determined as the level of real examination that he had.

3.6 Consolidations

The behaviorism taught us that many behaviors are maintained by the consequences that they have. The immediate withdrawal of the consolidations makes that the behavior to disappear gradually. The presence of the consolidations makes that the students to maintain their motivation their interest.

The consolidations have two sources: extrinsic and intrinsic. It is generally admitted that the education must help the pupil to have rather insitric consolidations than to wait rewards from those around him. In time, the pupil learn to evaluate his teachings, to appreciate his progress and to obtain from his experience a valuation of his own person.

The motivation of the learning can't be limited to a simple reaction of the approval of the others. Of course that the human company is motivating but it is not limited to obtain to the pupil extrinsic consolidations. It is much motivating if the pupil has as a base his social medium in order that his intrinsic motivation in learning to be higher. (Guthrie and other,1998) wrote that ''The literature about the developing of the intrinsic motivation shows that the students have as a base the external support in order to internalize the aims and to develop his own determination''.

In every teaching method, the teachers want that the students to be able to create his own sources of intrinsic motivation, even if they start from an extrinsic

consolidation. This sources or these determinants of the motivation are not the only able to influence the pupil in his learning medium. We think that there are also others.

The way of learning acts to the way of knowing. Every teaching practice makes that some determinants of the motivation to be privileged, and others want to pass on a second plan. The objectivistic pedagogy stimulates the competition among students, while the constructivist pedagogy encourage the collaboration. It is obvious that these two learning mediums are different between them.

Many determinants of the motivation which we want to add, are strong connected to the learning context and teaching practices given by the integration of the computer. The complementarity between computer and constructivism make the teachers to change the education in a manner as that in which the motivation of the students depends on the factors which call more and more the attention of the searchers. Look here other factors which, in our opinion, could act above the motivation of the students in a teaching medium involving the TICs.

3.7 Social cooperation

The importance of the social medium in school learning was first recognized by John Dewey the by Lev Vygotsky, then by Jerome Bruner. The theory of auto-determination (also Ryan, 1985) has it itself a social component. These are only some examples which demonstrate that social medium in learning received consideration in different epochs.

The pupil belongs to many groups, in which some have more influence than others. (Wentzel,1999). For example, there is his family, his classmates and his hockey team. He obtains much satisfaction from these groups that he belongs to. In his turn, the pupil influences the vitality of these groups. His participation with his group is made through cooperation or the competition with the others. Sometimes he chooses the isolation and to work alone. So, in the classroom, the pupil may prefer the competition with the others, the cooperation with them or only the individual work. In a way or another, he obtains advantages.

After the reviews written by many searchers the work in collaboration in the classroom has more advantages than the other options. The groups in cooperation make that the students to be interested in the interdependence of the members. Contrary to the competition, the cooperation encourages the interactions among students, the responsibility of each with the others and the development of the social abilities. As the constructivist approach accompanies the majority of the time the integration of the computer in the classroom and as it takes place in a social medium (socio-constructivism), it results that the interactions among students are a source of indisputable motivation.

Newman (1989) in an article about the commitment of the students given their learning pretends that this commitment depends on five factors:

- ✓ A necessity to obtain competences
- ✓ A extrinsic consolidation of the competences
- ✓ A intrinsic consolidation of the competences
- ✓ A support of the company
- ✓ A membership or property feeling given his achievements.

The fact that Newman is so much interested in the competences should not be surprising, because the competences are an important objective for the school. He also insists upon the importance of a social group which encourages the pupil and upon his pride to make achievements. Are not indeed these learning conditions to explain the admiration of the students for technologies? Briefly, the interactions of all kinds with computer work could be a motivation element.

Newman (1989) advertises us about a school structure which encourages the competence instead of collaboration among students.

3.8 The learning by tasks rather than the development of abilities

The teaching practices of the traditional education base first of all on the development of the cognitive abilities. In a such classroom, the teaching is centered on the teacher, the efficiency of the pupil, the competition among students, the extrinsic consolidations, the criterions of the group, the isolation and the division of the teaching objectives, the formation of the homogenous groups based on efficiency and many others.

Thus, the studies show that a pedagogy rather directed to the achievement of the tasks helps the pupil to form effective teaching strategies, to communicate more frequent with the others, to emphasize bigger challenges and to form a more positive image of the school and of his own person as a learner. Finally, to these two directions (the development of the cognitive abilities and the achievement of the tasks) correspond two values from the theory of the aim.

The traditional teaching is based on disciplinary objectives isolated one from another. It is preferable that the integration of the computer to have interdisciplinary and efficiency plenary teaching, for example class projects made in a teaching constructivist medium. So, it is possible that some teaching practices of the teacher represent another motivation source for the students. We treat exclusively the new teaching practices that include the integration of the computer in the classroom.

3.9 The objective evaluation of the own capacities

Am I able to carry out this task? In the domain of the motivation and learning, the concept auto-efficiency became popular adequate to the searchers who want to predict the efficiency of the pupil. Auto-efficiency consists of the individual's subjective evaluation of his own abilities to achieve a task or an activity.

It is trying to find out when the individual is able to perform in a domain. It is thinking that now, the individual evaluation predict in a good manner his performance: more activated is he, more performs.

The pupil will be motivated in the learning on computer only if he considers himself able to use it. .

From here, the importance to evaluate a pupil, not only his specific abilities in using the computer, but also the perception that he has abilities.

3.10 The motivation to manage

Want I succeed this task? It is not enough to know that we are able to succeed in a domain, neither to know if we could succeed, it is also necessary to want to succeed. Actually, we must value the things in order to succeed. At the base of a

behavior showing the motivation, we must find a commitment or an any action made by the individual to succeed the task.

The commitment reflects the intention of the individual: Eccles & Wigfield (1985) allege that the subjective value of a task has three elements:

- ✓ the value of the interest (in what moment the individual accepts his task)
- ✓ the value of achievement (the importance of the task)
- ✓ the utilitarian value (the use of the task)

These aspects of the subjective value of the task predict often the individual intention or wish to make. The auto-efficiency predict rather the success of an activity. We think that the motivation of the students is influenced by the value that they give to different tasks regarding the learning with the computer. The commitment of the students depends, in his turn, on this evaluation, which determines that achievements of the tasks. (Clement and oth.,1999) showed that, participating in a French foray of the Anglofone students, that more they like to learn and more autonomy they have, more sustained their efforts are and have more belief to continue their learning.

Maehr (1984) defines the commitment as the motivation to perform a task out of its context. In this way, the commitment is the personal and independent effort to continue learning started in the classroom.

We think that this commitment notion is an evaluation meaningful criterion of the impact of the computer in the schools.

Actually, if the computer stimulates the pupil's senses, the pedagogy which accompanies him directs his commitment. It is partly, what the constructivist approach wants to show.

The computer makes the pupil to be beyond his ken, to pass over his minimal usual work, in order to satisfy a curiosity which he thinks to be possible now when he use a computer.

Which are the characteristics of the computer and pedagogy which excite the pupil and make him to pass over his own abilities, to be more curious, to have more questions for an exciting thing?

The motivation of the daily learning is interpreted as a general commitment of the learning. So, Ryan thinks that the commitment of the learning is the fact that the pupil succeeds a task which considers it interesting. The subjective value of a task depends both on the global hierarchy of the pupil's objectives and the task itself. Actually, how is defined an interesting task? Won't be it interesting because it is meaningful for the pupil?

3.11 The perception and the value for itself.

It is possible that the computer to make the pupil to think that he can improve the value of his person or integrating in his learning? Covington (1984) pretends that there exists a functional relation among ability, effort, efficiency and the value itself. Covington & Omelich showed that 25% from the value it self is predicted by efficiency but 50 % from this variation is predicted by the perception that maintains the abilities of the pupil.

The subjective measure of the abilities predicts better the value itself than the objective measure of the abilities. .

The students know when it is important to integrate the computer in their lives and when it will have a preponderant role in the whole life. Only in the school where they can observe the variety of the applications of the computer, the computer invaded all the domains, in planetary level. The familiarity with the computer means that the students will appeal easily to their dreams and their professional and personal succeed.

It is possible that the pupil to have a strong feeling to learn to work more rapidly with the computer.

The students' own image is better when they have good results with the computer and when they feel able to work with it. Actually, the students' interest for the work with the computer results from the fact that they feel the attentions of their company, what means that it is another motivation.

3.12 Autonomy

The integration of the TICs changes the pupil's relationship with the knowledge. In an objective class, the teacher must give to the students definite contents and even to transmit this information in a certain snapshot and in a timely rhythm. The computer integrated in pedagogy upsets this dynamics. The pupil identifies his information sources and organizes them in order to give them a sense. So, the pupil makes his knowledge in a personal manner, even if he makes this in collaboration with the others.

This freedom, which the pupil feels when he uses the computer for his work, represents a source of motivation. This autonomy is accompanied by another freedom, generally that of choosing alone their work subject. So, he chooses what interests him and decides to approach his subject in a personal manner. So, who motivates the pupil? Only the thing about a subject that interests him very much? Here, the computer doesn't motivate more the pupil: it only makes that the efficiency of its project to be higher.

There is a risk, that of incapability to differ in different situations, the motivation created by the intrinsic value if the task, the motivation crated by the succeed of the task on the computer. It doesn't know exactly if the motivation of the pupil for the work is in relation with its subject or because the TICs allow him to succeed efficiently his project.

The computer is only a teaching instrument. On the contrary, it encourages more and more the particular pedagogies, as in the case of the constructivism. The constructivist pedagogy, as in many cases applies only in the separated parts. It is a coherent ensemble. A pedagogy that pretends that it is constructivist, but which doesn't allow to the students to examine itself about the problems of the real world, it doesn't achieve. The new functions of the computer become attractive because they ease the application of pedagogies that we think about them that are better for the learning of the students.

3.13 The pedagogic practices

We know that almost all the students are fascinated by the computer. We can easily see their alive interest. Till now, we enumerated some factors which act to the motivation of the pupil which learn with the help of the computer. Another variable, the pedagogic practices called the attention of many searchers and teachers. We consider that the pedagogic practices give learning conditions, which can be motivating or not for the students.

The efficiency of the learning with the computer depends both on the way of learning and on the nature of the computer.

The computer is not a learning instrument as the protection machine, encyclopedia and television. It distinguishes especially through his interactive nature: the other instruments being rather passive. But this is not enough as its simple presence to upset the learning in the class. We think that a teacher is more necessary for a computer than the other teaching conventional methods.

An increase in the motivation of the students, doesn't mean that better they learn, their learning is more meaningful. It is possible that variations in motivation to be owed to the fact that the level of the motivation of the students on the computer has no sense only when it is connected to learning.

The integration of the computers in schools has not the aim to increase the context of the learning, its aim is that of creating a more meaningful, efficient and better adapted to the students learning medium.

The constructivist pedagogy exists before the computer. However the computer eases its bring up-to-date. Searching about the integration of the computer, rapidly results the following equation:

The constructivist pedagogy=a successful integration of the TICs

When the teaching practices become more constructivist, increases or diminishes the motivation of the students?

Many authors speak about a perfect relation between constructivism and computer, so that it could think that the computer includes in his area the constructivism. Actually, it is rather wished the contrary. The computer encourages the constructivist pedagogy, but in the conditions in that the teacher is assured by the advantages of this pedagogy.

4. The real impact of the computer

Doubtlessly, the motivation concept is important, only if it is connected to the learning of the students, learning which depends in his turn on the pedagogy.

The computer, in spite of his spectacular and designing functions, has no value for teachers, only if it is integrated to the learning activities. When this integration is succeded, we must interest upon the nature and qualities of the student's learning. How we can notice if the students' learning with the computer is more or less valid. When it is possible the method learning should be compared in order to evidentiate the advantages and drawbacks of a learning with the computer.

For example, the students of a normal class make a project about the pollution of the underground waters using conventional resources as a library, a visit in a center of depollution, a review written by hand, and so on.The students of another class make the same project, but using resources offered by the computer. When the project was finished, obtained the students of the second class more meaningful information? Of course that if the students of the second class show more interest for the project, the computer deserves a special attention. The computer is not introducted in the classes

only to stimulate the interess of the students, but especially to help them to learn better and to increase their potentiallity.

The last objective of the school is not that of helping the students to assimilate knowledges, but to educate them as persons.

Tardif gives us a higher vision about the effect of the computer's integration in the classes. He writes: „The school could help that the integration of the information and communication technologies to represent a chance to influent more meaningful the senses that the students give to school so that the knowledges that they assimilate and the competences that they develop paying a particular attention to the school motivation and their personal and social development". (Tardif, 1998, p. 17).

The efficiency of the computer in the class is analyzed through the efficiency of the students. The supporters of the computer's integration in the class will appreciate if the students succeed, being also more motivated. Wouldn't be better to analyze the computer varying with his pedagogy?

Everybody distinguishes the introduction of the computer in the classes and its veritable pedagogy integration.

Almost all the students are interested in the computer. The integration of the computer in the classes makes us to believe that students participate more and their commitment is higher, because there are more motivated. The appearances could be wrong. Newman defines the learning concept: „The commitment means more than the motivation or the general wish to succeed in the school. It involves participation, connexion, attaching and integration in specific situations and tasks".

Which are the criterions and the approach after which we analyze the influence of the TICs' integration in the classes?

For certain, the learning with the computer could represent one ot the pedagogic interventions which could allow the students to achieve the objectives proposed by Newman. He refers to pedagogy and instructive practices of the teachers.

We express our doubt that the modern computer, even well-equipped with sophisticated application software products causes a revolution in education. On the contrary, if it brings a revolution in education, it could become the source of a revolution in education. Could act the computer to the pedagogic practices of the teachers or to the class?

The context of the class influences the motivation and indirectly the efficiency of the students. Some searchers show that the new technologies in the class increase the complexity of the student's tasks, their motivation and changes in classroom's organization. The new organization of the class gives the pupil more autonomy, incites him to make from the teacher a facilitor more than once.

It doesn't seem paradoxically the fact that the students are more motivated when they confront with a more complex situation than usually? This situation invites us to reflect. Who would have thought that the students that were on the way to abandon the school, are now interested to learn when they confront with a more complex situation than usually, but provided that the medium to be more complex and not so simple.

The alive interest of the students for the computer couldn't be connected to its complexity, being a challenge?

The using of the computer in a classroom is not always conceived in the sense of the stimulation of the participating learning. Many soft are rather conceived in order that the pupil to use their specific abilities in a matter without to interact with the others. The latest innovations in technology make us to believe that their integration in the classes will have meaningful effects to the pedagogy. The knowledge that have the constructivist pedagogy are not strange by the evolution of the technology. Green (1996) pretends that the teachers ask rather for technological instruments which urge the students to learn in interaction to the applications and real problems, and which appeal to research, composition and communication.

The computer has a direct influence to the motivation of the pupil: nobody dares to dispute this noticeable reality. On the contrary, its indirect influence will be also considerable. We have established a modulus of the impact which the computer will have above the pedagogic practices of the teachers.

5. Conclusion

How could be explained the motivation of the students given the learning supported by TICs? We can assure you that the researchers about this subject will continue assiduousness in next period. However, the computer is not an universal miracle as we thought a quarter of a century ago. Our vision about the impact of the computer in the learning of the students wins in realism. The computer won't replace the teacher. Even more, we think that now the students will need more the teacher in order to be able to use this instrument, even in a class where the constructivism is privileged. Anyway, the constructivism encourages the autonomy and the expression and production liberty by the students.

For the parents, among others, the computer creates new waiting, because they are the only who notice their children's interest. The parents think that the children would be more interested in the school work only if the computer would be integrated in education. This waiting is realist but difficult to achieve. When the children spend hours on computer, what they really do? Is the computer for them an entertainment object or a learning instrument? Do they use their computer especially to communicate with their friends? Do they navigate in an information universe without to form and develop their spirit?

Different factors make that the using of the computer in the school to bring about the commitment, at least the interest of the students. It is not necessary to know if the computer will have any impact in the education. The interrogation is made more about the kind of impact that we wish. Consequently, the teachers are responsible to define the most adequate pedagogic practices in order that this integration to create the best learning for the pupil.

In spite of the spectaculars functions of the computer, it is not a learning instrument more than the chalk, the book and the blackboard.

The computer must be accompanied by a file with the directions that must be followed, when it is brought in the classroom.

In the end of our review about the subject of the motivation of the students regarding the new technologies, we found when all the authors say that the computer act first of all over the education methods. All agreed the fact that to support this sudden change in the education methods happens only then when the teachers adopted another epistemological position regarding the learning and the education. The arrival of the computer only hurries a change that was in the waiting hall.

The witchcraft of the computer is to urge more and more teachers to change their teaching practices adequate to the new perspective.

The only fact to transform the pedagogy of the class makes the comparison between the efficiency of the students of a traditional class and the efficiency of the students of a „connected" class. The essence of these two types of classes is different, because the efficiency of the students is not the best criterion to evaluate the advantages of the technology integrated in the classroom. Anyway many researchers tend to do this. Other researchers try to compare these two class types after a standard criterion, for example the normative tests, used very often in more school matters. However, the nature of the researchers spreads every day.

We think that more and more researchers will study the relation between the pedagogic practices and the impact to the cognition, motivation and the development of the students not only as persons but also as students.

REFERENCES

1. Adams, J.S. (1965). *Inequity in social exchange,* In L. Berkowitz (ed.), Advances in experimental social psychology. New York: Academic Press.
2. Alderfer, C. (1972). *Existence, relatedness & growth.* New York: Free Press.
3. Ames, C. (1992). *Classroom: goals, structures, and student motivation*. Journal of Educational Technology, 84(3), 261-271.
4. Atkinson, J.W. (1964). *An Introduction to motivation.* Princeton, NJ: Van Nostrand.
5. Clément, R., Noels, K.A., Pelletier, L. (1999). *Perceptions of teachers' communicative style and student's intrinsic motivation.* The Modern Language Journal, 83, 23-34.
6. Covington, M. (1964). *The motive for self-worth.* Research on motivation in Education, 1, 77-113, Orlando, Florida, Academic Press.
7. Eccles, D.C. & Wigfield, A. (1985). *Teacher expectancies and student motivation.* In J.B. Dusek (Ed.), Teacher expectation (pp.185-226). Hillsdale, NJ: Erlbaum.
8. Green, J. (1996). Web site: http://www.ncrel.org/ sdrs/areas/issues/students/atrisk/at400.html.
9. Guthie, J.T.&Sweet, P. (1988). *Teacher perceptions and student reading motivation.* Journal of Education Psychology, 90(2), 210-223.
10. Maerhr, ML. (1984). *Meaning and motivation: Toward a theory of personal investment.* In R. AMES & C. AMES (Eds.) Research on motivation in education (Vol. 1).
11. Maslow, A. (1954). *Motivation and personnality.* New York:Harper.

12. Newmann, Fred M. (1989). *Student engagement and high school reform*. Educational Leadership, 46(5), 34-36.
13. Piaget, L. (1970). *Piaget's theory*. In P.H. Mussen (Ed.) Carmichael's manual of child psychology (Vol.1, 3rd ed. Pp 703-732). New York: Wiley.
14. Tardif, J. (1998). *Intégrer les nouvelles technologies de l'information. Quel cadre pédagogique?* ESD Éditeur, 23, rue Truffaut, 75017 Paris.
15. Vroom, V. (1964). *Work and motivation*. New York: Wiley.
16. Weiner, B. (1986). *An attributional theory of motivation and emotion*. New York: Springer Verlag.
17. Wentzel, K.R. (1999). *Social-motivational processes and interpersonal relationships: Inplications for understanding motivation at school.* Journal of Educational Psichology, 91(1), 76-97.
18. Wlodkowski, R.J. (1985). *Enchanging adult motivation to learn*. San Francisco: Jossey-Bass Publishers.

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

COMPUTER ASSISTED LEARNING. CONSIDERATIONS AND METHODOLOGY

Junior Lecturer Constantina Catalano, PhD student
University „Avram Iancu", Cluj-Napoca

Abstract

Computer assisted learning has several benefits: Firstly, the computer is a partner and a tutor in learning, secondly it is a running environment of the specific software and an extension of the teacher during the lessons.

It is important also to consider the computer as an information provider when used offline to consult different sources of data or online when using Internet. One of the advantages of computer assisted learning is that usage of computers is preferred by students, who have the possibility of involving actively in their learning process; in the same time usage of computers by the students leads to a real attendance in the education process.

From a technical point of view, one can use simple solutions as a support for teaching-learning-evaluating. For example, there are on the market several applications for presentation management and multimedia content, which made computers become real assistants of the teachers in the learning process.

Continuous development of technology is favorable for teachers of all types and for students as well. So, why not make full advantage of the new learning tools which we can use and try and integrate those in our existing teaching-learning-evaluating environment? It is important to understand that usage of computers in the learning process does not exclude the traditional lessons as unit of organizing or the existence of teachers.

Key concepts*: (ICT) Information and Communications Technology, Computer assisted learning, advanced distributed learning, independent learning, process, tutoring software, self culture, new learning tools.*

In order to approach teaching in accordance to the reform, one has to weigh pedagogics throughout the changing aspects of instruction strategies, such as the transition from a "passive" pedagogy (discursive, expositive, respectively skillful) to an "active" pedagogy (experimental, operational and of course active) and lately to a

more "interactive" one (digressive, expositive, lively experimental, self-absorbing and most of all interactive). (V. Chis, 2002)

Next, I shall make reference to the structures which the interactive pedagogy calls for in case of promoting it to the modern education which on its turn should be accessible, innovating, creative and continuous. Thus, there are two main aspects vital to this type of instruction:

- *Computer Assisted Learning* – it involves the more frequent use of the computer in didactics either as a learning tool or as a source of data (one should consider the sheer data available on the Internet)
- *Advanced Distributed Learning* – it supposes the ongoing activity of instructing people regardless of their age, location and knowledge. This type of learning also makes use of prior methods such as *e-Learning* (for instance distance learning or virtual learning). It implies a planned teaching-learning experience, based on an organization, which provides for the students teaching aids in an sequential and logical manner in order not to constrain on the attendance of both parties. The agreement is done in various ways, from data on floppy disks (even by mail) to on-line delivery and even by *Distance Learning.*

Another issue which must be clarified concerns the modernization of the education with respect to the diversification and renewal of the teaching techniques. However, when mentioning modernization in certain cases, such as the use or the lack of audio-video systems: TVs, VCRs, or projectors in the school units make more difficult the technology process.

We also have to keep in mind that the transformation should be done in baby steps, while swift changes are harder to comprehend causing disorders not only in the education but also in the system and at a conceptual level. Taking into account the part of the teaching aids in the learning process, it is recommended maximum exploitation of existing technology, by identifying and restructuring the lesson units which can be displayed as such, even if this means a supplementary demand from the part of the teaching staff.

A highly important note in this sense is that of training and instructing the teaching staff with the technical aspects of the technology, as experience showed us that the results achieved by technical means are conditioned rather by their user and not by their quality (M. Ionescu, V. Chis)

1. A brief history of ICT

The history of ICT has started since 1960, when IBM launched its first software for teaching mathematics. In 1963 the same company developed the first specific software of ICT in collaboration with the Stanford University. A few years later PLATO (Programmed Logic for Automatic Teaching Operations) emerged on the market, an ICT, which had a software collection for the use of students, respectively programmes which recorded every step of the learning process for each student and allowing simultaneous access to its users. Over the years it was continuously improved, accomplishing even an online version.

Starting with the year 1995 the Web technology is being used for the teaching-learning activity.

James C. Taylor suggested in 2001 five generation models of distance learning. Generation 1: the correspondence- typing model

Generation 2: the multimedia- typing model, audio and video recordings, computer assisted learning, interactive video.

Generation 3: audio-visual aids and video conferences, audio graphic communication.

Generation 4: a quick to follow learning model- online multimedia interactivity, access
to Internet, a fast-response communication using computers.

Generation 5: the intelligent quick to follow learning model – online multimedia interactivity, lucrative, Internet access, and communication based on automated systems, electronic universities and portal campuses.

2. Concept dimensions

Programmed learning (B.F. Skinner, 1950) as a concept and practice takes shape before the computer assisted learning model, thus laying grounds for future learning methods.

Programmed learning is a learning method structuring the didactic activity applying the principles of cybernetics at a teaching-learning-evaluating level.

This type of instruction requires the scanning of a programmed contents meant for learning, made up of informative notes, at the end of which the pupils have to answer a question or fill in an exercise. (Cerghit, 2002)

On the other hand, computer assisted learning is a modern teaching method supporting a topical didactic principle that of stimulation and stage development speed up of intelligence. (M. Ionescu, 1997)

This type of training holds the following characteristics: the transfer of lesson units to the programme used, the development of software from a technical and educational psychology point of view, the following of programmed learning principles (V. Chis, 1998)

By its didactic nature, the computer assisted learning, follows and enhances the programmed instruction method.

3. Considerations on the role of ICT in education

It is momentous for us to understand that the role of computer in education does not exclude in any case the lesson in its basic form and neither the teaching staff. It is more and more obvious that the teaching staff cannot disregard any longer the advantages that the computer brings. Therefore is no longer surprising to actually find computers in almost every school, even if in most cases are being used at computer

science classes or as a means of rendering lessons and less as a teaching aid for other classes.

Naturally, those computer science classes are not to be neglected, although rarely happens for the teaching staff to consider computer assisted learning as a teaching alternative.

It goes without saying that nowadays education is not complete without a course in computer assisted learning

Likewise, one has to point out some of the cases which allow the use of a computer in education, moreover during a class:

- Teaching a lesson, respectively a unit lesson by highlighting some details explicitly by the use of this didactic tool.
- Computer check of a lesson or even a unit lesson..
- To do exercises in order to develop and improve skills which are adequate for didactic purposes. (I. Jinga, E. Istrate, 1998)
- The use of software makes possible the understanding or study of certain aspects which can be accessed each and every time it is needed to broaden or improve one's knowledge at other branches of learning.

4. Principles of computer assisted learning

On one hand ICT is submitted to a set of in-built guiding principles of the software, and on the other hand covers a series of pedagogy principles.

- The *baby steps* principle is representative for programmed learning and implies breaking down large learning units into smaller ones, thus ensuring a meticulous run through of the contents from the pupils.
- *The step by step principle* can be acquired within the framework of ICT, respectively the appraisal of the pupil.
- *The active participation* becomes an enduring premise of ICT towards guiding the pupil through the selection, understanding and use of information in coming up with a precise solution.
- *Immediate assessment* of the pupil followed by positive or negative incentives according to his/her response creates a fruitful context for teaching pupils.

Nonetheless, the ICT principles take the shape of pedagogy requirements, such as:

- *The guarantee of feedback* (not only of positive incentives but also of complex data detailing to the pupil his assessment)
- *The structuring and planning of teaching-learning units within the framework of ICT* (teaching aids distribution based on concepts and exercises)
- *Didactic strategy and pupil supervision* (a learning programme which can oversee the pupil's reactions or to give him free scope during the exercise)
- *The visualization of stock of knowledge* (it is a three level design: the learning ability of the pupil, the outline of didactic tasks, of contents and obvious activities as well as the illustration of teaching-learning strategies);

- *The visualization and structuring of the lesson using the ICT method* (V. Chis, 1998)
- The principle of *success* concerns the drawing up of the syllabus; according to which any syllabus must shape ideal circumstances for all pupils, where 90% of the pupils should answer correctly out of 90% of the questions (I. Cerghit, 2002)

In this sense the ITC entails four characteristics and these are: Ionescu, V. Chis, 2001, coord.):

- The implementation of computer science
- The pedagogical programming of contents and pupil's activities
- The draw up of the programme
- The setting up of the hardware component.

There is an interconnection between all the four characteristics, altogether ensuring a methodological adequate learning environment.

5. Types of programmes and usage of software

In programmed instruction, one can distinguish three types of programmes: *a linear, branched and mixed type*

The linear or straight-line programme (Skinner type) has a minute structure based around certain steps, which pupils follow accurately. The "solving of step one" is followed by the formulation to which the pupil answers with a question, and then he is given the correct reply and moving on to the next step. In the case of linear programme I chose "The features of adding and multiplication" lesson for the 3rd graders.

Step 1. The formulation

A. When we add, and we shift the order of the terms, *we have the same result*

43 + 29 = 29 + 43

72 = 72

Step 2. Question/Answer

Solve the following exercises and give the correct answer.

23 + 15 = ? 25 + 53 = ?

53 + 25 = ? 15 + 23 = ?

Step 3. Control answer

The key to exercises is provided to the pupil If the answer of the pupil matches, he passes on to the next step; if the answer is wrong he goes back to step 1

Step 4. Formulation B

B. When we multiply, and we shift the order of the factors, the product is the same.

7 x 9 = 9 x 7

63 = 63 etc.

The branching programme (Crowder type) has similar structure with the linear one, except a few features: "the steps are larger", the answer is made up of multiple choice answers, and depending on the pupil's answering he goes on or back one step. See diagram 2

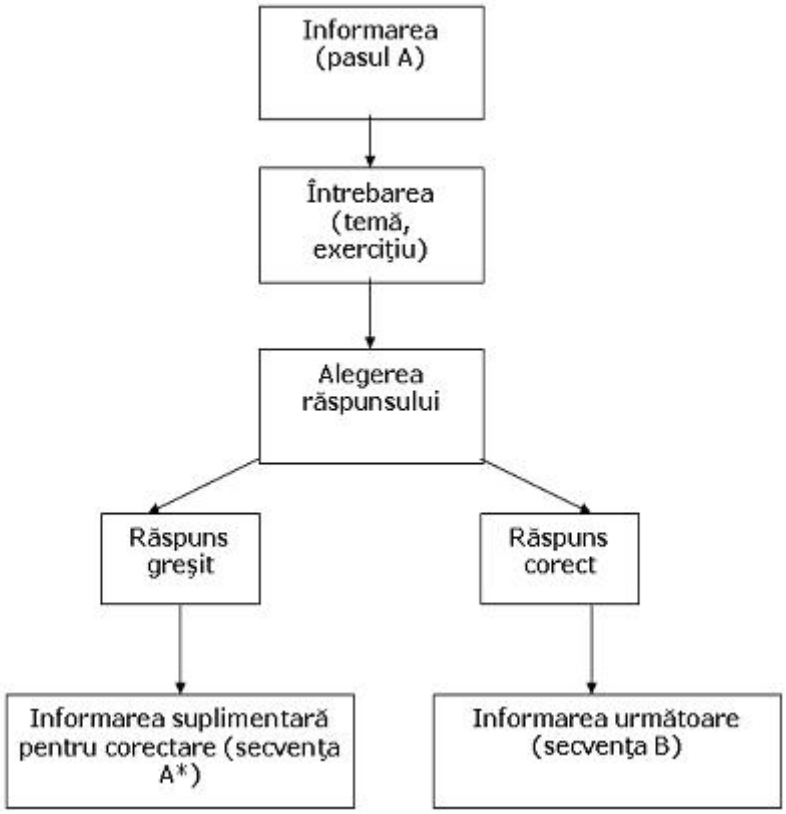


Diagram 2: The scheme of a branching programme (I. Radu, 1997)

As example we suggest the same lesson.

Step1. The formulation

A. When we add, and we shift the order of the terms, we have the same result

43 + 29 = 29 + 43

72 = 72

When we multiply, and we shift the order of the factors, the product is the same

7 x 9 = 9 x 7

63 = 63

If we combine any of the three terms, the result is the same.

25 + 15 + 50 = (25 + 15) + 50 = 25 + (15 + 50)

90 = 90 = 90

If we combine any of the three factors, the product is the same.

4 x 2 x 5 = (4 x 2) x 5 = 4 x (2 x 5)

40 = 40 = 40

Step 2. Question/Answer

Choose the correct answer for the exercises below (by pressing the key corresponding to the correct answer)

23 + 15 a) 25, b) 57, c) 38

3 x (2 x 5)	a) 30, b) 45, c) 20
34 + 20 + 10	a) 54, b) 49, c) 64
15 + 23	a) 42, b) 57, c) 38
2 x 5 x 3	a) 20, b) 30, c) 40
(20 + 10) + 34	a) 64, b) 45, c) 38

Step 3. Control answer

The choice of the pupil's answer will generate a new sequence If the answer of the pupil matches, he passes on to the next step; if the answer is wrong he goes back to step 1

Step 4. Formulation B

When we add a number with 0 (zero), *the sum is the same*.

45 + 0 = 45

When we multiply a number by 1, the product is unchanged.

7 x 1= 7

Etc

In both examples one has to observe not only the correct answer given by the pupil, but also the time of response in case of term shifting exercises.

The mixed programme is the result of combining the above mentioned programmes. In this case the best pupils can go over the familiar steps to new ones while buying time for others who have not understood the exercise.

Thus we can name the following educational software after their functions (I. Cerghit, 2002)

- Practice – good results have been registered in the case of foreign languages and mathematics practice as well as reading and comprehension exercises.
- Improving - exercise repetition
- Prezentare interactivă de noi cunoştinţe, atât a secvenţelor de lecţie pe care le proiectăm în variantă electonică, cât şi accesarea (pe Internet sau cu ajutorul mediilor de stocare) unor fenomene rare (de exemplu, cele astronomice);
- To offer incentives and encourage character building – by creating dilemmas to which pupils come up with their own solutions
- Rare natural phenomena simulation – using animated pictures.
- The supply of cognitive patterns – which capture mental structuring methods of knowledge.
- Knowledge assessment
- Development of skills or abilities (it is more probable by using certain software such as didactic purpose games)

Moreover, software, at large contain databases which in time record pupils' achievements, making them easy to compare, to stock and to access. Also, because of the incredible amount of information that can be stocked, there is always the possibility of revising and bring it up to date.

The didactic software can be approached from two angles: that of a partner and that of a tutor. These models target at the use of purposeful instruction, question wording, the choice of answer (editing a text, pressing a key), giving an affirmative or negative response, data gathering, rewarding etc

- As a *partner* - it entails an adventurous activity and personal structuring of the pupil Under these circumstances, a piece of information or content is being conveyed as well as its assessment and comprehension at a predetermined high-level (especially assessment and practice software)
- As a *tutor* – shares the knowledge, offers guidance by giving instructions, openness to discussions, and concept check by phrasing questions, establishing great achievements through quantity evaluations.

From a tehnical point of view, we benefit of simple usage solutions of the computer as a teaching aid such as PowerPoint presentations or multimedia, thus becoming the teacher's "assistant".

On the other hand, a feature much explored in the recent years is the connection to Internet, through which one can convey and download the information much needed (more precisely on-line activities, e-mail, chatting, or video conferencing) turning the ICT into an undeniable tool in education pedagogy. Consequently, there are a few advantages worth mentioning:

- the ability to rouse the pupils
- the singling out the act of learning
- the skimming through the units at his/her own pace
- the strict overseeing of pupils
- to keep one's self-control
- to give more freedom of action to the pupils
- the encouragement of pupils to a better learning in the shortest time possible.
- to reduce as much as possible idle periods.

In addition, along the ICT can interfere the individual learning, which at the same time is the basis of self-teaching. Thus, the pupil can work individually using an educational software or simply by logging on to Internet

Accordingly, he develops study motivation and professional interest orientations

Conclusions

The ICT can be seen in more than one perspective. Firstly, the computer can play the role of a partner or tutor in one's education, then it can also be used to sustain educational software or as a teaching aid, but it is highly important to mange its use as a data provider and online mediator.

On the other hand, it comprises the two main principles of education: that of formation and informing. Also, its active feature increases the pupils' level of motivation for learning since their interest is for everything that is new and changing.

Thus, we have to keep in mind that the ongoing development of technology is welcoming not only for the teaching staff but also for the pupils and students Therefore, why not explore these new educational boundaries and try adjusting them to our teaching-learning-evaluating context and enjoy the resources they offer.

Nowadays, in the context of modernizing education, the ICT holds along with the advanced distributed learning an essential part in modifying the motionless process of learning into a more active one and turn it into a desirable partnership, where the part of the pupil that of an object of learning becomes a subject of learning.

REFERENCES

1. Cerghit, Ioan, *Sisteme de instruire alternative şi complementare. Structuri, stiluri şi strategii, Ed. Aramis*, 2002
2. Chiş,Vasile*, Provocările pedagogiei contemporane***,** Ed. Presa universitară Clujeană, 2002
3. Chiş, Vasile, *Pedagogia contemporană. Pedagogia pentru competenţe*, Ed. Casa Cărţii de Ştiinţă, 2005
4. Cristea, Sorin, *Dicţionar de termeni pedagogici***,** EDP, 1998
5. Huberman, A.M, *Cum se produc schimbările în educaţie: Contribuţie la studiul inovaţiei,* EDP, 1978
6. Ionescu, Miron, Radu, Ioan, Salade, Dumitru, *Dezbateri de didactică aplicată***,** Ed. Presa Universitară Clujeană, 1997
7. Ionescu, Miron (coord.), *Educaţia şi dinamica ei***,** Ed. Tribuna Învăţământului, 1998
8. Ionescu, Miron, Radu, Ioan, *Didactica moderna***,** Ediţia a II-a, Ed. Dacia, 2001
9. Jinga, Ioan, Istrate, Elena, *Manual de pedagogie***,** Ed. All, 1998
10. Joiţa, Elena, *Educaţia cognitivă*, Ed. Polirom, 2002
11. Joiţa, Elena, *Pedagogia. Ştiinţa integrativă a educaţiei,* Ed. Polirom, 1999
12. Maior, Aurel, Ploscaru, Nicu, *Matematică- manual pentru clasa a IIIa*, Ed. Aramis, 2002
13. Nicola, Ioan, *Tratat de pedagogie şcolară***,** EDP, 1996
14. Taylor C., James, *Fifth Generation Distance Education* , USQ, Australia
15. http://www.1educat.ro/elearning
16. http://www.fernuni-hagen.de/ICDE/D-2001
17. http://www.kappa.ro/idgro/cworld/cw7-16-1.html#a12

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

THE HISTORY AND COMPARATIVE PEDAGOGY TEACHER TRAINING

IOAN POPASU, THE FOUNDER OF ROMANIAN ORTHODOX HIGHSCHOOL IN BRAŞOV

Professor Voicu Lăscuş, PhD
"Avram Iancu" University, Cluj – Napoca

Abstract

The creation of the Orthodox Romanian High school in Brasov is the result of some natural, insistent and repeated demands of the Romanians from Transylvania, who until 1859 had only 4 post elementary schools in Blaj, Beius, Nasaud and Sibiu. The demarches in order to obtain the official approval and recognition of the Orthodox Romanian High school at Braşov became a real fight of the Romanians for their rights and lasted three decades. The first action was initiated by George Baritiu in 1837, being followed by the action deployed by A.I. Laurian in 1842. In 1844, Ioan Popasu (1808-1889) started new demarches. During that particular period he was archbishop of Braşov. His assiduity was to be followed by the opening of the gymnasium in 1850. The imperial authorities recognized the Gymnasium in 1856 and the Orthodox Romanian High school in 1868.

The herein paper presents important data and aspects within the social-historical context prior and contemporary to the creation period of the High school, Ioan Popasu's contribution as well as aspects of its functioning in the first years and its significance for the Romanians in Transylvania.

In 1850, the Romanians in Transylvania obtained the right to establish a highschool in Romanian, after long toils and struggle. Up until then, apart from popular schools (elementary and confessional) and border-line schools the Romanians in Transylvania only had access to four post-elementary schools in Blaj, Beiuş, Sibiu and Nasaud.

The most important role in the establishment of the Braşov Gymnasium, later to become The Romanian Orthodox High school, was played by Ioan Popasu who did not enjoy a unitary monograph so far, although he had a rich biography and was an active presence in the events in 1848/1849 and in the following decades, his deeds remaining scattered in the writings of his time and dispersed in various posthumous documents.

Ioan Popasu was born in Brasov, in 1808, his father being a renowned merchant in this economically and culturally powerful city.

After completing his elementary education in his home town he took up theology in Blaj and Vienna. After graduating he took the opportunity to become a priest at the Saint Nicholas Church in Scheii Braşovului in 1837.

His studies in Vienna were possible because he had obtained a scholarship on the part of the Sidoxial Fund. Such scholarships were enjoyed by a small number of Romanians such as Gheorghe Lazar, Ioan Moga, Moise Fulea and Nicolae Popea. From Gheorghe Lazar to Ioan Popasu only 14 young Romanians had obtained such scholarships.

The Sidoxial Fund scholarship was established as a result of an Imperial resolution in 1809 and it admitted the access of Romanian orthodox students at the University in Vienna but not on a state-endowed scholarship but rather on a scholarship granted by the special funds based on the contribution of orthodox families. Apart from the fact that, due to the origin of the funds, these scholarships were few, there added to this the opposition of the Church in Carlowitz that wanted to maintain its supremacy over the Romanian Orthodox Church in Transylvania.

As a result of favorable circumstances as will as of his superior professional, cultural and personality qualities, Ioan Popasu shortly makes Dean so in 1845 when the bishop Vasile Moga dies; the young dean could consider climbing the church hierarchy. The death of the bishop brought up the problem of a vicar to ensure the leadership of the diocesis until the appointment of a new bishop. The nominees for the vicarage were Ioan Moga, Moise Fulea and Ioan Popasu. The first two were nephews of the late bishop. In copetition with such positions, Ioan Popasu „attempts through interventions, to ensure his suppost of the Court and Governor[1]". However, none of the three candidates pleased the Imperial Court- the first two due to their closeness to the late bishop, and the latter on account of his youth. In exchange the Imperial court invokes the recommendations of Raicici, head of church in Carlowitz and of vice-chancellor Jösika and appoints Andrei Şaguna vicar in Sibiu.

The consequence of this nomination was the intensification of the struggle of orthodox Romanians to be acknowledged their traditional right to choose their own bishops. This struggle will eventually lead to the awaited victory, though with some limitations, by the resolution on July the 24-th 1847.

The election of a bishop for the Sibiu diocesis took place, as a result of the above mentioned resolution, on December the 1st - 2nd 1847. The votes were obtained by Ioan Moga, Moise Fulea, Andrei Şaguna, Iosif Ighian and Ioan Popasu (the least known of them was Iosif Ighian). It would be unfair for the latter to remain unmentioned because he later became bishop, being a consistent and efficient

supporter of students in Vienna. The number of votes obtained by Ioan Popasu was eleven. The Imperial Court did, however, confirm Andrei Şaguna out of the above mentioned candidates, according to expectations, by order of the emperor on February, 2nd 1848.

It was the second failure of Ioan Popasu, one that he lived in great anguish, as mentioned by his acquaintances, but the events that followed trapped him in new fields to assert his qualities.

Thus, Ioan Popasu took part in the Gathering of Romanians in Brasov, led on April 23rd by Simion Bărnuțiu during which he declared himself in favor of collaboration with Eftimie Murgu and Aron Pumnul. This gathering took place, as known, as a preparatory phase for The Blaj Gathering. Among other things, they decided to call Eftimie Murgu to join and Ioan Popasu took it upon himself to write to the former about this[2].

The reunited conference of Orthodox Romanians in Sibiu on December 16th/ 28th has Ioan Popasu among its participants. It is now that they decide the departure for Vienna of the Romanian delegation made up of A. T. Laurean and Ioan Popasu, later to be joined by others. In fact, the members of this delegation had been decided earlier on by the Romanians, as stated by Cornelia Bodea "a few weeks earlier"[3], Nicolae Balcescu himself being aware of its components.

There were rumors that at the Braşov conference on April the 23-rd several representatives of Banat[4] had joined in which was not out of the question since Ioan Popasu and A.T. Laurean went to Vienna on a route passing through Banat (Sibiu-Deva-Lugoj-Zagreb-Vienna) whereas another delegation made up of A. Şaguna, Iacob Bologa and Grigore Pantazi took another route (Sibiu-Bucureşti-Focşani-Iaşi-Cernăuți-Lemberg-Olmutz). These routes were established according to the contact interests with other Romanians. Thus, Ioan Popasu and A.T. Lauren would seek advice from Ioan Mocioni, Lucian Mocioni and Patriciu Popescu in Lugoj[5].

The half delegation arriving in Vienna was there completed by Ion Maiorescu. At that date Mihail Kogălniceanu was also in Vienna. The group of Romanians then took the road to Olmütz where the emperor was and by whom the delegation was received on February the 13-th/ the 25-th 1849. There was an enlarged delegation comprising delegates from Transylvania as well (Andrei Şaguna, A.T. Laurean, Ioan Popasu, Iosif Pop, Vasile Ciupe, Iacob Bologa şi I. Stoica), from Bucovina (Eudoxiu Hurmuzaki şi Mihai Botnariu), from Banat (Ion Mocioni, Lucian Mocioni şi Ioan Dobrescu). Crişana and Maramureş were represented by Constantin Poruțiu. The delegation was also accompanied by Ion Maiorescu. Although a Transylvanian himself, he was not an official member of the delegation being on his way back from a diplomatic mission in Frankfurt and, as a consequence he was not one of the representatives that signed the official act handed to the emperor. The demands of the Romanians were read by Andrei Şaguna to the emperor. The central idea of the delegates present at the conference in Olmütz,
February the 13-th/ the 25-th 1849, "has been the necessity that all the Romanians under the rule of the Hapsburg Empire have one single head of church and one single head of state[6]".

Thus Ioan Popasu took part as an active member in an essential political action of the unified Romanians in the Austrian Empire. With regard to this action, more precisely to some aspects of its initiation, Ion Maiorescu (Ioan Popasu's brother-in-law) expressed his discontent. Thus, a letter of Ion Maiorescu, addressed to Ioan Eliade Rădulescu , shows that the Romanian delegation had left Sibiu rather late :" The committee[7] which at first did not know what to do and how to behave, sets Laurean and Popasu on their way to Vienna and they don't arrive there until February the 10-th…[8]". Ion Maiorescu's discontent might have been caused by the assumption that had the Romanian delegation arrived earlier in Austria, they would have achieved a better preparation for the audience in the imperial chambers and chancery.

At the National Gathering in Blaj on May the 15-th 1848 Ioan Popasu was elected one of the 10 secretaries of the gathering and also in the delegation that would present the petition of Romanians to the emperor[9]. The great confidence awarded to secretaries consisted of the fact that, apart from establishing and abiding by the protocol, they were entrusted with the formulation of the national petition:" The secretaries were elected, says the unofficial protocol, kept at Library of the Academics in Cluj, with the purpose of delivering the protocol and petition so that the Romanian nation regain all its political rights according to the principle of righteousness, equality and fraternity…[10]

Afterwards he was present at the fulfillment of the second task he had received during the Blaj Gathering: "A part of the Romanian delegation, led by the dean Ioan Popasu, professor Laurean, without president Şaguna, running late, and without vicepresident Nopsta, having left the delegation, was present on June the 15-th in Innsbruck to meet the emperor."[11]

The emperor's answer was delivered to the Romanian delegation in writing on June the 11-th. The date of the answer was June the 7-th, one day after the emperor had signed the decision to unite Transylvania to Hungary.

Deeply dissatisfied, the Romanian delegation demanded a new meeting that would take place on the 16-th June, this time being led by its president Andrei Şaguna. Ioan Popasu was present at this meeting as well but unfortunately, the results did not turn out for the better.

The attempts of the Romanian delegation in Austria went on. On November the 17-th 1849 Ioan Popasu takes part in a new delegation in Vienna together with Simion Bărnuțiu and A.T. Laurean in order to protest and fight against the new administrative separation of Transylvania initiated by governor Wohlgemuth to the disadvantage of Romanians. Also, the Romanian delegation would protest against the arrest of Avram Iancu and Axente Sever, arrests ordered by the governor of Transylvania. On December the 2-nd the delegation reached Vienna. The petition was presented to the emperor and was signed, once more, not only by the representatives of Transylvania, but also by those of Banat and Crişana.

On the occasion of this petitioner initiative, Ioan Popasu took part in the discussions of Romanian delegates with the Serbian, Croatian and Slovene delegates about the coordination of actions of regaining the rights of these nations that had been badly injured by the 4th March 1849 Constitution.

The next year emperor Francisc Iosif I visited Transylvania. When the emperor arrived in Brasov during the summer, Ioan Popasu salutes him on behalf of the inhabitants of this city.

In the same year, on March the12-th 1850, Ioan Popasu takes part as Dean at the Sibiu Synod , where was proven beyond doubt "first of all the ' fair equality' of the Romanian Orthodox church , nation and language as compared to any other Transylvanian nationalities or confessions". He was also among those who signed the Romanian Act for the re-establishment of the Orthodox Church in Transylvania dissolved (at the unification in 1700 of a part of the Orthodox Church in Transylvania with the Catholic Church) and for its separation from the Serbian Church.

Ten years later, on May the 10-th 1860, Ioan Poapsu is among the 176 Romanian intellectuals (among George Barițiu, Timotei Cipariu, Ioan Axente Sever, Pavel Vasici, Iacob Bologa, Aron Densuşianu, Ioan Micu Moldovan, Andrei Mureşianu, Ioan Codru Drăguşianu etc.) who demanded approval for the establishment of a cultural society for the Romanians in Transylvania. As part of this initiative he participated in the gathering of establishment of the society unfolding in the building of Romanian Orthodox Seminary in Sibiu on March 9th - 21st 1861.On September 6th, 1861 The Imperial Court in Vienna approves the establishment of Astra, whose founders was, among others, Ioan Popasu, not by signature only, but by means of his fervent activity to create and make it flourish over the next years.

In the meantime, on December the 10-th 1860, Ioan Popasu took part in another delegation of over 20 members led by Şuluțiu that presented the emperor in Viena the request for the approval of a general congress of Romanians due to take place in Brasov, also claiming a number of other things. They obtained approval for a national conference on January 1st - 3rd, 1861 in Sibiu, also attended by Ioan Popasu as Dean. He also attended the Romanian's Conference on April 8/20th -12-24th, 1863 in Sibiu during which he was elected in the commission for the drawing up of the demands to the emperor in which they would eventually reiterate the demands of 1848. Once again he works alongside George Barițiu, Timotei Cipariu, Iacob Mureşianu, Iacob Bologa, Andrei Şaguna etc.

On the same year, 1863, Ioan Popasu becomes a royalist deputy in the Transylvanian Dieta alongside Şuluțiu, Ioan Alexei, Alexandru Dobra (bishops), Paul Vasilici (doctor), Macedon Pop (cleric) etc, fighting together for the recognition of the Romanian nation and for the safeguarding of Transylvanian independence from the actions and increasing pressures of Hungarians that aimed at integrating Transylvania into Hungary.

On December the 24-th 1864 an imperial decree finally re-establishes the Orthodox Metropolitan Church of Transylvania in Sibiu, Andrei Şaguna becoming metropolitan. Thus, Andrei Şaguna demands the establishment of six episcopacies (Bucovina, Arad, Timişoara, Carabsebeş, Oradea şi Cluj). Only two are approved of by imperial decrete on June the 8-th 1865, Arad and Caransebeş. Naturally, Andrei Şaguna had considered the candidates for the episcopacies and had taken measures in this respect. Ioan Popasu was among the first options for such a promotion. Thus, shortly after the imperial approval, we witness the investment of Ioan Popasu as

bishop of Caransebeş by Andrei Şaguna on August the 15-th 1865. The special significance awarded by Andrei Şaguna to this event can be seen in the fact that in order for him to perform this episcopalian investment he was an absentee for the third time in a row at the General Gathering of Astra that was taking place that day in Abrud (he had missed the Blaj Gathering working on the Dieta and the Haţeg on account of illness).

From that moment on until the end of his life Ioan Popasu led the Orthodox Episcopacy of Caransebeş.

Although caught up in such a long and intense struggle, Ioan Popasu did manage to find the time and energy to act in the best interest of the Romanian system of education in Transylvania, a field in which his contribution would also be crucial.

Romanians had always wanted to develop their national educational system. A significant event was in 1837 when the Romanians in Braşov tried to establish a Romanian gymnasium. The initiator of this project was George Bariţiu who actually wanted to set the basis of a Romanian highschool. Beside the disapproval of the authorities, the initiative was also rejected by the opposition of the Greek Componia in Braşov and of the Greek Church. This opposition was generated by the fact that The Greek School in Braşov was in poor shape and the proposal was that it be transformed in an orthodox gymnasium within which a commercial and polytechnic school should function as well. The organization of this gymnasium was claimed by Romanians that would fund the project with the money awarded by Constantin Brâncoveanu for a Romanian school and by the contribution of the Romanian community.

In 1844, as orthodox Dean of Braşov, Ioan Popasu launches new attempts towards establishing a new Romanian school in Braşov and raising the level of instruction of Romanian children. His action in favour of the Romanian system of education was neither singular nor isolated. The vicar Marian had struggled for a gymnasium and a military academy in Năsăud. In 1842 A.T. Laurean demanded bishop Moga to sustain the establishment of secondary and post-secondary schools in Alba-Iulia and Haţeg. In 1844 the headmaster of Romanian schools, Moise Fulea, and bishop Moga reiterated the requests of Romanians for the establishments of schools. Therefore, Ioan Popasu did fit into a larger frame of movement that aimed at the formation of a Romanian class of intellectuals more numerous and more active in various fields and at various levels.

In 1844 the site for the construction of this school is bought with Romanian resources. In 1845 and 1847 the deputies of Braşov support the cause of the gymnasium. In 1848 the two Romanian schools in Braşov are joined in a national central school.

In 1850 Ioan Popasu continues his attempts to establish a Romanian gymnasium under the circumstances of the reclaiming of the Romanian's sacrifice during the 148/1849 Revolution. He has the ability to solve the attempts at a local scale by informing the authorities that the gymnasium will be financed by Romanian contribution. A commission is founded under the ruling of Ioan Popasu and comprising Ioan Iuga, George Bariţiu, Iacob Mureşianu, Ioan Pantazi, Nicolae Dima and Iosif Barac.

Ioan Popasu's success was due, to a great extent, to the fact that he was sustained by the Romanian merchants in Braşov. Because of this, it was also unofficially known as "the school of the Romanian merchants in Braşov".

Ioan Popasu's perseverance in the creation of the Romanian gymnasium went as far as his participation in the physical labor of building it. Referring to this, Iona Lupe wrote that Andrei Bârseanu "tells a characteristic detail about Dean Popasu, in his attempt to involve all the Romanian souls in Braşov in the building of this school, took the students in his free hours advising them to carry rocks for the foundation of the building. The first students of the high school performed in high spirit the advice of their spiritual father"[12].

The initiative in which Ioan Popasu was involved with all his belief was by no means an easy one:" The financial difficulties were extensive. But the relentless persistence of Popasu managed to defeat them by persuading in words even the richest of them all to open up their treasury (….) and even the poor, so that they would not delay the taxes., in order for a 'Romanian Jerusalem' to rise in Gabrovenii Braşovului, an imposing edifice meant to shelter and enlighten the young generations of a people restrained by circumstances in the slavery of darkness"[13].

The fact that Ioan Popasu knew and managed to get involved in the overcoming of material and political difficulties related to the establishment of the new school in Braşov had larger significance, as emphasized by history: " The material support provided for the design of the gymnasium , the essential improvements to existing schools and their teachers under the urge of Dean Popasu around the time of the Revolution all mark the radical change of the strong community in Braşov in favor of the promotion of the national culture."[14]

As a result of such efforts, on October 1, 1850, the courses for primary education began and for the secondary education class led by Gavril Munteanu they were inaugurated on November, 1st the same year. Among the first students of secondary education class was Titu Maiorescu, the nephew of Ioan Popasu. Referring to this special moment Ioan Lupaş wrote:" The enlightened priest and Dean of Braşov, Ioan Popasu, a true precious stone of the Romanian Church in the 19-th century, managed to create the necessary means out of nothing so that classes of the designed gymnasium open in the autumn of 1850...".[15]

Also regarding this accomplishment the same historian noted:" Deeply pervaded by the conviction that national rights for which the Romanians in Ardeal bled at the Revolution of 1848/1849, would be valued and bonded by men fulfilled in schools and endowed with solid knowledge". Dean Popasu was relentless in his attempt to persuade believers to sacrifice all the necessary for the construction of the new 'Romanian Jerusalem' in Gabrovenii Braşovului."[16]

In 1856 the authorities acknowledge the right of the inferior gymnasium and afterwards, in 1868, the right to function as a full high school.

It is obvious that the establishment of the gymnasium was not the only thing that required funding. The funds were required to keep the gymnasium functioning. Fully aware of this, „ Popasu had planned since 1855 to value the historical rights of the St. Nicholas Church in the best interest of the school, built on the ancient

documents of contributions in the name of the merciful rulers of Moldavia and Muntenia. In 1860 , with the help of his brother-in-law, Ioan Maiorescu, Popasu managed to arouse Prince Alexandru Cuza's interest and thus the same year witnessed the vote of the subvention of 18,500 lei on the part of Moldavia and in 1861 15,750 on the part of Ţara Românească"[17].These contributions were annual.

Among those who financially supported throughout the years the Romanian Highschool in Braşov were the members of the Hurmuzachi family in Bucovina, the Mocioni family in Banat, the Dobre and Sima families in Vienna, the Sturzeşti family in Moldavia, the Rosetti family in Bucharest, also M. Kogălniceanu, Titu Maiorescu and many others.

The establishment and functioning of the gymnasium and then of the Orthodox Romanian High school in Braşov have represented a great accomplishment, because of the role played in the formation of the Romanian intellectual class, in the development of cultural awareness and of the acknowledgement of national unity: "The ardent enthusiasm and the spirit of sacrifice that characterized Ioan Popasu and all his companions in the troubled years of the national awakening, engulfing all generations that lived it in with a thirst for Romanian learning and Christian virtue"[18].

Those who benefited from the light spread by this cradle of Romanian culture honored the memory of those who built it and kept it alive. An assortment of Ioan Lupaş, we understand that the Highschool in Braşov displays the portraits of the enlightened headmasters, Gavril Munteanu and Ioan Meşotă and those of Deans Şaguna and Popasu.

ENDNOTES

[1] Ladislau Gyémánt, The National Movement of the Romanians in Transilvania, 1790-1848; E.D.P., Bucharest, 1986, p.158.
[2] Al. Papiu Ilarian, The History of Romanians in Superior Dacia, I – II, Viena, 1852, p. 124.
[3] Cornelia Bodea, The Fight of Romanians for National Independence, 1834 – 1849, Ed. Acad. R.S.R., Buc., 1967, p.185.
[4] This assertment belongs to I.D. Sârbu in his work The Revolution in 1848 – 1849 in Banat, citing the memoirs of A.Kanitz.
[5] Patriciu Popescu was at that time administrator of the dyocese of Caransebeş in which Ioan Popasu will become Dean;
[6] Vasile Netea, The fight of the Romanians in Transylvania for National Independence (1848 – 1881) Editura ştiinţifică, Bucureşti, 1974, p.38
[7] It refers to the Committee of Romanians in Sibiu
[8] Apud Cornelia Bodea, Op.. cit., p.347.
[9] V. Cheresteşiu, The National Gathering in Blaj, Editura politică,Bucureşti, 1966,p.470
[10] V. Cheresteşiu, Op. cit., p.441

[11] V. Cheresteşiu, Op. cit., p.507
[12] Vasile Netea, Op. cit., p.102
[13] Ioan Lupoş, Op. cit.., p.268
[14] Ladislau Gyémánt, Op. cit., p.402
[15] Ioan Lupoş. Op. cit., p.268
[16] Ioan Lupoş,Op. cit., p.286
[17] Ioan Lupoş, Op. cit., p.269
[18] Ioan Lupoş, Op. cit., p.269

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

BOOKS AND IDEAS

THE GENERATIVE CHARACTER OF THE CONSTRUCTIVIST PARADIGM IN THE INITIAL FORMATION OF TEACHERS

Senior Lecturer Corneliu Novac, PhD
TSTD, University of Craiova

Review: Elena Joița (coordinator), 2005- "Constructivist Strategies in the Initial Formation of Teachers"- Universitaria Publishing House, Volume I, Craiova, 430p.

Elaborated in a postmodern context, the constructivist paradigm nowadays holds an important part in the frame of explanatory theories on the organization and functioning of society and implicitly on the development of man as a personality. Essentially, the constructivist paradigm asserts that human development is determined by the way in which

every human being builds oneself by means of the tools provided by nature (genetic information) and by society, that is by reporting oneself to a world in which he/she is integrated in a more or less creative manner. The formative features of a constructivist approach spring from the cognitive need felt by all people, regardless the age, to award significance to their own deeds and to the problematic situations experienced.

In 2004 a team of the Teaching Staff Training Department of the University of Craiova has obtained a CNCSIS financing for a grant research project for the period 2005-2007, having as research topic the formative features of a constructivist approach applied to the field of initial teacher formation. The results of this research are presented in an analytical manner in the volume Constructivist Strategies in the initial Teacher Formation, coordinated by Professor Elena Joița. The volume referred to is made up of 5 sections:

- The need for constructivist training for teachers;
- Objectives and purposes in training a constructivist teacher;
- Strategies and instruments of constructivist training;
- The constructivist planning of teaching;
- The evaluation of the constructivist teacher.

The accomplishment of this paper has required an enormous amount of work on the part of its authors, both as far as the bibliographical research was concerned, as well as in point of the analysis and interpretation of strategic solutions proposed in the realm of practical activities on the cognitive-formative side.

We would like to mention some of the most important contributions of the team, referring to the objectives of the first stage:

Joița Elena: has conceived and finalized the research project as a Grant project, starting from the development of a previous interest regarding the modernist approach to the aspects of education and to the formation of new teachers; she has applied the requirements and procedures of the experiment to the four samples chosen, by reorganizing lecture courses (in a constructivist manner or by combining it with the classical lecture course). The results are to be noticed in the emphasis of the initial possibilities of applying constructivist ideas, in the planning and checking of a new model of instruction (CECERE), in the specific application of the principles of constructivist learning (of independent construction and group construction of knowledge), in the evaluation of specific instruments (the cognitive map, the solving of real situations).

Vali Ilie has interpreted, quantitatively and qualitatively, the results of the tests applied to the students involved, with the purpose of pointing out their value in the volume announced for 2005; he has pointed out the factors and restrictions applied to the new model of formation: deficiencies in the organization of this type of activity within the framework of existing didactic materials and conditions, the lack of educational means, the students' learning styles and motivation.

Popescu Mihaela has applied, quantitatively and qualitatively, the results of the initial and final trials of the topic, as conceived by the team, and has offered solutions for perfecting the experiment; she has applied and adopted some instruments proposed in the topic: the cognitive map, the projection of didactic and managerial situations in a constructivist manner.

Frăsineanu Ecaterina has applied and interpreted, in point of quantity and quality, the results of the final evaluation tests, adapted to the topic, the results later being incorporated into the general frame analysis; she has noticed and analyzed the objective and subjective difficulties in the application of the experiment; the poor learning resources, the persistence of previous abilities and motivations for learning, prejudice regarding teacher formation.

Mogonea Remus has identified aspects favoring the constructivist formation of teachers, has insisted on their expansion, he has observed the qualitative leap registered in the second semester and has designed actions for development; he has synthesized the observations of students, the difficulties pointed out: the material and didactic means required by the constructivist approach to learning, the discrepancy with the classical style of teaching other disciplines, the struggle against prejudice in the pedagogical formation of teachers.

Stefan Mihaela has interpreted, quantitatively and qualitatively, the results of final evaluation tests, designed in accordance to the objectives of the formation of the constructivist teacher.

Mogonea (State) Florentina: like the rest of the team, she oriented her first course of action in the direction of understanding and completing the theoretical framework of the topic, on formulating hypotheses and directions for action within the context, on the design of support materials and instruments required by this new way of learning.

Novac Corneliu has provided the team with support in clarifying the psychological basis of constructivism, in understanding the dimensions of the psychology of the students involved in this way of learning formation, in the factorial interpretation of results, in shaping the experiment for improvement.

Boboilă Cristea: among the primary experimental measures of the topic, we point out: the constructivist learning through colaboration, the sketching of conditions for using Computer Assisted Learning (CAL) in context, identifying difficulties in the processing of information with CAL in various samples, the organization of subjects' guidance according to their initial cognitive potential; verifying the roles of the constructivist teacher, identifying combination procedures between classical and constructvist methods in using the computer, the exercise of exposing students to real situations (simulations) of class instruction using CAL, the use of the computer in the qualitative and quantitative evaluation of the results of constructivist learning.

Boboilă Cornelia has used specific computer programs for the construction of Power Point presentations of some constructivist instruments of learning and for the graphic introduction of various interpretations given to the results by team members.

The conclusions of the research in the present volume provide an answer to the following problems regarding the increase in the quality of teacher training:

- the adaptation of methodology of initial formation to the new paradigms of education, among which we refer to cognitivism and constructivism;

- their use in the designing of competences later to be used and manifested in future school practice, overcoming the classical behaviourist method;
- the facilitation of future possibilities so that teachers may benefit from the free traffic of staff and services in the educational system, that they can provide in a European framework, not only in Romania.

This paper offers educational strategies and valid didactic solutions from the perspective of cognitive constructivism, making direct reference to the psychological mechanisms of information processing on the part of the student in the context of learning situations. Among the elements of original contribution in the field of the constructivist formation of teachers, we mention the following as being the merit of the present volume:

- the comparison, selection and evaluation of our national educational value for this professional formation, specific to Romania, of information, models, criteria, instruments for the cognitive and constructivist formation;
- the conception and validation of an instructional model built in this manner and adapted to the specificity of initial teacher formation;
- the formulation of solutions for the elements of an initial formation curriculum for teachers, from a pedagogical and managerial point of view, by means of the Teaching Staff Training Department.
- The design of evaluation standards for derived competences, as a base for the profession of teacher, within the European framework.

It is rather obvious that the authors set out to suggest teachers of various disciplines methods of formative creative application of the school curricula, through the lens of the constructivist model. We have pointed out the richness of examples in the above mentioned chapters, which provide a generous invitation addressed to university professors, practicing teachers, to authors of school textbooks syllabi and curricula, to students undergoing various forms of psycho-pedagogical and methodological training to set emphasis on procedural learning, on the structuring of strategies and didactical methods based on constructivism meant to favor the acquisition of operational competences without which the didactic vocational course of action would be unconceivable.

ANNALS OF THE UNIVERSITY OF CRAIOVA, Psychology-Pedagogy, an-V, 2006, nr. 13 – 14

THE PEDAGOGY OF THE III-RD MILLENIUM: QUESTIONS, IDEAS, HYPOTHESES, AND SOLUTIONS

Junior Lecturer Florentina
Mogonea, Ph.D. student
Junior Lecturer Florentin-Remus
Mogonea, Ph.D. student
TSTD, University of Craiova

Review: Miron Ionescu (coordinator), 2006*, "Paradigmatic Changes in Education and Instruction"*; The Universitas Collection, the Pedagogical Series, Eikon Publishing House, Cluj-Napoca, 345 pages.

The alert pace of changes affecting the society of the XXI-st century is pressuring the educational system to adjust to these changes as they arise. This is why educational systems all over the world perceive this attempt to adapt as a real challenge. Also, this accounts for the reasons why researchers (pedagogues, sociologists, psychologists) and also practicing teachers are trying to answer the questions raised by the great problems of the XXI-st century and to come up with solutions that provide increased efficiency of the teaching process.

This renewing yet risky and necessary path is approached by Professor Miron Ionescu's coordinated work, "Paradigmatic Changes in Education and Instruction", following a first attempt of similar preoccupations represented by "Contemporary Approaches of the Sciences of Education", which appeared in 2005 and was coordinated by the same author.

This book appeared out of the extensive experience of an excellent teacher who has profoundly studied the educational realities not only through the eyes of a theorist but also through the means and artistry of a practician and methodist and also according to the bold approaches of a researcher. All these advantages justify the author in being the coordinator of 21 doctoral students in various stages of their doctoral apprenticeship. We consider the author's initiative an excellent one in the hope that it will serve as an example to be followed by other doctoral or scientific projects coordinators both in the field of educational sciences and in other fields as well.

The research studies gathered in this volume are preceded by an Argument, signed by the volume's coordinator, setting out to be a motivation for the occurrence

of this book, an explanation of its contents as well as a recommendation to students, teachers, parents and to all those that do not remain indifferent to modern changes within the human community and implicitly within educational systems worldwide.

The research studies cover an extensive thematic area and they propose innovation at the level of the instructional-educational system through the exploitation of the latest research activities in the field of educational sciences. By emphasizing the formative-educational character of the process of teaching, a part of the studies confirm the theoretical course of action by means of the data obtained by the undertaken research, statistically validated by correlation indices. The didactical preoccupations are joined, in this volume, by methodical ones (religious education, physical education, professional education), psycho-pedagogy, and also preoccupations regarding the continuous formation of teachers. We would also like to signal the presence of studies regarding the future development of the educational systems all over the world, which will, undoubtedly, be based on the use of computers (computer assisted learning and the role of teachers in a virtual classroom). With the purpose of demonstrating that any educational activity should be preceded by a theoretical background to justify it, in its turn preceded by thorough scientific research, the coordinator of the volume is signing a study of the essential conditions for the selection of sample groups of subjects for the study in the pursuit to identify the knowledge of success steps within the classroom.

Although the work approaches a variety of topics, it generally creates the impression of a homogeneous construction due to its authors' common interest in providing practical solutions (and even pragmatic ones) for the various problems under scrutiny. The volume bases its discussion on seven thematic areas, each comprising several studies that approach various controversial issues and forward solutions for the improvement of the theoretical practical and investigative courses of action.

Without further detailing, we shall present the seven fields of interest covered by the studies in this volume, as well as the subjects dwelt upon by their authors in their articles:

- *Education. Educational change and modernity* (the involvement of meta-cognition, reflection in the process of education; increasing efficiency in communication; the development of intellectual labor techniques; diminishing learning deficiencies; the relationship between teacher-student; doing away with school violence).
- *Educational management. Theoretical foundations and practical applications* (class management; the management of communication; interactive management).
- *Educational evaluation and self evaluation* (self evaluation on the part of the high school student; computer assisted evaluation and self evaluation).
- *Moral and religious education. The reform of the theological system of education* (the role of classical pedagogy in the development of religious education; the place of religious education in the school curriculum).

- *Physical education. Means of achieving it* (sports activities and educational factors; the activation of students through mountain skiing).
- *Education and career* (the increase in professional development for rural teachers; the implementation of career educational programs for high school students).
- *Educational research. Application courses of action* (conditions for the constitution of representative sample groups for research in the fields of religious and moral education; presentation of preliminary data of the research).

By the diversity and novelty of the scientific research and practical investigation, the volume "Paradigmatic Changes in Education and Instruction" may provide answers and solutions to some of the problems of contemporary education.

INFORMATIONS FOR CONTRIBUTORS

Manuscripts for publication, should be submitted to **PhD CORNEL NOVAC (e-mail: corneliunovac@yahoo.com** or **dppd@central.ucv.ro**), Editor-in-Chief, Psychology-Pedagogy AUC, Teacher Staff Training Department, University of Craiova, str. A.I. Cuza, nr. 13, Craiova, 200585, Romania.

Requests for the original typewritten papers:

1. Chapters or sections should be designated with arabic numerals and subsections with small letters.

2. Margins:

-up: 5 cm

-down: 4.75 cm

-left: 3.75 cm

-right: 3.75 cm

3. Spacing: single

4. Alignment:

- the body text: to the left and to the right;
- the title of the article: alignment to the middle.
- the titles of the paragraphs: alignment to the left with 1.27cm

5. Characters:

- the title of the article: TIMES NEW ROMAN 14 BOLD;
- the names of the authors: TIMES NEW ROMAN 11 NORMAL and bellow the title;
- the address: in NORMAL 11 bellow the names of the authors;
- the titles of the paragraphs: TIMES NEW ROMAN 12 BOLD;
- the abstract: in ITALICS 11 and bellow the address;
- the main text: TIMES NEW ROMAN 11 with the paragraphs aligned with the first letter of the titles.

Requests for further information or exceptions should be addressed to PhD. C.NOVAC, the Executive Secretary,
AUC, Teacher Staff Training Department, University of Craiova, str. A.I. Cuza,
nr. 13, Craiova, 200585, Romania.

ANNALS OF THE UNIVERSITY OF CRAIOVA
SERIES: PSYCHOLOGY, PEDAGOGY

PUBLICATION OF
TEACHER STAFF TRAINING DEPARTMENT

- THEORETICAL APPROACHES – NEW INTERPRETATIONS

- EDUCATIONAL PRACTICE – NEW INTERPRETATIONS AND PERSPECTIVES

- RESEARCH LABORATORY

- COMPUTER ASSISTED TEACHING AT PRESENT

- THE HISTORY AND COMPARATIVE PEDAGOGY TEACHER TRAINING

- BOOKS AND IDEAS