INTERDISCIPLINARITY AND PROFESSIONAL DEVELOPMENT

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REZUMAT: Societatea în care trăim este o societate în continuă mişcare, o societate în care zi de zi intervin schimbări majore, fiind principalul factor care determină instituţiile de invatamant să valorifice adevăratul potenţial al elevilor prin antrenarea acestora în activităţi specifice vârstei, activităţi ce au ca scop final obţinerea performanţei şcolare. Interdisciplinaritatea este cea mai bună metodă de învăţare, deoarece pe de o parte implică participarea unui grup de cadre didactice de la discipline diferite, cu obiective comune, să lucreze împreună, iar pe de altă parte poate satisface dorinţa de perfecţionare şi cunoaştere a tânărului acestor timpuri, supus unui efort continuu de a utiliza si intelege informaţia.

Cuvinte cheie: profesor, student, interdisciplinaritate, arie curriculara, obiective cadru, progres intellectual.

ABSTRACT. The society in which we live is a continually moving society, a society in which day-to-day changes occur, being the main factor determining the educational institutions to use the real potential of the pupils by engaging them in age-specific activities, activities that have the ultimate goal achieving school performance. Interdisciplinary is the best learning method, because on one hand, it involves the participation of a group of teachers from different disciplines, with common objectives, to work together and, on the other hand, it can satisfy the desire to improve and know of the young of these times, subjected to an ongoing effort to use and understand the information.

Keywords: teacher, student, interdisciplinary, curricular area, framework objectives, intellectual progress.

1. INTRODUCTION

Being a teacher means the certainty and anxiety that you have chosen a complex profession, that you will go through a cognitive trail throughout your entire activity, but also that you have the power to give, to live under the sign of high aspirations, to seek solutions which are between art and science, between vocation and knowledge, between rationality and intuition [1].

Designing a curricular activity, designing teaching strategies, tests, projects, relevant items, completing and harmonizing the formal field of knowledge and learning with the no formal personality modeling, knowing and understanding human nature, age, difficulties of relationship, communication are just a few hypostases taken by any teacher.

Vocational training is a complex concept whose components are the formation and improvement of employees. The two components intertwine and their delimitation is difficult.

When we talk about training, we are thinking about courses, sessions, colloquia conducted within school institutions, but nowadays this process takes place throughout our lives

The variants presented above represent only a part of the training that a person can benefit from.

Some theorists believe that permanent training or self-training is done through documentary activities, professional experience, receiving the necessary information from the media and being in contact with the environment

2. PROFESSIONAL DEVELOPMENT

Vocational training is a deepening of what has already been learned. The responsibility for the professional training of the employees of a company rests equally with the organization and the employees.

That is why it is necessary to be by both, firm and employee and to be useful to both partners. Vocational training is a powerful tool for developing an organization that involves investing in people and technology.

The high share of intellectual variables involved in the process of work leads directly to the need to raise staff to higher levels of knowledge required by practice [2].

Employee training requires:

- acquiring knowledge of general culture and related to the profession;
- developing skills and working skills;
- modeling the personality characteristics and the behavior required by the profession. Some training requirements are common to most professions, others are not, and for the employee they are of differentiated importance;

For example, at the current stage of development, the most important training requirements are:

- developing the creativity of all employees;
- training and development of self-training and self-training capacity;
- formation and development of specialized thinking, in close correlation with the economic thinking;
- forming and developing participatory attitude and sense of responsibility;
- the formation and development of a managerial culture, irrespective of the position of the post in the organization hierarchy
- education in the spirit of avoiding the environmental pollution.

Mentoring involves the guidance of a young man, at the beginning of his career, deployed in an organized setting.

The synonyms of this notion are: guide, mentor, leader, preceptor and counselor.

Although it is generally recommended that a mentor be as experienced as possible, it is preferable that the age difference between him and the disciple does not exceed 15 years in order to establish a cordial relationship. Specialists identified two types of mentoring: formal and informal.

Informal mentoring is the one that takes place between colleagues at the same level or at different levels, but without a structured and constant relationship. It can take the form of an exchange of ideas, supporting the conception of a project, communicating valuable experiences.

Formal mentoring is practiced in organizations and involves a process of transmitting more or less structured knowledge, based on relaxed communication, usually face to face.

The mentor provides information, details, suggestions about what to do in the profession, and how to proceed. The mentor is also an expert in his field of activity, his role being to increase the disciple's confidence in himself, challenging him to do his best to take advantage of the professional opportunities.

In the presence of the mentor, it is preferable for the disciple to feel relaxed and comfortable, perceiving his master as his equal. Thus, the debutant can share thoughts, ideas, projects in relation to which he needs feedback, constructive criticism and guidance. Also, a mentor has to be appreciated for his performance in the field of work.

3. RELATIVE SCIENCE INTERDEPENDENCE

Our society is increasingly focusing on technology, knowledge and understanding of all that is new, but especially on the formation of an intellectual behavior, characterized by autonomy of information and judgment.

The modern graduate must not only be a good theoretician, but also a person able to make connections between assimilated information, finding their scope more easily, so in the end, knowing what profession will satisfy him.

Intellectual progress is not only achieved through theoretical knowledge. It is precisely why the development of creative capacity begins in primary education. The speed with which information is circulated and developed must not necessarily find the student/ teacher/ mentor unprepared, so from the beginning, in educational act, emphasis will be placed on increasing the formative character of didactic activities.

Today, we can easily see the multiplication and diversification of the sources that fuel the content of education.

Some of the main sources that can be considered as landmarks in content dimensioning are:

- the evolution of the exact sciences;
  - interdisciplinary transfers;
  - transit/border disciplines;
  - unmatched combinations of disciplines;
- the evolution of technology and its impact on:
  - family;
  - modern production;
  - life styles;
- the evolution of the labor market:
  - mutations in professions;
  - the emergence of new occupations;
  - the disappearance of some occupations;

All of these determine the education to promote Interdisciplinary as a form of cooperation between different disciplines, in order to solve complex problems involving the combination of several points of view [3].

Thus, it is necessary to reduce the differences between classical disciplines and the use of explanatory languages (operations.

„A school content, structured in an interdisciplinary way, is more adequate to the perception of described reality and ensure a unitary coherent perception of the existential phenomenology” [4].

For the interdisciplinary teaching, in the case of curricular areas Technology-Mathematics and Natural Sciences, the example in this paper, I chose one of the three points of entry proposed by Professor C. Cucos, depending on how the teacher intervenes in the learning act systematic and elaborate disciplinary connections, which is the expression of a bi-multidisciplinary vision [5-7].

They involve the epistemological analysis of the disciplines, the identification of common concepts and methodologies, extrapolated, or teamwork of the lesson projects and the annual planning.

Teamwork collaboration will involve the development and deployment of a class curriculum, thus achieving the integration of all elements of information from the informal environment.

We are open to proposals for the development of certain Technology Education lessons through the participation of physics, mathematics, chemistry, biology and computer science teachers.

The motivation consists in the fact that the Technological Education discipline is the component of the curricular area Technologies and it can be seen as a discipline that can be taught in teams of teachers with different specialties for the following reasons:

- curricular area itself provides a multi- and /or interdisciplinary vision on the subject matter;
- close connection between the curricular areas Mathematics and Natural Sciences and Technologies derives from the disciplines belonging to the two areas (or chapters of these disciplines!);

There is no Technology Education subject without the objects provided in the curricular area Mathematics and Natural Sciences being known by students:

- the common objectives of the two curricular areas;
- common methods used in teaching these traditional disciplines (exposure, heuristic conversation, exercise) and modern (algorithmization, problem-solving and programmed training);
- one of the dominance of the new curriculum by reference to the previous one is the correlation and integration with the study objects from the other curricular areas;

The objectives of the discipline Technological education are subordinated to the Romanian educational goals, being focused on the formation of spiritual attitudes and capacities that will lead to acquiring skills and skills, thus acquiring knowledge and thus harmonizing with those specific to other related disciplines:

- the order of scrolling of the content for each theme is established by the teacher, after a preliminary consultation with parents and students;
- selecting and fixing content, taking into account the following criteria:
- prospectively: anchoring in the predictable evolution of discipline;
- logic: harmonizing the logic of discipline with the logic of science;
- applicability: the practical value of that disciple;
- exemplary: the ability of the discipline to provide optimal models of knowledge and action in the field;
- developing the lesson according to the predominance of the reference to objectives, contents, location (laboratory, workshop, farm, factory, pilot stations of the educational institution), how pupils are organized;
- diversification of evaluation techniques and shortening feedback, the time/line from diagnosis to improvement;
- increasing the degree of interest, training, self-improvement of each teacher;
- cultivating the sense of friendship between teacher-student-teacher.

CONCLUSIONS

The interconnection of these disciplines leads to the creation of new disciplines only with the necessary compartments and not all of them, because this would have led to their unwanted combination.

Interdisciplinary can be defined as a process of unitary co-operation, unification and codification of the disciplines of contemporary sciences, characteristic of the present stage of development of scientific knowledge, in which each discipline maintains the gnoseological autonomy, specialization and relative independence and at the same time integrates with the system the world of knowledge.

Interdisciplinary is the best method that can satisfy the desire to improve and enlarge the knowledge of the young of these times, where information develops fast, from one hour to the next.

Ion Dragan, in "Psychology for All", states that "the school as a subsite of the social system has the mission to ensure for the other sectors of the system, the labor force of a certain degree (depending on the level and type of the school, faculty etc.). From our point of view, the previous statement is a source that has an essential truth: without the proper education of the students, it is not possible to achieve a qualitative result, the school having the mission to ensure the high quality workforce, for tomorrow

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