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MANAGEMENT OF INITIAL TRAINING OF AGRONOMY STUDENTS FOR THE TEACHING PROFESSION THROUGH CROSS-CURRICULAR EDUCATIONAL PROJECTS

Carmen Olguța Brezuleanu, Assoc. Prof., PhD; Roxana Mihalache, Assist. Prof.;
Mihai Stanciu, Prof., PhD; Carmen Luiza Costuleanu, Assoc. Prof., PhD,
University of Agricultural Sciences and Veterinary Medicine, Iași

Abstract: The initial training for the teaching profession of the agronomy students must be understood as a accumulation of individual and collective transformations of the components of training strategies, social work, which can be used in various professional situations, to ensure success, didactic performance, but also to ensure their better integration in the culture of their future professional environment.
The creative conduct of the teacher of specialized agronomic didactics is one of the factors that ensure the development of creative potential (inventive, innovative) of the agronomy students. Thus, the teacher of specialized didactics must tackle the teaching-learning-assessment process specific to the agronomic disciplines making permanent reference to formative higher resources, permanently improvable, strategically and operationally, as are the use of cross-curricular educational projects and the use of educational software in 3D labs of UASVM. Also it was necessary to use collaboration through dialogue in an effective way and also collaborative software applications that have ensured the exchange of information between teacher and students. This type of training stimulates agronomy students through critical, creative thinking, helping them to: decision making, self-organization and self-assessment of individual resources, adopt a positive attitude towards formation of cross-disciplinary cognitive abilities.
The ultimate goal of these teaching strategies is the development of transfer capacity of purchases from education to everyday modern life which is in continuous transformation, which implies a complex effort of building the professional personality of agronomy students, future teachers of specialized subjects who must possess adaptive capacity to new, both in individually and socially.

Keywords:initial training, innovative, didactic strategies, cross-curricular educational projects, 3D products.

INTRODUCERE

The initial training for the teaching profession of the agronomy students must be understood: as a cumulus of individual and collective transformations of the components of training strategies, of professional socialization, which can be used in various professional

situations, to ensure success, didactic performance, but also to ensure better integration of their future professional environment culture.

Learning based education projects is a training model focused on pupil / student, because this type of learning develops knowledge and skills in a field by extensive workloads that promotes inquiry and authentic demonstrations of learning through projects that result and performance. Education through the method of cross-curricular educational project faces important questions that link specific skills and higher level thinking skills of the pupil / student and real-life contexts.

The professor of agronomic speciality - manager of didactic activity, does not only accomplish only teaching-learning-evaluating, but also relates to agronomy pupils/ students, influencing their way of learning, by interfering in directing their general evolution (Carmen Olguţa Brezuleanu, Educational Management for Agronomic Higher Education: Methodological Guide "Ion Ionescu de la Brad" Publishing House Iaşi, 2016).

Initial training of agronomy students for the teaching profession is managed by teachers who provide specialised training, coupled with the psycho-pedagogical one.

In this context, the central figure for agronomy students, the teacher, the manager of the teaching activity takes on other roles of educational influence:

1. plans activities, determines tasks on various levels, structures their content, programs their actions;
2. organizes group activities and determines the specific work climate;
3. communicating various information;
4. runs the group activity according specific normative;
5. coordinates activities, synchronizes objectives, harmonizes styles and rhythms, gathers groups prevents negative influences;
6. guides students in knowledge in various activities which he proposes;
7. motivates students through stimulation / sanction balance;
8. advises students on individual and age-specific problems;
9. controls student progress in comparison to objectives;
10. appreciates and evaluates the achievement of performance, data standards, makes valuable judgments.

Through these behaviours, the professor influences the managerial educational activities, but do not confuse the two action plans.

The management of initial training for the teaching profession of the agronomy students differs from management of the school or other educational settings by the specific teacher-student-student relationships, to form - their personality development, along with their pedagogical, methodological problems.

PURPOSE OF PAPER

The ultimate goal of using teaching strategies specific to the cross-curricular educational projects is the development transfer capacity from the education plan to in everyday life which is specific to the modern society, in continuous transformation we live in, which implies a complex effort of building the professional personality of agronomy students, the prospective specialist teachers who should possess adaptive capacity to new, both individually and socially.

WORKING METHODS

To achieve this experimental educational approach, we used *the method of educational project in cross-curricular approach*, where we studied the curricular areas from 13 specializations of University of Agricultural Sciences and Veterinary Medicine Iasi and were treated thematically unified under the title: "Agri-tourism with student steps", developed in educational partnership in April 2015. The working methods used were investigation, documentation, questionnaires, analysis, 3D design and interpretation of results. The presentation of the final product of the project was done by DPT students, invited students from high schools of Iasi, in the Aula Magna and UASVM laboratories under the form of: animation, 3D projects, PowerPoint presentations, virtual photo albums, workshops life demonstrations. Also, it was necessary to use, as effective way of collaboration through dialogue, the collaborative software applications that have ensured the exchange of information between teacher and students. This type of training stimulates the agronomy students to develop critical, creative thinking, helping them in: decision making, self-organization and self-assessment of individual resources, adopting a positive attitude towards formation of cross-curricular cognitive abilities.

RESULTS AND DISCUSSIONS

The educational project-based learning is a training model focused on pupil / student. This type of learning develops knowledge and skills in an area with extensive workloads that promotes inquiry and authentic demonstrations of learning as results and performances (Educational Project Approaching Teaching-Learning, Transcurricular Modern Method. -

Brezuleanu C. O,2010,Lucrări Ştiinţifice USAMV Iași, Seria Agronomie, vol.53 (1), Editura „Ion Ionescu de la Brad).

The initial training of agronomy students for the teaching profession by using cross-curricular educational projects is oriented towards important questions that link the transversal skills that they acquire by attending the agronomic disciplines, coupled with the psycho-pedagogical ones (a starring role having the teaching practice) and also the higher thinking skills and real-life contexts for which they prepare.

The cross-curricular approach is a constructivist approach to the curricular process that seeks to achieve certain results for which it is necessary to tackle an integrated thematic organization of the curriculum. (Lucian Ciolan, Învățarea integrată; Fundamente pentru un curriculum transdisciplinar.Editura Polirom. Iași.2008) .For this it is necessary to establish different ways to approach the concepts and objectives, content and applying methodology.

The proposed cross-curricular projects of agronomy pupils / students:

- are integrated themes of study (interdisciplinary) that focuses on their personal and social development;
- represent integrated units of study which aims at acquiring skills, of values and attitudes essential to everyday life in today's society which the young teachers prepare for.
- aim at capitalizing the potential of agronomy pupils / students in order to build meaningful learning experiences for them.
- require effective cooperation between those involved
- promote a constructive vision of learning in which the student plays a role, actively participating in designing and conducting their own learning experiences
- can be applied to a broad spectrum of topics.

The cross-curricular educational project we did, was the result of investigation of agronomy pupils and students, on their request regarding the approach to lessons in a differentiated manner within the educational partnership we run between UASVM and high schools of Iasi. In this regard, the DPT students of UASVM, who do their teaching practice at the Agricultural and Food Industry College and Economic College Administrative No.1 Iasi, besides the classical lessons they carry on as teaching practice, proposed a series of model lessons to be held at the university in the week "Know more, be better" -April 2015. The cross-curricular educational project "*Student for a day at UASVM Iasi - Edition II* ", was

called" Agri-tourism with student steps", its theme being treated unitarily by students from 10 specializations who attending DPT, an idea that was well received by all educational partners. 600 students from 4 schools Iasi were invited and the activities were prepared by the DPT students.

The students, coordinated by professors and graduate students made: the poster of the project, flyers with the presentation of activities, obtained approval for the project in the Aula Magna and UASVM laboratories, promoted the event in the media, invited students from high schools from Iasi to their teaching practice, made the didactic projects of the themes proposed, set tasks for each team member: leading and guiding the pupils, project documentation, implementation PPT, presentation of the theme in the Aula or labs, photo-video, simulation of collective sports accident, presenting the Museum of Anatomy and its laboratories, contact person from each group.

The student teams proposed the theme: "Agri-tourism with student steps" that they divided into 10 themes, in accordance with specialization of study, as follows:

1. *Incursion in business environment* – the students from *Economic Engineering in Agriculture* presented a business plan to set up an agri-tourist boarding house.
2. *A day in Poiana Izvoarelor*- students from *Engineering and management in public catering and agri-tourism* made the presentation of Poiana Izvoarelor boarding house, where made a part of the specialty practice.
3. *Elements used in landscaping the surroundings of boarding houses* - students of *Landscape design* and *Environmental engineering* did a 3D design of a boarding house.
4. *Culinary arts, traditions and crafts of Vatra Dornei* – students from *Technology of processing of agricultural products* did menu options that can be served at Poiana Izvoarelor boarding house and presented the tourist festivals from Dorna Region, where the boarding house is located.
5. *Hydroponic cultures* – students at Horticulture showed how vegetables can be grown in the mountains.
6. *Technology for producing chocolate products* – students from *Control and expertise of food products* did a presentation of desserts that can be served and how they are quality controlled.

7. *Animals, means of attraction of agri-tourist boarding house* - students from *Animal Husbandry* made a presentation of large animals and pets that can be reared at an agri-tourist boarding house.
8. *Animal eco-nutrition in a boarding house* –students from Agriculture and Mountainous Agriculture showed how forage is obtained.
9. *Integrated sanitary-veterinary services for animal health at a boarding house* - presentation done by students of Veterinary Medicine.

presentation in the museum, radiology:

10. Demonstration of first aid done by students at Biology in partnership with the Red Cross, Iasi.

The topics tackled correlate skills and knowledge in a set of agronomic areas / disciplines in designing the training process. The methodological innovation brought by the cross-curricular themes are: increased use of participatory working methods; focus on metacognitive skills development; focus on moral education; creative conduct and skills of the teacher of agronomy specialization.

The creative conduct of teacher of agronomy specialization is one of the factors that ensure the development of creative potential (inventive, innovative), of agronomy students. Thus, the teacher of speciality must tackle the teaching-learning-evaluation process-specific to the agronomic subjects, by making permanent connection with the formative superior resources, constantly improvable, strategically and operationally, as it is that of cross-curricular educational projects. Also it was necessary to use as an effective way to collaborative dialogue, the collaborative software applications that ensured the exchange of information between teachers and students. This type of training stimulates the development of critical, creative thinking, helping them to: decision making, self-organization and self-assessment of individual resources, adopt a positive attitude towards formation of cross-curricular cognitive abilities.

For this it is needed that the specialized teacher, as trainer of initial training activity of the agronomy students by using this type of cross-curricular project, to:

- Stimulate an active attitude and creativity of the agronomy pupil / student through personal example, showing a behaviour and a positive attitude in this regard;

- • Use a type of interactive training, which leads to resizing of the teacher roles and hypostasis of the teaching staff;
- • Uses questions in a creative way, which must be open to make sense and are not to suggest predetermined answers (Brezuleanu Carmen Olguţa**, Didactica specialităţii disciplinelor agronomice,**- Editura " Ion Ionescu de la Brad", Iași, 2016).

All these activities contribute to specific acquisition of competences of a teacher:

- *Scientific, methodological and psycho-pedagogical skills of the teacher of agronomy speciality: scientific skills* refers to the scientific correctness, quality, logical structuring and didactic presentation of the content that will contribute to achieving the objectives, thus facilitating the development of pupils/ students, to the operatory, emotional, motivational, actionable structures, while the *pedagogical and methodological skills* are those that ensure the psycho-pedagogical effectiveness of educational approaches, logical didactics, the teachers of agronomy mediating the link between the agronomy pupil/ student with the subject of education.
- • *Managerial and psychosocial competences related to the educational management and organization of social relations of the teacher of agronomy speciality involve* the following activities:

Establishing variants of the decision and choosing the most appropriate time of communicating certain issues;

* working in group or team;
* motivating the pupil / student to follow him as leader;
* Demonstrating flexibility and courage in making the right decision when assessing;
* Assuming responsibility for all assessments, recommendations and actions taken;
* Mastering the law in general and school law in particular.
* Being able to evaluate himself periodically and carry out changes after self evaluation;
* Developing diagnosis, prognosis and designing activities for the subject he teaches;

* Having the ability to give and prioritize tasks;
* Managing time budget properly for those with whom he communicates.

- . *Competences of assessment* of the teacher of agronomy subject:

* manifesting trust and respect for education;
* communicating openly with pupils/ students, showing fairness in dealing with them;
* empathizing with pupils/ students i.e. possessing the ability to transpose into situations in which they find themselves in order to get to know them better and to improve communication with them;
* developing a good collaboration with pupils/ students and other teachers;
* giving advice to pupils/ students in order to be able to solve various problems;
* having the ability to impose rules that regard learning through cooperation

CONCLUSIONS

Through the experimental application of the cross-curricular project called "Agri-tourism with student steps" we intended to accomplish teaching activities in an attractive manner to students outside the class. This required on behalf of the agronomy teachers and students involved in initial training for the teaching profession to demonstrate that they possesses educational management skills in order to ensure the success of this educational project.

The cross-curricular project activity done by the agronomy teachers, students and pupils invited was very well received by all the educational partners because:

1. The teachers used effective measures to promote equal opportunities and to prevent discrimination so that pupils/ students should attain their potential;
2. The teachers established and maintained efficient working and communication relationships with pupils/ students, teachers, mentors for the teaching practice and with the headmasters;
3. The pupils / students were set individual criteria regarding the learning outcomes and learning targets for this type of teaching activity;
4. The learning programmes and learning materials (e.g. homework, projects) offered the possibility of cross- curricular learning, being at the same time explicit and attractive for pupils and students;

5. They used a wide range of strategies for teaching and learning in order to meet individual learning styles, abilities, culture, gender and motivation of every pupil/ student;
6. The mentors and agronomy students, future teachers of speciality objects used a wide variety of resources, materials and teaching strategies in order to meet the expectations of each group of pupils;
7. All learning activities were carefully planned and structured in order to promote and encourage learning in contexts different from the classic frame used in classroom;
8. The students regularly received feedback and information regarding their progress in preparing this type of project which was applied experimentally;
9. The pupils and teachers invited to participate in this cross-curricular educational project were impressed by this type of learning and this led to its successful repetition the following school year.

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Annex 1: Poster of the cross-curricular project" Agri-turism with student steps"