

INFLUENCE OF FORMAL AND NON-FORMAL EDUCATIONAL ACTIVITIES ON THE ACADEMIC INTEGRATION OF FIRST-YEAR STUDENTS OF "ION IONESCU DE LA BRAD" UNIVERSITY OF LIFE SCIENCES (IULS) IAȘI, ROMANIA, FOR REDUCING EARLY DROPOUT

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Abstract

University dropout has become a worrying reality for the education system in general, but also for Romania in particular, which ranks first in Europe. Thus, the worrying phenomenon of early university leaving is a phenomenon that has complex causes and therefore requires a variety of ways to combat it. These include the development of a supportive extra-curricular environment and individualized teaching practices focused on student-centered learning to support their potential. The aim of the research undertaken in this paper is to demonstrate the contribution of learning support activities in a formal and non-formal environment to the progress of first year of "Iasi University of Life Sciences" (IULS) students in the Faculties of Agriculture and Horticulture in reducing dropout. The qualitative research methodology was carried out through a review of the literature on university dropout, predominantly early. The case study, as a quantitative research method, is composed of a questionnaire containing 13 questions applied to first year students at IULS Iasi. The resulting data were processed and analyzed by statistical methods, and after interpreting the results we formed an overview of the problem of the causes of early university dropout of first year students and thus could apply personalized support measures. As a result of the steps taken in this respect, adaptability to the university environment increased and early university leaving was reduced, which provided us with a working model. This work has an innovative character in terms of the educational support measures provided to first year students at IULS Iasi, which constitute a model of good practice for increasing the adaptability of first year students to the university environment and for reducing early dropout. These extracurricular activities, carried out in a formal and especially non-formal friendly environment in a modern way, must be continued and adapted to the students' needs, but taking into account the skills they need to acquire in order to finally integrate into the changing labour market.

Key words: students, remedial activities, dropout, university integration, IULS Iasi, Romania

INTRODUCTION

According to the European Commission on University Education, it has an important role to play in contributing to sustainable and resilient economies. It is also recognised that higher education occupies a borderline position at the confluence of education, research and innovation and that it must serve society and the economy. Thus, because Europe needs to increase the number of highly skilled citizens, EU Member States have set an important target that by 2030 at least 45%

of 25-34 year olds should have a higher education degree. The aim is for university graduates to be highly qualified, so that they have excellent employment prospects on graduation (80% of recent tertiary graduates in the EU obtain a job within 3 months of graduation), but also to be well engaged in democracy [14].

Reviewing the literature, it was found that the problem of school/university dropout is broad and covers a variety of approaches from different research areas. [1, 21]. Thus, Diego Opazo et.al., (2021) [20], in his study, states

that education and implicitly also university education is an important factor in the development of a society, a quality but extensive education can lead to increased social welfare and economic growth, because it contributes to the progress of science, innovation in technology, but with all these benefits, not all students enrolled in a university study program finish their studies, leaving university without obtaining a degree. Therefore, it becomes important for universities to establish their own mechanisms to prevent, or at least reduce, dropout, starting from the knowledge of the determinant causes [2, 4, 20, 24].

The research made by Diaz, P., et al., (2016) also attracts the fact that, unfortunately, dropout has become a phenomenon that had to be taken into study, due to the fact that it is already an important problem for university education, with a negative impact on society. Thus, it is recommended that measuring and studying dropout should become a continuous measurement tool in the process of evaluating the effectiveness of the university education system. In this way, academic mechanisms can be implemented to control the phenomenon in order to measure the quality of study programs, but also the quality of the educational process offered [6, 10, 11, 13].

Researchers Aldowah, H., et. al., (2020), established that for the most part, dropout may be caused by factors that cannot be controlled by the university institution and that the "causal relationships between key factors" need to be well understood in order to have a clear and accurate picture of the dropout rate, which unfortunately, is increasing at universities in various corners of the world, which they analyzed/studied [18]. They have shown that for students to be motivated to complete their university studies, they must be offered academic activities relevant to their field of study, so that they bring them the desired benefits [3, 5, 8, 12, 16].

Researchers Lorenzo-Quiles et. al., (2023) [19] and Segura, M., et al., (2022) [25] also present the phenomenon of university dropout from the perspective of the Organisation for Economic Co-operation and Development

(OECD), which in 2019 made public that 20% of students who start tertiary education fail to complete it. They also pointed out that Eurostat in 2020 made public the fact that, at European level, Malta ranked first in terms of university dropouts with 18.4%, second: Spain with 18.3% and, Romania with 18.1%, in third place and that the percentage of students giving up a bachelor's degree is increasing significantly, which is already a problem, at a time when European educational institutions had set out to reduce university dropouts to 10% by 2020, due to the negative socio-economic effects observed both at university level and implicitly at the level of society as a whole. Thus, when a student drops out of a university programme, it is a failure that entails psychological damage, suffering that then extends to the family from which they come [15, 17, 25].

A study of the literature shows that dropping out of university has become a major challenge for the entire academic community, especially since at European level it has become an important objective of university education to improve the specialist knowledge and practical skills in the field of undergraduate studies, so that students can integrate quickly and properly into the labour market. Also from a careful study of the literature on the causes of dropout, it can be seen that they are divided into: personal, academic and social. Thus, personal factors can be explained as being determined by the individual characteristics of the students, i.e. they refer to their motivation, aspirations, health and financial situation. Among the academic factors we can list the study conditions, namely: the quality of the study programmes, the teaching-learning-assessment methods, the teaching support provided by the teaching staff, etc. Last but not least, an important role is played by social factors, which refer to the influence of the professional level of the family and even the community environment, which may influence the students' decision to continue or not to continue their university studies [9, 19, 23].

Unfortunately, the dropout rate in higher education in Romania in the academic year

2021-2022 was 19.3%, thus increasing compared to the academic year 2020-2021, according to data published by the Ministry of Education and Research, and this level is well above the European average, which was 10.6% in 2020. Thus dropout is a serious problem that affects the quality and efficiency of the higher education system in Romania [22].

In this paper we have made an extensive study at the "Ion Ionescu De la Brad" University of Life Sciences (IULS) Iasi, Romania, where we have addressed the problem of early dropout detection in first year students, the negative impact being the greatest due to them if we think about the deficit on funding that is lost for the next 3 years. First, this phenomenon was analyzed based on the data collected from the faculty secretariat. The main problems that determine the low performance of first year undergraduate students at IULS Iasi, coming from the Faculties of Agriculture and Horticulture, are: the high number of absences in some fundamental subjects, on which the basis was laid in high school education and then at university level more advanced notions are deepened (mathematics, chemistry-biochemistry, biophysics, economics, biology, physiology, etc.). From the analysis carried out over the years, the following causes have emerged: institutional due to the school and university environment: causes linked to the student's personality and health; causes linked to socio-economic and family conditions. Absenteeism leads to dropout, a low participation rate in first semester exams and induces a low promotion rate at the end of the first year.

The aim of the paper is to demonstrate the contribution of learning support activities in a non-formal environment to the progress of first year IULS students in reducing dropout.

In this context, although at university level there is an ongoing concern about linking curricula and their contents to the real needs of students to develop skills required by the labour market and to the level of preparation of graduates, about the appropriation by teaching staff of modern, student-centred teaching-learning-assessment methods and

techniques but also with overall or faculty and programme level efforts, to reduce dropout, we considered it appropriate and necessary to investigate in detail within IULS Iasi the concrete causes of dropout of first-year students, but also the intervention measures to reduce this phenomenon by creating a different institutional learning structure from the structures that provide a conventional-formal learning and training environment.

MATERIALS AND METHODS

Research methods used in this study: from a qualitative point of view, a literature review was carried out on the rate and causes of dropout in the first year of study, because the benefits of higher education for young people, giving them greater opportunities for labour market integration in the field of undergraduate studies after graduation. From the quantitative point of view, document analysis and investigation with the help of the questionnaire, a specially developed document, was used to get answers directly from students on the causes that may lead to university dropout in the first year of study, in order to create intervention measures to counteract the phenomenon. Thus, in this paper, for the general objectives established: O1- Investigation of IULS students in the first year regarding their expectations to form the necessary skills and knowledge to be able to easily integrate into student life and O2- Identification and implementation of good practices of extracurricular support of students to reduce early university dropout, the most appropriate research methodology was chosen so that in the end we have concrete answers and practical solutions in line with the theme taken in the study.

The initial target group was represented by students of the first year of "Ion Ionescu de la Brad" University of Life Sciences (IULS) Iasi, Romania, the questionnaire we developed was administered to them at the end of the classes, in 2019, and the intervention measures were applied during 2019-2021. The questionnaire was designed as a self-reporting tool containing 13 items allowing simple and concrete answers. They were suggested to

answer the questions honestly, all answers were anonymous and it was made clear that there were no right or wrong answers. They were asked to fill in the following starting items: gender: female/male, age, specialisation.

The questionnaire was structured as follows: I would like to finish this university on time; I would like to work in the field of my specialization as soon as I finish university; In general, I feel motivated by my teachers; The courses of my specialization meet my expectations; I am satisfied with the choice I made; I actively participate in lectures and laboratories to have a higher learning output; I think I learn useful things in the future; In general, I structure the material I have to learn; I feel that extra hours would be needed to understand the courses; I have easily built relationships with other colleagues; When I have had difficulties understanding the course or the practical work, I have asked for help; Often, I feel that extra support for students would be needed through; If I would have to drop out, it would be for the following reasons.

The limits of the investigation can be considered as follows: The completion of the questionnaires took place at the end of the classes, which may generate superficiality of the answers due to the students' fatigue to focus on the questions, the respondents' quickness to leave the classroom; the facade bias - the respondents tend to understand what the researcher wants to know and try to formulate "correct answers"; the male/female ratio - the faculty having a certain specificity, generated a gender imbalance in the research, the group of respondents was 100 first year students of which: 62 male and 38 female. The resulting responses were statistically processed, interpreted and presented in the form of tables and graphs.

RESULTS AND DISCUSSIONS

In the first stage, there were investigated **the causes of early dropout** at "Ion Ionescu de la Brad" University of Life Sciences (IULS) Iasi, Romania, and in the second part to identify and provide extracurricular support measures

to first year students in formal and especially non-formal environment, in order to help them to integrate into student life and to acquire academic learning skills, so that they can successfully pass the exams and acquire the skills needed on the labour market in the graduated field.

The approach of the objectives proposed in this paper is presented below.

Objective 1: Investigating IULS first year students' **expectations in order to form the skills and knowledge** necessary to integrate easily into student life. After investigating the documents in the secretariats of the two faculties: of Agriculture and Horticulture, it was found that the initial statistical aspects (risk factors for dropout) at IULS Iasi are the following: a high percentage of students, come from families with modest income, single parents or with parents who have left to work abroad (22.1%), many students come from rural areas (46.1%), the level of education of students admitted to the Bachelor's degree in the first year is average, and their interest in studying and learning is low. First year undergraduate students at IULS Iasi have low learning skills because a significant percentage (26.24%) have averages lower than 7 in the baccalaureate exam, and a significant percentage of first year undergraduate students come from disadvantaged social backgrounds or are at risk of dropping out (57.47%).

Next, **the quantitative method of investigation was based on** a questionnaire, to which the first year students from the faculties of Agriculture and Horticulture had to answer, in order to reflect which are their expectations and needs when entering the university environment, so that they can integrate into student life, so that they can achieve good results and not be tempted to abandon university courses.

Students were asked to answer the 13 items honestly, as all answers were anonymous and there were no right or wrong answers. They were also informed that the requested information is useful for teachers to take support measures within the project "ROSE/103/SGU/CI/II, "USV IAȘI LEARNING CENTER: LEARNING FOR

LIFE".

The interpretation of the questionnaire answers from the 100 first year students (42 male + 36 female) is as follows: the evaluation, both of the level of satisfaction and of the importance given, was carried out on a Lickert scale in 5 steps (1 - very dissatisfied; 5 - very satisfied), being aimed at the academic activities carried out on site and online. After applying the questionnaire to a sample of 100 students, we aimed to investigate the satisfaction of the students of the Faculties of Agriculture and Horticulture towards education, their training needs, their information needs, their expectations from USV Iasi, in order to gather a wide range of students' expectations regarding the fields of agri-food activities in their areas of interest.

Qualitative interpretation of the questionnaire

The questionnaire applied to the students of the Faculty of Agriculture is composed of 13 items distributed in such a way as to provide information both on their opinions and on their concrete actions on the proposed topic.

In this regard, 13 closed questions were formulated, with pre-defined answer options, giving respondents the opportunity to freely express their opinion or to present their knowledge, especially in relation to the professional development conditions provided by the University of Life Sciences of Iasi.

Concerning Item 1: *I want to finish this faculty on time*, 78% of the students said that they very much want to finish the faculty and 22% of the students said that they very much want to finish the faculty, some of them having to work during the faculty in order to obtain additional income (Fig. 1.).

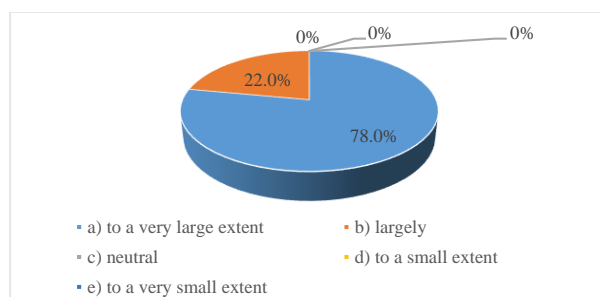


Fig. 1. Answers to Item 1 of the questionnaire: I want to finish this college on time
 Source: Students' answers.

Concerning Item 2. *I would like to work in my field of specialisation* as soon as I finish university, rated from very highly to very low, brings to the respondents' attention issues related to how the study programme is adapted to the needs of employers, the theoretical or practical skills required, or the flexibility of jobs. Respondents rated aspects of the study programme offered positively to a very large extent with 86.0% saying that it will give them the possibility of employment in agricultural companies or horticultural farms and some answers were less satisfactory, i.e. some students say they very much want to work in the field of the study programme with 14.0% (Fig. 2).

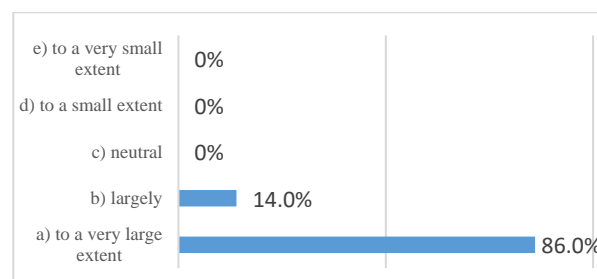


Fig. 2. Answers to Item 2 of the questionnaire: I would like to work in my field of specialization as soon as I finish college
 Source: Students' answers.

Item 3: In general, *I feel motivated by my teachers*, wanted to get ratings on the following aspects: clear and appropriate communication of the concepts, topicality and usefulness of the concepts taught, practicality of the concepts taught, interactive teaching methods, adaptation of the teacher's teaching style to one's own learning needs and possibilities, effective use of new technologies (e-mail, electronic course support, etc.). Respondents highly appreciated aspects related to the topicality and usefulness of the notions taught with 77.0% and some activities were highly appreciated, i.e. the practicality of the notions taught in some fundamental subjects with 19.0%, a number of 3 students gave a neutral answer, i.e. 3%, and only one student was motivated to a small extent by the teachers not to abandon the courses (Fig. 3).

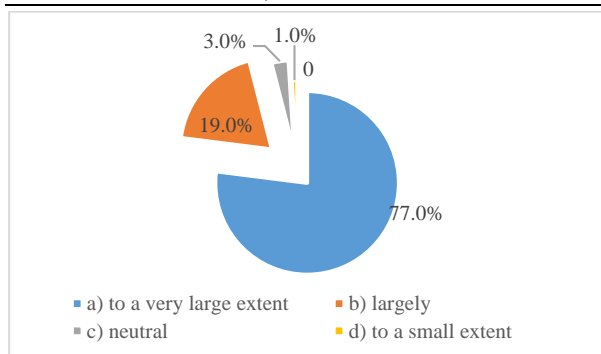


Fig. 3. Answers to Item 3: I generally feel motivated by my teachers
 Source: Students' answers.

Item 4: The courses of my specialization meet my expectations, aimed at the appreciation of students through the feedback provided by the teacher for training purposes, the possibility of obtaining information and practical skills that will give them greater chances of employment, procedures for implementing the latest developments in the field through ICT. The students of the Faculties of Agriculture and Horticulture appreciated positively to a great extent, 45% of the answers were related to the balance between their expectations and the information provided and some activities were highly appreciated with 34% of the answers. There were also 12 neutral responses, 5 students who appreciated this aspect to a small extent and 4 responses were not very satisfied, i.e. 4% (Fig. 4).

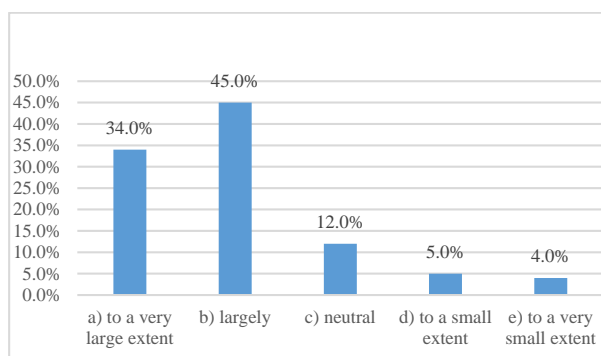


Fig. 4. Answers to Item 4: The courses of my specialization meet my expectations
 Source: Students' answers.

Item 5: I am satisfied with the choice made, which largely makes appreciation to the involvement of teachers in theoretical professional development as well as professional perspectives on labour market

insertion. To these are added the existence of a programme of consultation of the teaching staff, liaison with the tutor and the year tutor, academic counselling (choice of courses, organisation of the study programme, effective learning), advice on involvement in extracurricular activities within the university. The students of the faculties of Agriculture and Horticulture highly appreciated the aspects related to the link with the tutor and the year tutor and students, in 35.0% and some activities were less satisfactory, i.e. advice on involvement in extracurricular activities within the university with 30.0%. (Fig. 5).

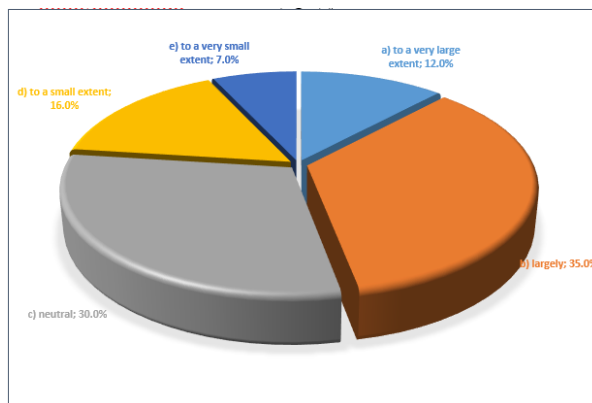


Fig. 5. Answers to Item 5: I am satisfied with the choice made
 Source: Students' answers.

Item 6: I actively participate in lectures and labs to increase my learning performance. Active participation in classes is a crucial component of academic success in the first year of college. Nearly 42.0% of students gave a neutral response and 21.0% of the sample chose to answer that they actively participate in classes and labs to a small extent, which shows their low engagement in the learning process. The fact that only 10-11% of the surveyed students answered that they participate actively to a very great or great extent in the courses implies that communication and relationship between teacher and student must be improved, the student must assume the role of active co-participant in the course, seminar or laboratory in order to clarify confusions, difficulties encountered in individual study (Fig 6).

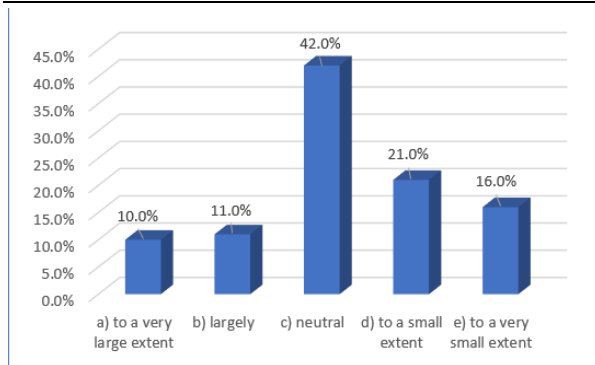


Fig. 6. Answers to Item 6: I actively participate in classes and labs to have a higher yield in learning
 Source: Students' answers.

Item 7: In order to get a more accurate picture of the information already held by students and therefore their interest in their professional development, they were asked to indicate whether they consider that *learning is useful in the future or can benefit their work*. Students responded as follows: very much 20.0%, to a great extent 28.0%, neutral 21.0%, and 31.0% to a small extent. The very high proportion of responses to the area of low importance can be explained by the fact that fundamental subjects (mathematics, physics, chemistry, etc.) are usually taught in the first years, which are more difficult for students from vocational or humanities backgrounds to understand (Fig. 7).

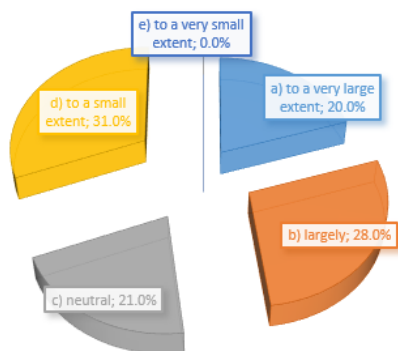


Fig. 7. Answers to Item 7: I believe that I am learning useful things in the future
 Source: Students' answers.

Item 8: In general, *I structure my learning material resulted* in the following opinions: very much 14.0%, to a great extent 17.0%, neutral 19.0%, 22.0% to a small extent and 28.0% to a very small extent. With a very high percentage of responses (28%) from students who very little structured their course

material, one can identify the correlation between the effort they put in and the learning outcomes that ultimately lead to high drop-out rates (Fig. 8).

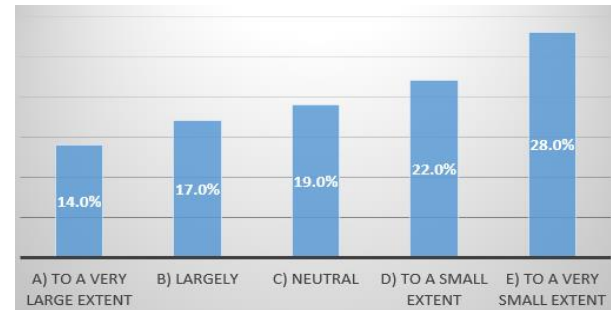


Fig. 8. Answers to Item 8: I generally structure the materials I have to learn
 Source: Students' answers.

Under Item 9: *I think additional hours would be needed to understand the courses*
 This component includes techniques to train independent study skills, personal study skills, training in how to learn and how to investigate problems, and students responded as follows: very much 87.0% and to a great extent 13.0% (Fig. 9).

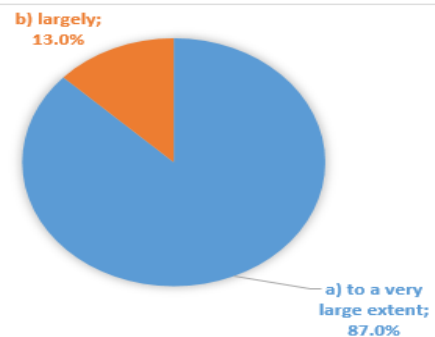


Fig. 9. Answers to Item 9: I feel that additional hours would be needed to understand the courses
 Source: Students' answers.

Item 10: *I easily bonded with other colleagues.* Social relationships are particularly necessary in the student's learning and training activity because they enhance success in this and other activities, they give the student the opportunity to showcase their personal qualities. The range of these relationships is varied and diversified, each of them having a certain significance, a social value, and the responses to this item were: 12% of the students had a positive answer, i.e. to a very great extent, 8.0% to a great extent,

32.0% had a neutral answer, 28.0% to a little extent and 20.0% to a very little extent (Fig. 10).

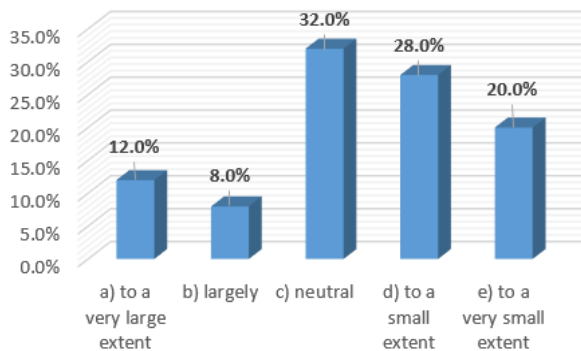


Fig. 10. Answers to Item 10: I easily built relationships with other colleagues
 Source: Students' answers.

Item 11: In the item *When I had difficulties* in understanding the course or practical work, *did I ask for help?* 26.0% of the respondents said they would ask the professor for help, 11% of the students would ask the psychologist advisor, 54% of them would ask other colleagues for help, and 9.0% of the students in the Faculty of Agriculture and Horticulture would ask someone else for help (Fig. 11).

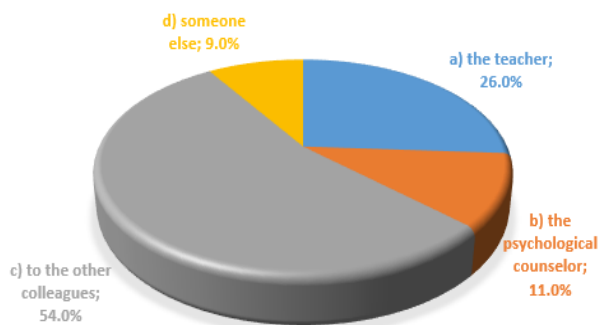


Fig. 11. Answers to Item 11: When I encountered difficulties regarding the understanding of the course or the practical work, I asked for help?
 Source: Students' answers.

Item 12: Many times, I feel *that extra support for students would be needed* through: referred to effective course deepening activities, counselling activities: (self-awareness, time organization, learning techniques), mentoring activities - involvement of a mentor. To this question, 48.0% of the students stated that counselling activities: (self-awareness, time organisation, learning techniques) is a priority activity,

while 30.0% of them consider that effective course deepening activities is important. 22% of those surveyed said that mentoring activities, i.e. involving a mentor, to stimulate personal and professional growth, development of skills, knowledge and understanding of a particular field (Fig. 12).

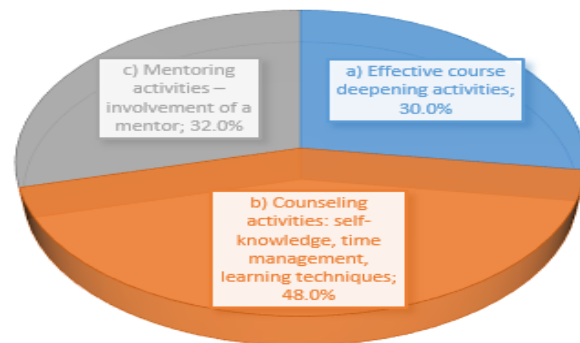


Fig. 12. Answers to Item 12: Many times, I feel that extra support would be needed for students through
 Source: Students' answers.

Item 13: If I had to *drop out of college, it would be for the following reasons:* This is the one who tried to identify the main reasons for dropping out of school such as: financial reasons, social pressure (bullying), failing exams, health problems, attending another college. According to the students, the main reasons were financial reasons (63.0%), exam failure (20.0%), attending another university (8.0%), social pressure (bullying) (7.0%) and health problems (2.0%) (Fig. 13).

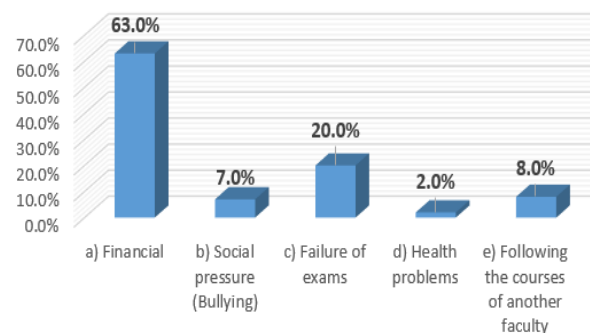


Fig. 13. Answers to Item 13: If I had to drop out of college, it would be for the following reasons
 Source: Students' answers.

Social causes are the most numerous at the faculties analysed, as their students come predominantly from rural areas and are related to the socio-economic conditions of the family (poverty, indifferent, neglectful parenting

style, families disharmonious families, very busy parents or parents living abroad). The second main reason is due to unsatisfactory exam results (Fig. 13).

Following the interpretation of the answers received from the students surveyed, it can be stated that the above results show that the students of the faculties of Agriculture and Horticulture, come with a request for a self-assessment of the need for guidance in order to acquire relevant knowledge on the topic. Most students who leave the university do so in their first year and are those who enroll in engineering faculties at IULS Iasi.

The fact that only 10-11% of the surveyed students answered that they actively participate to a great or great extent in the courses implies that the communication and relationship between the teacher and the student must be improved, the student must assume the role of active co-participant in the course, seminar or laboratory in order to clarify the confusions and difficulties encountered in individual study.

More than half of the respondents felt that they only needed support to a certain extent and only 26% were aware that without competent support from the teacher they did not know how to proceed in this area. A small percentage, approx. 13%, stated that they do not need additional lessons and information and that they know how to get the data they are interested in, although here we met both people who said they were well informed and students who admitted to being less informed. However, 87% of the students surveyed felt that they needed consultation and remedial classes in some subjects, especially fundamentals. A possible explanation is that students do not assess their need for information in relation to the knowledge they already have but to the usefulness it could have in their work, and this is not well understood.

The effects of dropping out show that this type of behaviour is considered particularly serious. First of all, those who drop out of university have neither the professional qualifications needed for socio-economic integration nor the moral and civic training necessary to play the role of a community

citizen. Secondly, as they have no qualifications, university drop-outs are the future unemployed and represent, in the medium and long term, a source of social hardship and loss which outweighs the investment required for initial training.

Thus, for **Objective O2: Identify and implement good practices of extra-curricular student support to reduce early dropout**, we found from the interpretation of the responses to the administered questionnaire that first year students are in great need of additional support measures from the university to be able to integrate into student life and to be able to pass exams so that they are not tempted to drop out early.

As a result, we started to implement student support measures: at the beginning of each academic year in 2019, 2020 and 2021, we proceeded to identify students from IULS Iasi (Faculties of Agriculture, Horticulture) in the first year of studies, undergraduate cycle, who are at risk of dropping out of university studies, with low learning skills and belonging mainly to disadvantaged groups, with the aim of increasing the promotion rate and improving academic performance.

Based on this dimensioning, four fully equipped spaces (about 170 sq.m.) for individual and team study, in a supported environment, have been provided for students with limited access to new content in the undergraduate field of study and at high risk of dropping out, within the *Learning Centre of IULS Iasi-Learning for Life*. The aim was to create an alternative, non-formal, modern space for learning, as well as for the acquisition of behaviours, habits and attitudes specific to a young intellectual, in a more open, interactive and friendly environment than the other formal learning environments used by them in the university. *The Learning Centre of IULS Iasi - Learning for Life* was conceived as a space for those who need professional, spiritual and human support, a warm space that allows the integration of high school graduates into the university environment. The adaptability and integration into the university and professional environment of students with reduced learning skills, belonging to the target group, was

improved through remedial activities, coaching and personal development, professional counselling, workshops and career guidance. This space is designed to carry out learning activities in a non-conformist, postmodern context, which allows students to develop affective feelings towards the university, the teachers and the subjects studied.

To achieve the objectives, the following staff members from IULS Iasi, student volunteers from the Department for the Preparation of Teaching Staff and from the Students' League belonging to the faculties of Agriculture and Horticulture, as well as qualified staff from the IULS Iasi Centre for Career Counselling and Guidance (CCOC) worked together.

The activities of the Learning Centre of IULS Iași-Learning for life, were :

Professional counselling and career guidance activities namely: Self-knowledge and career guidance workshop "Know yourself. Me and my strengths" with the following thematic content: my skills; my interests; my personality; how I present myself. *Training and development workshops of learning techniques/skills characteristic of university study* were organised with the following theme: Training workshop "Learning to learn with love at IULS Iasi" which aimed and achieved the creation of the premises for effective learning, by introducing students to the specifics of studying at university level, learning in general and independent documentation in particular; *Training workshop "Learning to learn with love at IULS Iasi, with the theme "Learning techniques characteristic of university study";* *Workshop on Documentation Technique with the theme: "Documentation methods",* namely active listening to lectures, fast reading and efficient reading, memorization techniques and elaboration of course and bibliographical notes; *Workshop on elaboration and support of papers in specialized subjects* with the theme: "What should a report, a review contain?". These activities were attended by first-year students, who, on the recommendation of the teaching staff, or on their own initiative of their choice, participated in one or more thematic modules,

depending on their individual needs. By participating in these activities, students were empowered with effective learning techniques and initiated with documentation techniques, which would ensure their successful integration into the university environment and thus lead to a decrease in academic abandon and an improvement in the quality of their own academic results.

Also, activities were organized and carried out in the form of remedial courses - "*IULS Iasi supports me*" with the aim of increasing the promotion rate of first year students by supplementing their incomplete preparation during high school and difficulties in understanding the subjects related to the first academic year, by conducting remedial courses on specific areas of *IULS Iasi*. The remedial activities also aimed to increase the number of *IULS Iasi* students who complete their first year courses. The organization of a remedial program has had a significant impact in the life of the university, aiming to change the attitude of each student who may have learning difficulties at some point. In these classes, students were supported in remedial activities and improvement of learning difficulties by experienced teachers. The activities were supported and guided by a remedial coordinator. He provided the material basis for the activities by equipping the *Learning for Life Learning Centre of IULS Iasi*. Department for the Preparation of Teaching Staff teachers and volunteers involved in the remedial activities conducted the initial testing of students, compiled supporting materials based on the results of the initial testing, assessed student progress. Students participated in the activities, meeting the requirements of the tutors/experts, collaborating with them, providing the necessary feedback for adapting the learning requirements and making progress. Remedial activities were organized in subjects where first session promotion rates are generally low. Thus, in mathematics and computer science, the notions taught in high school were resumed and consolidated, in order to facilitate access to the contents of the specific subjects foreseen for year 1 in the curricula of the faculties with an agronomic profile with

the aim of bringing students with deficiencies in mathematics and computer science training to a level that allowed the development of specific skills with applicability in the fields of IULS Iasi; in physics and chemistry, workshops were carried out with the theme : "Basic elements in physics and chemistry". The physics/chemistry notions taught in high school have been taken up again, to facilitate access to the content of the subjects foreseen for year 1; in botany and economics workshops have been carried out on the theme "Basic elements in botany/economics", which have been used to rework the botany/economics notions taught in high school. The activities were designed in an interactive manner, focusing on students and their individual learning needs and on remedying their poor preparation in high school, given that some students entered university with averages less than or equal to 7 on the baccalaureate exam. The results have been: the recovery of gaps in prior knowledge in core subjects through the provision of fundamental knowledge support to ensure the development of subject-specific and cross-curricular skills, increased self-esteem and the development of a positive attitude towards the learning effort specific to the university environment.

Workshops were organized in specific areas: entrepreneurship in agronomy and entrepreneurship in horticulture where participants learned to develop entrepreneurial skills necessary and useful in life as a student of IULS Iasi and later as a graduate; they acquired basic notions on entrepreneurship: basic components and main aspects of a Business Plan. They were informed what are the main sources of funding for small businesses; they were presented with concrete case studies (successes/failures) thus learning how a start-up can be initiated by a student. The aim of these extracurricular activities carried out with first year students was: to learn the concept of "entrepreneurship" and to identify and evaluate their own skills in this field; to attract and motivate young students to build a career as an engineer, aiming at: enriching their knowledge, opening their

perspectives and shaping a clear and concrete vision of what it means to be an engineer.

Successful coaching and personal development activities were also organised with the aim of increasing the adaptability and integration into the university and professional environment of first-year students with low learning skills. Thus, through coaching and personal development activities and workshops in specific areas to help develop students' ability to adapt to the demands of university life and increase their self-esteem, confidence in their own strengths, develop a positive attitude towards the university, with the aim of raising awareness of the importance of attending classes and labs/seminars, learning and improving attendance and learning outcomes. Specifically, the name of the activity carried out was: " We train for a good integration in the academic environment and the development of self-esteem". Sessions were also organized to present volunteering opportunities at USV Iasi in order to inform first year students how they can get involved in volunteering and personal development activities within IULS Iasi organizations, raising students' awareness of the benefits and advantages of getting involved in extracurricular activities through the lens of personal development. The organized events are also posted on the web site and Facebook of "Asociația Calea Vieții Tineri pentru bătrâni-bătrâni pentru tineri Iași", an association coordinated by the IULS' teaching staff [7].

These approaches have come to complement the diversity policy in the IULS Iasi space, through an appropriate support mechanism, addressed to young people, some coming from disadvantaged backgrounds, with the aim of recovering the differences in the level of knowledge from pre-university education, adapting the educational act to the specific needs and thus achieving the goal of centering the educational act on the student.

An attempt was made to counteract the main risk factors identified as the basis for the intention to drop out of studies, in order to decrease the dropout rate, but also to increase

the academic performance of the students in the target group.

Therefore, all these support activities carried out for first year students contributed to the improvement of the educational climate, the promotion rate after the first year was improved compared to the baseline (79.67% - university average), through the implementation of the activities increased by about 4 percentage points to 81.7%, and the dropout rate was reduced from 16.45% to 15.5% at the end of the 3 years.

CONCLUSIONS

A comparative review of the literature, to which we add this study, concluded that there are five major components behind dropout: student adjustment, personality, socio-economic level, teacher-student relationship, and the poor knowledge that some students have when they leave high school. Of course, dropping out most certainly occurs when the student does not have the financial support to continue their studies in their first year. Another very real cause is failing to accumulate the credits to move on to the second year, a minimum of 30 credits. There are various reasons why the student fails to collect them. One of them is that the student is not coping with university life in the sense that there is a very big gap between what is done at high school and what is done at university. In this case, certain remedial and support programs done extracurricularly at university can make a difference. If the university has programs to help the student acquire skills in time management, stress management, note taking, appropriate learning strategies, then these can help the student overcome this problem.

The support activities carried out in formal and especially non-formal environment organized in the Learning Center of IULS Iasi-Learning for life, to increase the adaptability of first year students to the university environment, were organized to help students, being designed in an interactive manner, focused on students and their individual learning needs and to remedy the poor preparation in high school, given that

they come from high schools on theoretical, vocational and technical non-agricultural tracks.

The results obtained are rewarding: improvement of self-esteem, discovery/improvement of learning style, personalised learning, development of active learning strategies. The remedial activities carried out, in addition to increasing the promotion rate and reducing dropout among first year students, have led to the formation of a learning community, to the improvement of the educational climate.

We can state that at IULS Iasi, the support measures for students aimed to increase access and equity in higher education, by improving the quality and relevance of study programs, to increase adaptability to the needs of the labor market; diversifying the academic offer, introducing cross-curricular modules; sustaining the development of the system of counseling and professional and personal guidance for students, encouraging student participation and involvement in academic and social life, by promoting student democracy, volunteering.

We can agree that in order to reduce early school leaving, an integrated and multidimensional approach to this phenomenon is needed, involving all relevant actors: students, teachers, higher education institutions, but also public authorities, employers, non-governmental organisations, because the problem is complex.

We believe that this study, through the support measures provided to first year students at IULS Iasi, is a model of good practice for increasing the adaptability of first year students to the university environment and for reducing early dropout.

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REFERENCES

- [1] Acevedo, F., 2020, Explanatory factors for dropout from higher education in unfavourable socio-academic contexts. *Rev. Española de Pedagog.* 78, 253–270. doi: 10.22550/REP78-2-2020-02
- [2] Álvarez, D., 2021, Analysis of university dropout in Spain: a bibliometric study. *Publicaciones* 51, 241–261. doi: 10.30827/publicaciones.v51i2.23843
- [3] Aldowah, Al-Samarraie, H., Alzahrani, A.I., Alalwan, N., 2020, Factors affecting student dropout in MOOCs: a cause and effect decision-making model, *Journal of Computing in Higher Education* (2020) 32:429–454, <https://doi.org/10.1007/s12528-019-09241-y>
- [4] Amelec, V., Garcia-Padilla, J., Vargas-Mercado, C., Hernández-Palma, H., Orellano Llinas, N., Arrozola David Monica, 2019, Integration of Data Technology for Analyzing University Dropout. *Procedia Comput. Sci.* 2019, 155, 569–574.
- [5] Anghel, R. E., Marcuta, A., Tindeche, C., Rosu, M., Tristaru, C., Marcuta, L., 2022, Management and rural development regarding the teaching – learning assessment activity carried out online during the Covid, *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development*, Vol. 22(4), 75-82.
- [6] Araque, F., Roldan, C., Salguero, A., 2009, Factors influencing university drop-out rates. *Comput. Educ.* 53, 563–574. doi: 10.1016/j.compedu.2009.03.013
- [7] Asociatii.Net, 2024, Asociatia "Calea vietii- Tineri pentru batrani, batrani pentru tineri", <http://www.asociatii.net/iasi/asociatie-asociatia-calea-vietii-tineri-pentru-batrani-batrani-pentru-tineri-cui30894867.html>, Accessed on 19.02.2024
- [8] Baert, S., Neyt, B., Siedler, T., Tobback, I., Verhaest, D., 2021, Student internships and employment opportunities after graduation: A field experiment. *Economics of Education Review*, 2021, Vol. 83: 102141.
- [9] Baragash, R.S., Al-Samarraie, H., 2018, Blended learning: Investigating the influence of engagement in multiple learning delivery modes on students' performance. *Telematics and Informatics*, 35(7), 2082–2098.
- [10] Bertola, G., 2023, University dropout problems and solutions, *Journal of Economics* 138:221–248, <https://doi.org/10.1007/s00712-022-00814-7>
- [11] Casanova, J. R., Fernandez-Castañón, A.C., Pérez, J.C.N., Gutiérrez, A.B.B., Almeida, L.S., 2018, Dropout in higher education: Impact of self-efficacy in dropout intention. *Rev. Bras. Orientaç. Prof.* 19, 41–49. doi: 10.26707/1984-7270/2019v19n1p41
- [12] Cooper, J. T., Gage, N. A., Alter, P. J., LaPolla, S., MacSuga-Gage, A. S., Scott, T. M., 2017, Educators' self-reported training, use, and perceived effectiveness of evidence-based classroom management practices. *Preventing School Failure*, 13–24.
- [13] Díaz, P., Tejedor-De- Leon, A., 2016, Design and Validation of a Questionnaire to Analyze University Dropout—CADES, *World Journal of Educational Research*, Vol. 3(2), 2016, www.scholink.org/ojs/index.php/wjer, 267, Accessed on 19.02.2024
- [14] European Commission, European education area, Quality education and training for all, Initiatives in the field of higher education, <https://education.ec.europa.eu/ro/education-levels/higher-education/about-higher-education>, Accessed on 19.02.2024
- [15] Fernandez-García, A.J., Preciado, J.C., Melchor, F., Rodriguez-Echeverria, R., Conejero, M., Jose, M., Sánchez, F., 2021, A Real-Life Machine Learning Experience for Predicting University Dropout at Different Stages Using Academic Data. *IEEE Access*, 9, 133076–133090.
- [16] Hegde, V., Prageeth, P. P., 2018, Higher education student dropout prediction and analysis through educational data mining. In *Proceedings of the 2018 2nd International Conference on Inventive Systems and Control (ICISC)*, Coimbatore, India, 19–20 January 2018; pp. 694–699.
- [17] Hendricks, L., Leukhina, O., 2018, The return to college: selection and dropout risk. *Int Econ Rev* 59(3):1077–1102.
- [18] Liu, T., Wang, C., Chang, L., Gu, T., 2022, Predicting High-Risk Students Using Learning Behavior. *Mathematics*, 10, 2483.
- [19] Lorenzo-Quiles, O., Galdon-Lopez, S., Lendinez-Turon, A., 2023, Factors contributing to university dropout: a review, *Front. Educ.* 8:1159864, doi: 10.3389/educ.2023.1159864
- [20] Opazo, D., Moreno, S., Alvarez-Miranda, E., Pereira, J., 2021, Analysis of First-Year University Student Dropout through Machine Learning Models: A Comparison between Universities. *Mathematics*, 9, 2599, <https://doi.org/10.3390/math9202599>
- [21] Ortiz-Lozano, J.M., Rua-Vieites, A., Casadesús-Fa, M., Bilbao-Calabuig, P., 2018, University student retention: Best time and data to identify undergraduate students at risk of dropout. *Innov. Educ. Teach. Int.*, 57, 74–85.
- [22] Păcurar, I., Cosmin, C., 2023, Study regarding the importance of participation in extracurricular activities organized by Centre for career counselling and guidance within University of Agronomic Sciences and Veterinary Medicine from Bucharest with the aim of consolidating career development in the agribusiness field *Scientific Papers. Series "Management, Economic Engineering in Agriculture and rural development"*, Vol. 23(1), 545-552.
- [23] Roșu, M., Mărcuță, A., Tindeche, C., Anghel, R.E., Trăistaru, C., Mărcuță, L., 2022, Study on the perception of students of the Faculty of Management digitalization in the training of competences necessary for the integration of graduates in the labor market, *Scientific Papers. Series "Management, Economic Engineering in Agriculture and rural development"*, Vol. 22(4), 627-634.
- [24] Santos-Villalba, M. J., del Olmo Fernandez, M.J.A., Montenegro Rueda, M., Cerero, J.F., 2023, Incident factors in Andalusian university dropout: A

qualitative approach from the perspective of higher education students. *Front. Educ.* 7:1083773. doi: 10.3389/feduc.2022.1083773

[25]Segura, M., Mello, J., Hernández, A., 2022, Machine Learning Prediction of University Student Dropout: Does Preference Play a Key Role? *Mathematics*, 10, 3359., <https://doi.org/10.3390/math10183359>