





## **Optimization of inter-knowledge in the class of students**

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**Abstract.** Optimizing the inter-knowledge within the group is of great importance for the performance and productivity of the students. The existence of positive preferential relationships between students allows the affinities to favour collaborations and induce a relaxed working atmosphere. The article is a survey about the perspective of the teachers on the inter-knowledge of their students and the benefits that can reside in applications of collaborative methods to boost the inter-knowledge.

**Keywords.** inter-knowledge, collaborative methods, group activity, self-knowledge

### **Introduction**

Educational interaction is an aspect, a form of the multitude and variety of interpersonal relationships in the class of students. Regarding a possible classification of interpersonal relationships in the class of students, the criterion used is the psychological needs and needs felt by students when relating to each other.

Optimizing the inter-knowledge within the group is of great importance for the performance and productivity of the students. The existence of positive preferential relationships between students, allows the affinities to favour collaborations and induce a relaxed working atmosphere.

Inter-knowledge relationships are important so that the teacher can anticipate the outcome of the tasks he/she assigns to the class. For example, in team formation, the teacher needs to know to what extent members can work and communicate. In organizing an event, the teacher needs to know what skills and talents the students possess to properly capitalize on these qualities.

Relationships of inter-knowledge are generated by the need to know the other, to obtain information about his personality, about his way of being. The establishment of such relationships depends on the one hand, on the ability of the people who enter the relationship to externalize



themselves and, on the other hand, on their ability to judge, appreciate, value the behaviors of another.) The absence of concerns of inter-knowledge within a class of students, the poverty of information about other colleagues can explain the existence of an atmosphere of suspicion and distrust among the members of the class collective.

The formal leader has a significant role in regulating the relationships within the student collective as well as in establishing the teacher-student relationship. It has as its essential characteristic the authority given by the recognition by others of this position and stimulates others to participate in the performance of the tasks that stand before the group-class. These qualities must be considered when appointing the leader of the class of students.

The teacher must comply with the requirements of the group, to know the tensions existing in the group, the cases of deviation from the norms of the group. In the class of students, an informal structure is also developed, because of the intersubjective relations that are established between the students. This structure has an affective character, based on ties of sympathy, antipathy or indifference.

These relationships sometimes influence the cohesion and productivity of the school group, or act to protect group members from the authoritarian practices of formal leaders. As a result of preferential relations in the collective, informal leaders appear who can have a negative influence, sometimes, on the other members of the group, so it is important for us to know the qualities by which they impose themselves and whether the influences by which they impose themselves are convergent or divergent.

To be a high-performing teacher means to be a significant presence in both the objective life and the subjective life of the students. Despite the constituent asymmetry existing in the class of students - relating to the superior status of the teacher -, the teacher-student relationship can no longer be conceived as a relationship of dependence of the student on the teacher or as an abstract communication relationship. (Iucu, 2000, p.101)

The much-discussed authority of the teacher is not limited to the possession of specialized knowledge, but also derives from his ability to alternate teaching strategies adapting them to educational situations, to allocate responsibilities to students, (even resorting to delegation), to mobilize students to cooperation in a group, to capitalize on the valences of the teacher-student relationship in the sense of a real dialogue. Through everything I have mentioned so far it can be seen that the so-called authority can be confused with the force of educational influence in the classroom.

The school group has a certain degree of cohesion that expresses the degree of unity and integration of the group, its resistance to dismantling. The sources of group cohesion are: interpersonal attraction, the extent to which the members sympathize with each other, the climate of mutual trust, the cognitive and affective consensus of the members, the success in the joint activity and the satisfactions generated by the group life, the cooperation within the group's activities, the prestige of the group of belonging, the extent to which the group satisfies the aspirations of the members. School groups have a relatively homogeneous composition in terms of age, as level of schooling, level of instruction, interests, needs, and aspirations.

The impact of the development of interpersonal relationships is better reflected in the medium and long term, in the degree of cohesion of the classes, in the conduct of each individual student in both school and family environments and in the optimal socio-professional integration of the trained young people. The criterion used in terms of a possible classification of interpersonal



relationships in the class of students is the psychological needs and needs felt by students when they relate to each other.

The impact of the development of interpersonal relationships is better reflected in the medium and long term, in the degree of cohesion of the classes, in the conduct of each individual student in both school and family environments and in the optimal socio-professional integration of the trained young people. The education, training and practice of life skills is carried out permanently, in an organized and structured way or spontaneously.

The development and optimization of interpersonal relationships is a particular form of non-formal, participatory education, stimulation, and personal development. The formation and development of life skills involves participatory teaching and learning methods, designed to provide young people with both practical experience and confidence in their own ability to respond correctly to the problems of independent living.

Interactive methods contribute effectively to the integrated development of knowledge, skills, attitudes, life values, as well as to the increase of young people's motivation for optimizing human relationships. Moreover, "interactive methods aim at optimizing communication, observing the inhibitory tendencies that may occur within the group" (Ion-Ovidiu Pânișoară, 2003, p. 140). Interactivity involves both cooperation – defined as "the motivational form of self-affirmation, including the activity of one's own advancement, in which the individual rivals with others for the acquisition of a social situation or superiority" – and the competition which is a "oriented activity socially, in the context of which the individual resumes, he collaborates with others in order to achieve a common goal" (Ausubel & Robinson, 1981)

The specific advantages of these methods, used for the development / optimization of interpersonal relationships, include the following: directly and actively involve the young person in his own learning process; increase participants' perceptions/reflections about themselves and others; promote cooperation between participants rather than competition; provides opportunities for group members to recognise and realise their individual potential and increase their self-respect; allows participants to get to know each other and expand relationships; promotes skills of active listening and effective communication between participants; promotes tolerance, understanding and acceptance of one's own needs and those of others; facilitates the formation / development of correct behaviours regarding sensitive issues; encourages innovations and creativity, with students being determined to discover, imagine, build and redefine meanings, filtering them through the prism of their own personalities and needs.

Brainstorming is an interactive method of developing new ideas resulting from discussions between several students, where each comes up with a lot of suggestions. The outcome of these discussions results in choosing the best solution to solve the debated situation. Brainstorming can be practice orally or in writing.

Discussion is a technique through which most of the interactive methods are realized and through which young people can get informed about interpersonal relationships, can practice their listening and expression skills, and can manifest their attitude towards the problems that concern them.

Role-playing. In a role-playing game, two or more people play parts of a scenario in connection with a theme of developing/ optimizing interpersonal relationships. Role-playing helps young people to better understand their own role and the roles of those around them, developing their empathic capacity, critical thinking, and decision-making capacity; it develops their ability to



plan alternative strategies of action, particularly useful in their daily lives; it highlights the link between young people's attitudes, opinions, and values.

**Bunk method.** Through this method, the participation of the whole group is encouraged. It is a way to make associations of ideas or to offer new meanings to previously acquired ideas.

**Example of an exercise on the topic "Self-confidence":** Students are asked to complete the following work tasks

1. Make a list of all the names of your colleagues and write underneath them the special things you appreciate about those people
2. Write your name in the middle of the circle and draw as many rays as your classmates are in the classroom
3. Each student writes something about their peers on their sheet of paper, passing by each
4. For 3-5 minutes, read what you have on your own sheet
5. In groups of four, share how you feel when you read what others have written about you.

**Group activity.** It is the most appropriate process in the realization of interactive methods. It gives students the opportunity for more responsible involvement and more effective cooperation, develops interpersonal communication skills. It helps participants to understand and solve some differences between them; it makes them understand the need to distribute roles in a team and to what extent the effectiveness of a team depends on the correct assumption of each role, on the correct performance of the tasks corresponding to that role.

**Games that aim to optimize inter-knowledge relationships:**

1. **Autographed sheet.** A handout and a pen or pencil are distributed to each participant. They have the task of representing themselves through a drawing and adding a sentence describing a unique thing about themselves, a preference, a skill, an achievement, etc. (for example, I love football, I speak Spanish, I cope with computer games, etc.). When everyone has finished, collect the plugs in a bag, mix and distribute them randomly. If someone has extracted his sheet, he will change it. Participants are asked to find the owner of the card and take an autograph.

2. **Concentric circles.** The group is divided into two equal groups, which form two concentric circles. The players in the outer circle have their faces inwards, the others outwards, each player in a circle having a correspondent in front of him from the other circle. The two circles start to move on the music, or at the command of the instructor, the outer circle in a clockwise direction, the inner circle in reverse. The movement is done at low speed, and at the moment of passing in front of a partner, the two touch their palms and say "hello". When the music stops, or the instructor gives the command "stop", the two circles stop and all the players hug with the one across the street, then start talking: they introduce themselves, exchange information about them, etc. After some time, the music starts again, or the instructor commands "turn on", and the game continues as before.

Social games for children are an easy and relaxing way of harmonizing the relationships in a group, favouring inter-knowledge, communication, and cooperation. With the help of these games, an informal networking framework is created through which the facilitator encourages the spontaneity and freedom of expression of the students.

In addition to games, teamwork develops inter-knowledge through cooperation. Teamwork gives students the opportunity to expose their ideas, comment on them, relate, collaborate for a common purpose. Through collaboration, students get to know their colleagues and in moments of



exposure to teaching tasks, to recognize their potential within the group and to use the strengths of each one for the common purpose of learning. Teamwork will be beneficial when students choose the team, they are part of, using inter-knowledge. Thus, they choose to work with colleagues with whom they have common affinities, who they feel equally motivated in carrying out teaching tasks or with whom they know they can collaborate effectively. Also, keep in mind that collaboration can be started with pairs, then triads and, finally, larger clusters. As the size of the group increases, it allows students to practice their skills and build more self-confidence through their experience with a variety of roles. (Osterholt & Barratt, 2012)

The relational universe of the class of students, analysed from the point of view of the educational influence in the context of the school group and approached, from a scientific point of view, under the auspices of the management of the class of students, becomes one of the most important topics, on whose knowledge and application depends on the success of the educational approach of the teacher.

## **2. Research methodology**

### **2.1. Research objectives**

- Identifying differences depending on the professional experience of the teacher, in terms of optimizing the inter-knowledge relationships in the class of students.
- Discovering the attitude of teachers, regarding the importance and optimization of inter-knowledge relationships, from the position of leader of the group of students.

### **2.2. Research objectives**

We presume that there are significant differences in the opinion of the teaching staff participating in the research, depending on their professional experience, on the extent to which interactive methods help to develop inter-knowledge relationships.

### **2.3. Description of the batch of subjects**

To verify the work hypothesis and achieve the objective of the paper, I chose to apply a questionnaire on a sample of 30 teachers, aged between 18-45 years, with experience at the department from the status of beginner to over 10 years.

It can be noted that out of the total of thirty teachers, those with ages between 18-25 years and 26-35 years predominate, in an equal percentage of 40%. Respondents aged 36-45 years were 13.3%, and the lowest percentage of 6.7% represents the subjects over 45 years of age. (Figure 1)

From the point of view of professional experience, we note that the highest percentage, of 50%, was among people with professional experience under 5 years of age. Participants in the

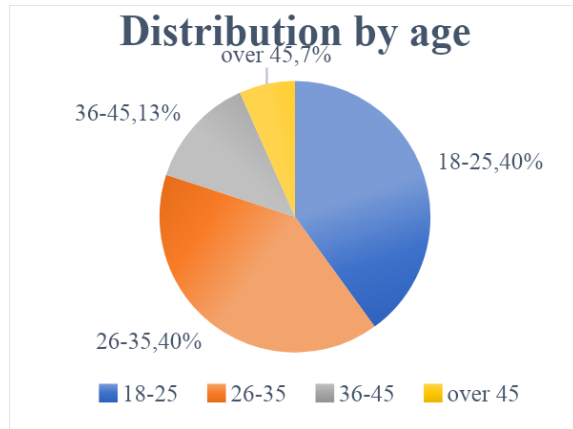


Figure 2. Graphical representation of the group of participants by age categories

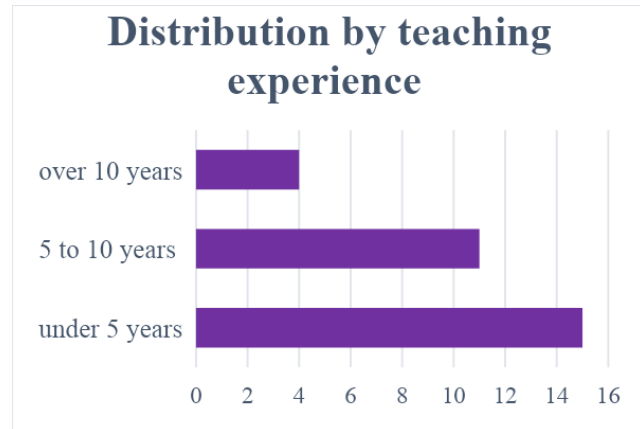


Figure 1. Graphical representation of the group of participants according to professional experience

study, with experience between 5-10 years, reached the threshold of 36.7%, while professional experience of over 10 years was 13.3%. (Figure 2)

Therefore, we can say that most of the participants in the study were young people, with average professional experience, up to 10 years.

#### **2.4. Description of research tools**

The research method consisted of applying a questionnaire, in electronic format, through the Google Forms application.

The questionnaire used was designed with the purpose of discovering the attitude of teachers, regarding the importance and optimization of inter-knowledge relationships, from the position of leader of the group of students.

Fifteen questions were used, with a closed, mixed, and open answer. The participants to the study were informed that they must choose at least one variant of the answer from the pre-selected ones to the eleven closed-answer questions, choose a pre-selected answer variant or complete a personal version of the two mixed-answer questions and fill in a short answer to the two questions with free answer. This way, using questions with mixed or free answers, we tried to obtain additional information, to define the picture of the individual opinions of the respondents.

The data processing was carried out with the help of the statistical program called SPSS (Statistical Package for the Social Sciences). This program presents an increased complexity that allows users to verify the existence of certain correlations between both dependent and independent variables, as well as their materiality threshold.

#### **2.5. Experimental research design**

The questionnaire was designed in April 2022 and will be distributed through the Google forms platform in May of the same year. The participants in the study were chosen from among the teachers.



## 2.6. Ethical requirements

Since the beginning of the questionnaire, participants have been entrusted with the confidentiality of their responses and no personal data have been collected. All questionnaires were centralized for this study only. Respondents were informed that the time to complete the questionnaire will be 5-10 minutes and that all questions are mandatory.

## 2.7. Analysis and interpretation of the research hypothesis

In the following lines, the answers to the closed questions from a quantitative and iconographic point of view will be analysed.

To the question "Do you think there is room for improvement in the way inter-knowledge relationships develop in your class?" most research participants responded with "frequently", 60%, followed by the "always" variant at 26.7%. A percentage of 10% of the participants chose the answer "sometimes", and the variant "never" was ticked in a percentage of 3.3%. (Figure 3).

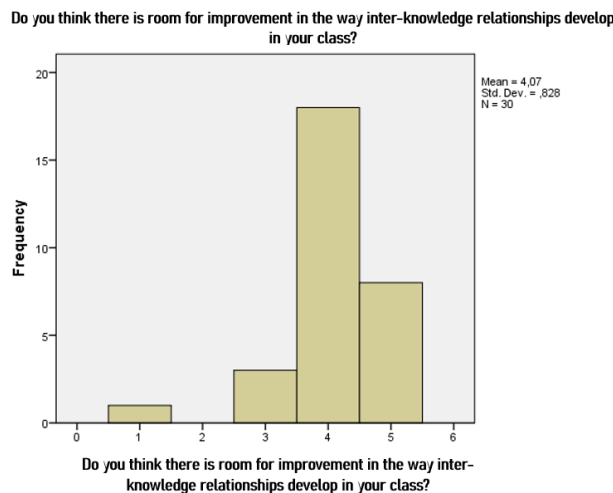


Figure 3. Graphical representation of the answers to the question "Do you think there is room for improvement in the way inter-knowledge relationships develop in your class?"

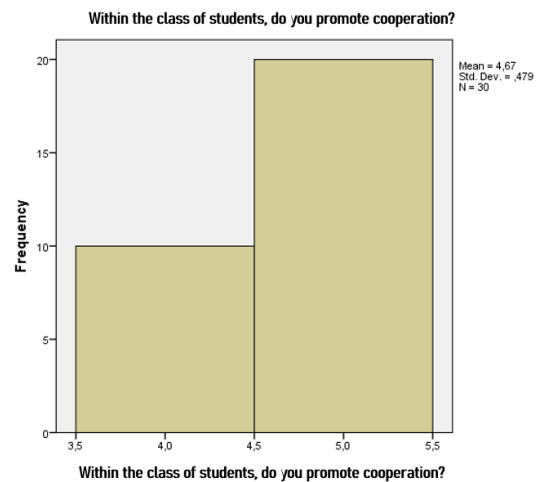


Figure 4. Graphical representation of the answers to the question "Within the class of students, do you promote cooperation?"

As far as can be seen, most teachers have given a favourable answer to this question, from which it appears that the participants in the study want to evolve and improve their way of optimizing the inter-knowledge relationships within the group of students.

To the question "Within the class of students, do you promote individualism?" the answer to the question was unanimous, the "never" version being chosen in a percentage of 100%.

We consider that this is a favourable response, given that any teacher should promote understanding between students, to train them according to the phrase "as in a family", but not to promote individualism among students.

To the question "Within the class of students, do you promote cooperation?" the respondents chose between the "frequent" and "always" answers, the largest share having an "always" option, in a percentage of 66.7%. The "frequently" response was ticked off by 33.3% of study participants. (Figure 4)





The fact that only the two variants of answer were chosen, indicates that the group of participants, the teachers, promotes positive attitudes in the classroom, such as cooperation.

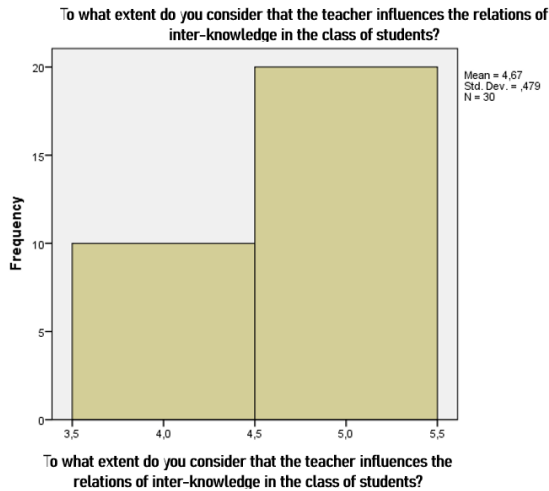


Figure 5. The graphic representation of the answers to the question "To what extent do you consider that the teacher influences the relations of inter-knowledge in the class of students?"

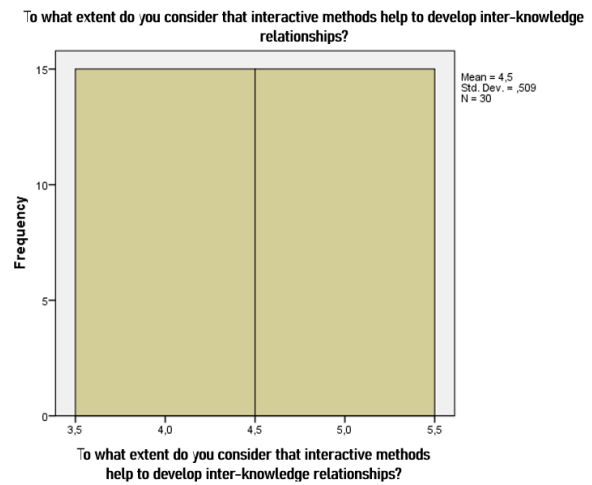


Figure 6. Graphical representation of the answers to the question "To what extent do you consider that interactive methods help to develop inter-knowledge relationships?"

Through cooperation, students learn to express their opinions, ideas, feelings, but also to listen to those of others, developing and thus optimizing the relationships of inter-knowledge within the group of students.

To the question "To what extent do you consider that the teacher influences the relations of inter-knowledge in the class of students?" there were the variants of answer "to a large extent" and "to a very large extent", the first variant being chosen in a percentage of 33.7%, while the second in a proportion of 66.7%. The variants "to a very small extent", "to a small extent" and "to some extent" were not chosen by any participant from the group of subjects. (Figure 5)

From the answers provided, it appears that the participants in the study are of the opinion that the leader, the teacher, has a strong influence on the inter-knowledge relations in the class of students, being the one who facilitates their optimization, through various means and methods.

To the question "To what extent do you consider that interactive methods help develop inter-knowledge relationships?" the participants again chose only the variants "to a large extent" and "to a very large extent", both having a share of 50%. (Figure 6)

The respondents of this study, provided adequate answers, given that interactive methods are increasingly used in the educational process, facilitating its development. As in the case of the educational process, in the case of optimizing inter-knowledge relationships, these innovative and interactive methods have an important role, because they involve all students, engaging them in various activities that favours communication and knowledge.

To the question "To what extent do you think the students in your class have integrated? in the school environment?" the subjects responded at a rate of 45.7% with "to a large extent", and the answer "very much" was chosen by a percentage of 53.3% of the participants in the study. The other variants of response were not chosen by any of the study participants. (Figure 7)



And this time the result is a gratifying one, because the integration rate of the students appears to be a high one, the participating teachers stating that the students have integrated well or very well. Thus, we can say that the inter-knowledge relationships in the class of students are optimal.

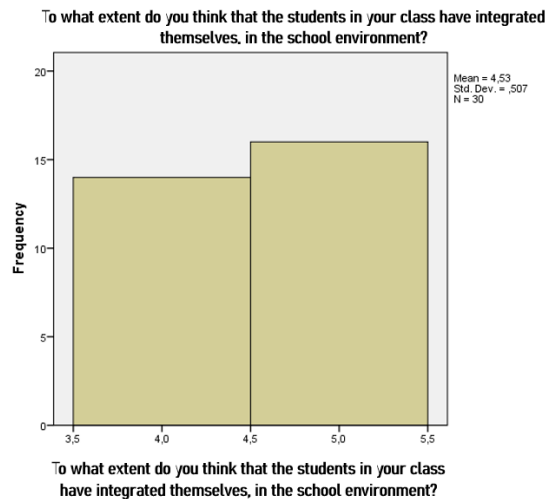


Figure 7. The graphical representation of the answers to the question "To what extent do you think that the students in your class have integrated themselves, in the school environment?"

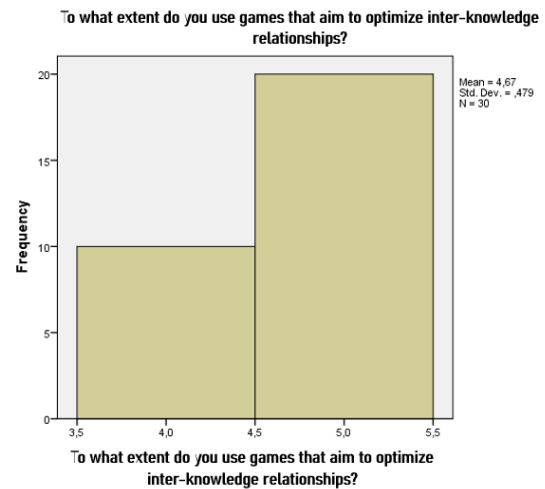


Figure 8. Graphical representation of the answers to the question "To what extent do you use games that aim to optimize inter-knowledge relationships?"

To the question "To what extent do you use games that aim to optimize inter-knowledge relationships?" the answer chosen by most participants was "to a very large extent", at a rate of 66.7%. The "largely" variant was ticked off at a rate of 33.3%, and the other response variants were not ticked by any of the 30 subjects participating in the study. (Figure 8)

According to the answers provided, study participants frequently use games that aim to optimize inter-knowledge relationships in the educational process carried out in the classroom. This is very beneficial for the development of the communication process between and with the students in the class, implicitly for optimizing the relationships of inter-knowledge.

To the question "To what extent do you consider that the educational environment influences the process of optimizing inter-knowledge relationships?" the study participants chose 50% the answer variant "to a very large extent". The "to a large extent" variant was ticked at a percentage of 43.3%, while the variant "to some extent" was chosen only by a percentage of 6.7% of the group of teachers participating in the study. (Figure 9)

It is clear from these responses that the participants' opinions are divided. Half of them believe that the educational environment exerts a strong influence on the optimization of inter-



knowledge relationships, while the other half of the subjects believe that the environment influences this type of relationships to a great or some extent.

To the question "Do you consider that the students in your class have an optimal relationship of inter-knowledge?" the opinions were divided into two categories: a percentage of 60% of the participants chose the option "to a very large extent", and the remaining 40% of the subjects surveyed responded with "to a large extent". (Figure 10)

Also, these answers are favourable, because it appears that the students communicate effectively with each other and with the teacher, they have made friends, implicitly they have a good relationship of inter-knowledge within the group of students.

To what extent do you consider that the educational environment influences the process of optimizing inter-knowledge relationships?

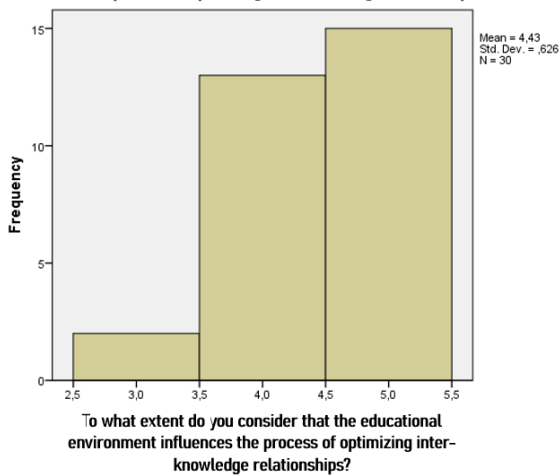


Figure 9. Graphical representation of the answers to the question "To what extent do you consider that the educational environment influences the process of optimizing inter-knowledge relationships?"

Do you consider that the students in your class have an optimal relationship of inter-knowledge?

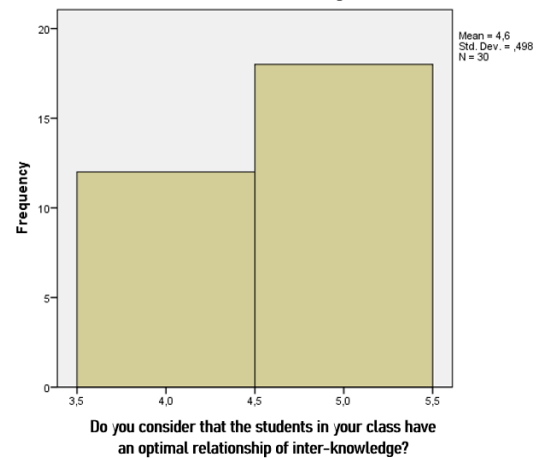


Figure 10. Graphical representation of the answers to the question "Do you consider that the students in your class have an optimal relationship of inter-knowledge?"

To the question "Do you know the tensions existing within the group of students?" the 30 teachers participating in the study answered as follows: a percentage of 73.3% chose the option "to a very large extent", while the "to a large extent" variant was chosen in a proportion of 23.3%, and the variant "to some extent" was chosen only by 3.3% of the subjects.

From the answers chosen to this question we can see that the teachers' majority know the tensions existing in the class of students to a large or very large extent, which is beneficial because in this way other future tensions can be prevented, can be properly alleviated and managed.

To the question "Do you manage these situations from the perspective of the leader of the group of students?", the subjects had to choose from five variants of answer, ticked off being only two of them, in similar percentages. The "to a very large extent" variant had a percentage of 53.3%, and the variant "to a large extent" having a percentage of 46.7%.

Based on these results, given that all the answers were favourable, we can interpret that all 30 subjects manage the conflict situations to every large or large extent.

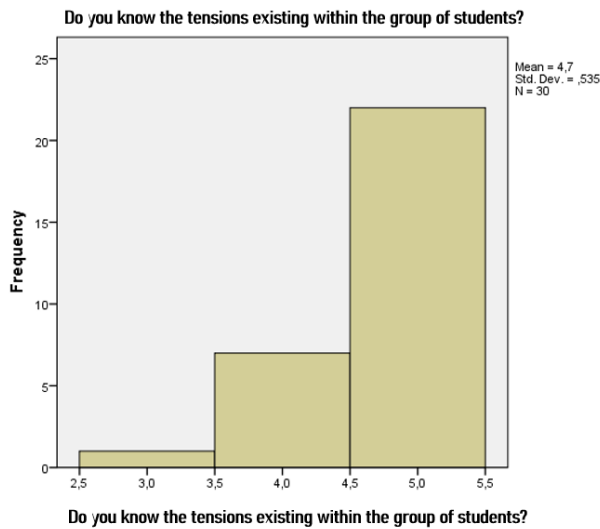


Figure 11. Do you know the tensions existing within the group of students?

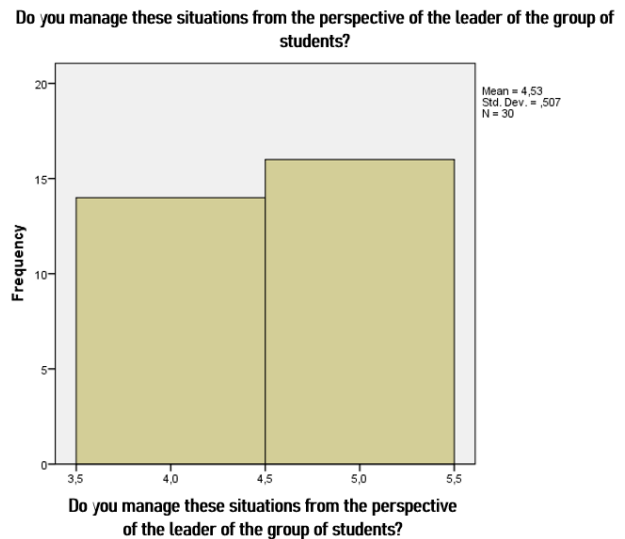


Figure 12. Do you manage these situations from the perspective of the leader of the group of students?

### 2.8. Verification of the working hypothesis

The objective of this study was to identify differences in the opinion of teachers participating in the research, depending on their professional experience, on the extent to which interactive methods help to develop inter-knowledge relationships.

Table 1. Cross-table of intervals of professional experience with the answers to the question under consideration

**To what extent do you think interactive methods help develop inter-knowledge relationships? \* Crosstabulation experience**

count

	Experience			Total
	under 5 years old	between 5-10 years	over 10 years	
To what extent do you think large extent interactive methods help develop inter-knowledge relationships?	7	8	0	15
very much	8	3	4	15
Total	15	11	4	30

To illustrate the differences between the answers of each category of teachers, with different professional experiences, to the question "To what extent do you consider that interactive methods help to develop inter-knowledge relationships?" the following table will be used in which we will



identify the batches of proportional respondents as the number of representatives to have an image as close as possible to the truth.

Differences of opinion are visible between the categories "under 5 years old" and "between 5-10 years old". For this reason, the present study will focus on comparing the data obtained by these two categories of professional experience to the question proposed to support the hypothesis.

Table 2. Calculation of the differences between the averages obtained on the two groups of participants

		<b>Independent Samples Test</b>								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
To what extent do you think interactive methods help develop inter-knowledge relationships?	Equal variances assumed	3,330	,081	1,322	24	,198	,261	,197	-,146	,667
	Equal variances not assumed			1,344	22,848	,192	,261	,194	-,141	,662

Since on the column Sig. (2-tailed) we obtained values of 0.198 and 0.192 > 0.05, it means that the proposed hypothesis is not confirmed, which shows us that there are no significant differences between the two categories of teachers with professional experience under 5 years and between 5-10 years, regarding the use of interactive methods in the process of optimizing inter-knowledge relationships in the group of students.

### Conclusions

Through this research we have tried to highlight whether there are differences between the perception that teachers have regarding the use of interactive methods, in order to optimize the inter-knowledge relationships within the group of students. Due to the limited number of participants in the study, i.e., 30 people, one cannot speak of some findings that can be extrapolated on a large scale, however, according to other studies, it can be concluded that there is a connection



between the two factors mentioned, namely professional experience and opinions on the use of interactive methods in the process of optimizing inter-knowledge relationships.

To the open questions, "Give examples of interactive methods that help optimize inter-knowledge relationships:" and "Provide examples of such games, used by you in daily activities:" the participants chose not to give very much detail and were limited to saying a single game name or interactive method.

It can be said that optimizing the inter-knowledge relationships within the group of students is an important aspect, which concerns the leaders of the group, the teachers, who have the role of facilitating the establishment of this type of relationship, so that it is accessible to all participants in the educational process.

We can say that the 30 participants in the study were concerned about this aspect and assumed the leading role, optimizing the inter-knowledge relationships, being in favor of using interactive and innovative methods, integrating this type of games in the daily activities carried out in the classroom.

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