

Quality report

Ready to innovate: Maths&Sports4all

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About the project

The integration of math and sports can provide a unique and engaging way for students to learn and apply mathematical concepts. By connecting math to real-world situations and activities, students can gain a deeper understanding of the subject and see its relevance to their own lives. This report presents the findings of an education project that aimed to incorporate math and sports into the classroom and gym, with the goal of improving student engagement and achievement in both areas.

The project involved a range of activities, including problem-solving tasks that used sports statistics, hands-on experiments with sports equipment, and collaborative activities that combined math and sports skills. Data was collected throughout the project to assess its effectiveness, and feedback was solicited from students and teachers.

This report provides a detailed overview of the project, including its goals, activities, results, and feedback. It also includes an analysis of the project's strengths and weaknesses, as well as recommendations for future improvements and expansion. By sharing these findings, we hope to provide valuable insight into the potential of combining math and sports in education, and inspire further exploration of this exciting and effective approach.

The main goal of this project is to develop a toolkit for students between 6 and 11 years old to learn, expand and reinforce mathematics content through physical education by training teachers in this new approach.

This project partnership is with seven partner organizations. For better understanding, the project partners will be addressed in the following report by the defined short names:

Partners	Name of organization	acronym
P1 (coo)	COLEGIO VIRGEN DE LA ROSA	CVR
P2	University of Burgos	UNIB
P3	Centro Regional de servicioc avanzados	CSA
P4	Gulbenes novada valsts gimnazija	GUL
P5	Osnovna skola "Branko Radicevic"	OBR
P6	OOU "Naum Naumovski Borche"-Skopje	NNB
P7	SIM Skopje	SIM

The quality evaluation report of the project will refer to the following points.

1. Quality evaluation of the Project management.
2. Quality evaluation of the Intellectual outputs.
3. Quality evaluation of the Training event.

1. Quality evaluation of the Project management.

In this section for monitor and control of the project management we have developed and designed a task file. This file is an excel document containing all activities and tasks within the project. Timeline of the activities and tasks is also included.

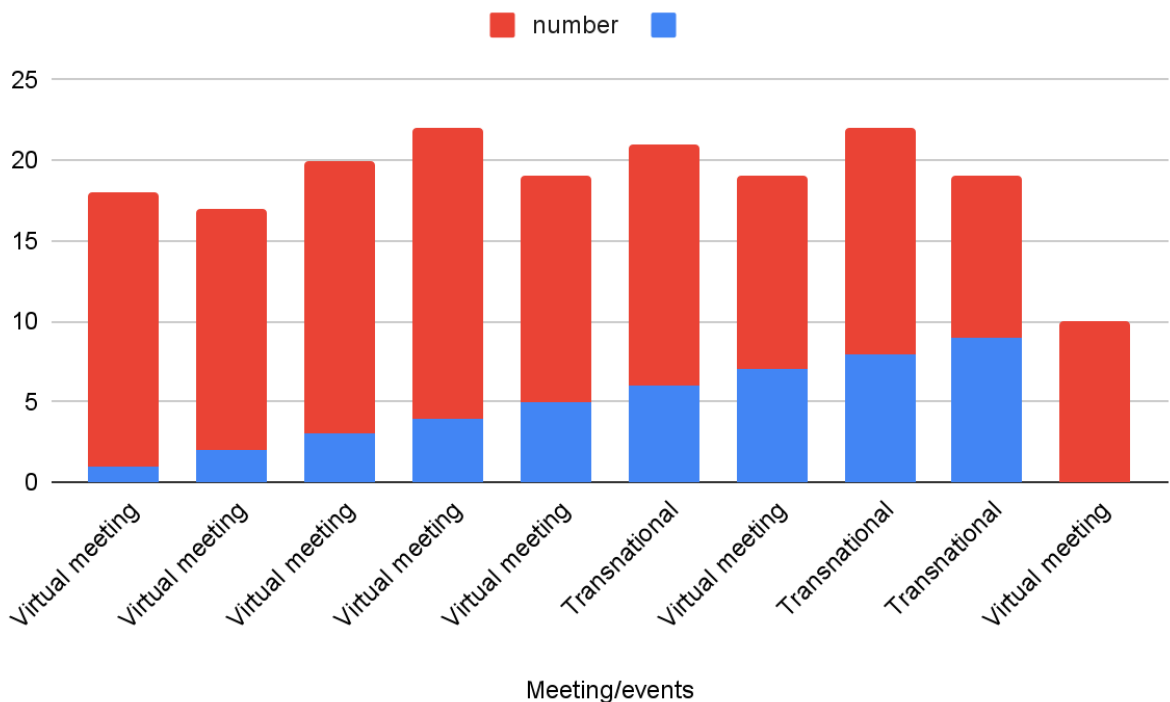
Monitoring: whenever something is done, we put on different colour on the activity meaning this is checked. Timeline is checked weekly by the project management team. If some activity does not follow the timeline, additional actions are taken.

On partnership level we made 4 transnational meeting that took place in Novi Sad, Skopje, Gulbene and Burgos, and we have 8 virtual meetings online. The online meeting were more intensively held in the first year of the project implementations, because of the Covid 19 and restrictions on travel in the year 2021.

On the following table we can see the number of meeting held, the dates of the meetings, and the number of the participants at the meetings.

Project management evaluation			
	Meeting/events	number	dates
1	Virtual meeting 1	17	10 March 2021
2	Virtual meeting 2	15	13 April 2021
3	Virtual meeting 3	17	22 June 2021

4	Virtual meeting 4	18	25 October 2021
5	Virtual meeting 5	14	13 January 2022
6	Transnational meeting in Novi Sad	15	23-26 January 2022
7	Virtual meeting 7	12	31 March 2022
8	Transnational meeting in Skopje	14	26-29 June 2022
9	Transnational meeting in Gulbene	10	18-21 October 2022
10	Virtual meeting 8	10	23 November 2022
11	Virtual meeting 9	5	23 February 2023



Meetings of partners in local environments. Every partner organization made meeting in local environment on a monthly basis. Lot's of arrangement on local level were made using whatsapp and emails.

Considering the number of participants at the meeting, and the frequency of the meetings, we can say that this project was well monitored from its beginning until its end.

2. Quality evaluation of the Intellectual outputs.

This project has two intellectual outputs:

1. Toolkit for maths learning through Physical education, and
2. Educational Platform RIMAS

2.1. Toolkit for maths learning through Physical education

After collection of good practices that involves maths and sports, a unique didactic unit was developed to incorporate maths and sports together. The didactic unit followed the national curricula of the countries involved in the project. Selected topics were taught following the new teaching methodology.

In order to measure and assess the effectiveness of the new teaching methodology, after the didactic units were implemented in schools, the students and teachers fulfilled satisfactory questionnaires. We wanted to have the feedback from them on their experiences with this new teaching methodology. To assess how the new approach affected the knowledge of the students we had a control group of students, and measure the achievements of both groups.

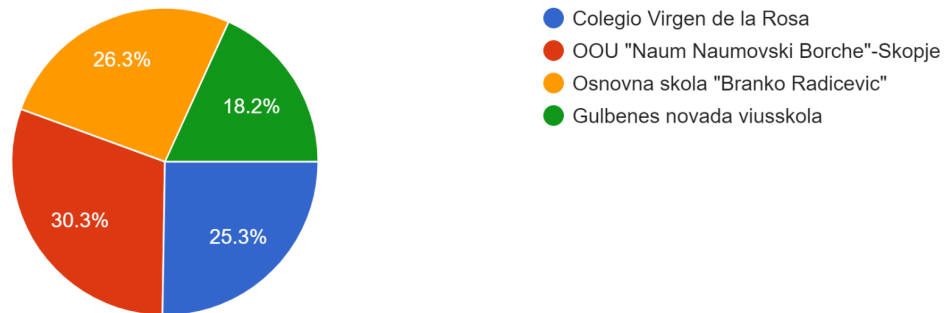
Students.

A student satisfaction survey is a feedback mechanism that is used to ascertain how satisfied your students are with the teaching practices. It is an important matrix used for measuring how successful a teaching was in line with pre-determined parameters. As students are the best critics on courses, you must run surveys to capture their feedback about the class to make their learning experience more fun and fruitful.

The questionnaire was fulfilled by 99 students who take part in the teaching of the new didactic unit. The distribution of students by their school is given on the following Figure.

My school is

99 responses



We had 53.5% girls, 45.5% boys and 1 % prefer not to say their gender. Concerning their age, we had 34,3% of 8 years old, 20,2% of 11 years old, 30,3% of 9 years old, and 15.2% of 10 years old students.

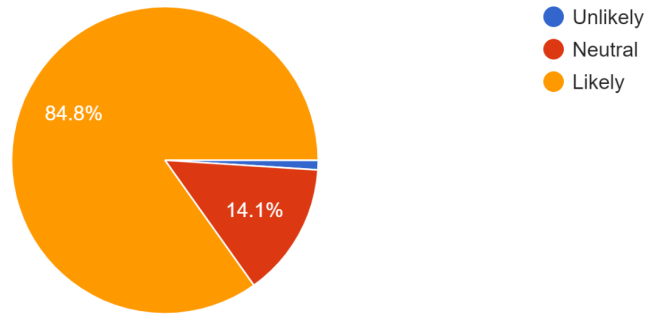
For the evaluation of the didactic unit we had the following questions.

1. Considering your complete experience with our pilot lessons being taught, how likely would you be to recommend these lessons to your peers?
2. Rate the amount of work you did though the unit.
3. Rate the level of your involvement in the activities of this lessons.
4. How much practical knowledge have you gained from this unit?
5. The math-sports lessons were fun.
6. The assignments given were interesting to do and enhanced my learning experience.

The results are given in the next Figures.

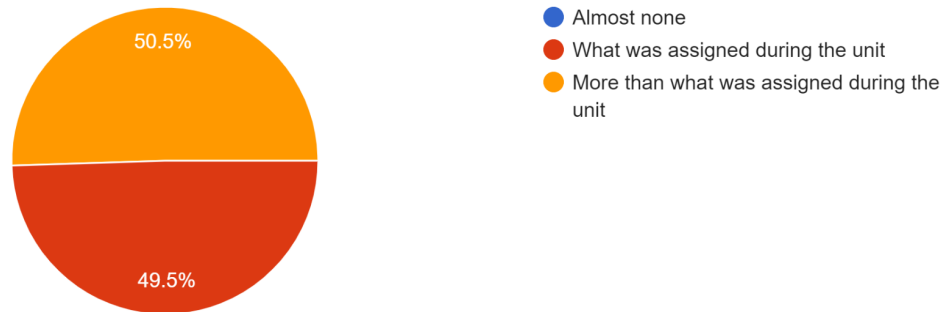
1. Considering your complete experience with our pilot lessons being taught, how likely would you be to recommend these lessons to your peers?

99 responses



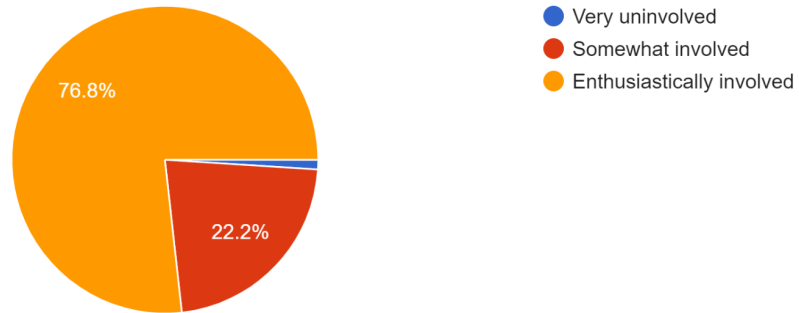
2. Rate the amount of work you did though the unit:

99 responses



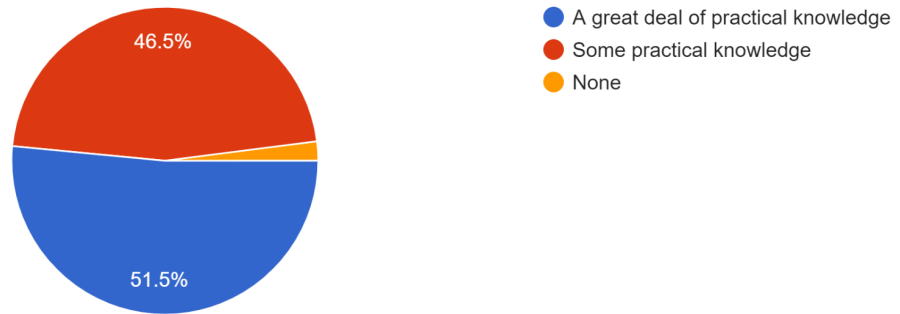
3. Rate the level of your involvement in the activities of this lessons

99 responses



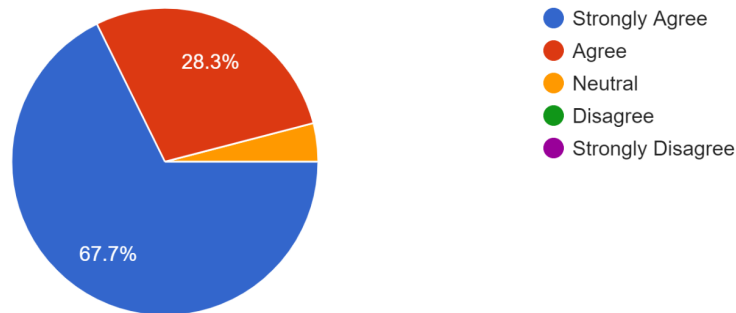
4. How much practical knowledge have you gained from this unit?

99 responses



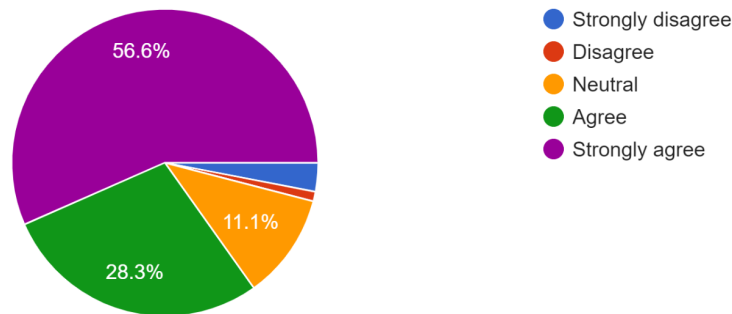
5. The math-sports lessons were fun.

99 responses



6. The assignments given were interesting to do and enhanced my learning experience.

99 responses



We can see that a very big percent of 84,8% of the students are likely to recommend these lessons to their peers. Only 1% will not recommend it. Next, 50,5% percents of the students did more work than it was assigned during the unit. 76,8% of the students were enthusiastically involved in the activities of the unit. 51% said that they get a great deal of practical knowledge by learning in this new way, and 46.5% gained some practical knowledge. 67.7% of the students strongly agree that math-sports lessons are fun, 28.3% of them agrees, and non of the students disagree or strongly disagree that the math-sports lessons are fun. Also, very big 56.6% of the students strongly agrees that the assignments were interesting and that they enhanced their learning experience.

At the end of the questionnaires we have 4 questions with free answers:

1. What has been the best thing about this unit? (What has caught your attention the most)?
2. What has been the worst thing about this unit? (What you liked least)?
3. Has this unit made you see maths in a more positive way?
4. Any other comments you would like to make about the unit?

We have summarized and analyzed students answers to get the following conclusion.

The students love working together, and they love math-sports lessons. The competitive part gives a special impact on their motivation for learning. The new didactic unit offered new approach, very interesting one, promoting collaborative learning, and peer to peer learning. It brought an evident increase of the motivation for learning mathematics. One of the students even wrote: I got the desire to study mathematics.

Considering the worst things of this didactic unit, many students answered that they like it very much, but some of them did not liked some jumping, running, someone breaking the rules of the play. There were also complains about the accounting part of the didactic unit.

Generally all of them are supporting the new teaching methodology and have seen mathematics in a more positive way, and they would like to continue with learning mathematics in this new teaching environment.

Control group students.

In order to measure the quality of the new didactic unit, we made tests with the students who followed the didactic unit, and test with students who did not followed the didactic unit. The test were made in each partner school, and we have the following result:

CVR

The school Virgen de la Rosa -Burgos, Spain- has put into practice the didactic units developed for 11-12 years old students. The experimental group was the 12-year-old

group, which was composed of 25 students, while the control group was the 11-year-old group, composed of 26 students.

Both groups developed the part of the unit dedicated to geometric knowledge of plane figures. While the experimental group acquired the concepts in the PE classes, under the methodology developed in the RIMAS project, the control group followed a traditional teaching-learning methodology.

Based on the tasks proposed to both groups in the classical theoretical test to which they were submitted after the application of the DU, we can highlight that the control group showed more insecurity and less capacity to develop the questions than the experimental group.

The experimental group was able to solve the questions with more imagination and thus was able to obtain better grades than the other group.

As a conclusion we can observe that the solutions to the problems given by the experimental group were supported by the joint learning of DE and Mat, and this has made it possible for the performance of this group to be higher, improving the personal satisfaction of the students and their position about learning mathematics.

GUL

The students from 3rd and 5th grade used sports lessons combined with math exercises to revise the learned theme.

For the fifth grade, it was multiplying/dividing/Roman numbers. The fifth graders have practiced the orienteering in the fourth grade, therefore-it was just one lesson combined with math. The class was divided in pairs. The children enjoyed different approach and noticed how hard it is to calculate without a paper in front of them, This was a moment where many of pupils realized that they knowledge is too poor in basic calculating processes that are supposed to be known by heart. This was a challenge, because one must do every example in a row, one cannot change to an easier, therefore it is different than in a test, where one can hop from example to an example. Nevertheless-it made the

students pay attention and find ways how to work in pairs in order to move forward. There were pupils who managed understand the Roman number coincidences, therefore-finally understood what each letter represents and the sequence of the written laws. Children were enthusiastic, even excited and have shown interest in having this kind of exercise in future as well.

For the 3rd grade it was a bit longer experience. They had to try the orienteering for few lessons to understand the basic principals. At the same time they learned the associated record during the math lessons. After two weeks it was the lesson of sports of orienteering plus the math examples. Pupils work in pairs according to their math knowledge. This lesson was just before a final test as a revision of both themes. Pupils worked enthusiastically, without feeling of pressure as the sports part was involved what they enjoy on everyday basis. They felt safer, as they were supporting each other, explaining the task in pairs. It could be that some of pupils felt bigger responsibility for their own performance as the result was submitted in pairs. This is a good way how to revise a theme during the theme implementation phase, as working with pupils it is noticed how much they enjoy some kind of change and innovation in their everyday work. Most of the students admitted that this was good, interesting and even easy way how to learn math. According to the results, it was noticed that those do not differ much from everyday results. It can be concluded that the physical activity do not influence badly the mind capacity. It could be that the sports enthusiasm to be the first could harm the math results if the child tries to get to the next station faster without taking good consideration of the example. Anything that is new and different creates a good base for willingness to get to know more and deeper- either it is just a change of a space or in this case-two very uncommon subjects combined in one.



Students in GUL on math&sports lessons

OBR

"Branko Radičević" elementary school in Novi Sad has a total of 65 third-grade students. 44 of them were tested. The purpose of testing is to determine the success of practicing mathematical content through physical activities designed and described in DU.

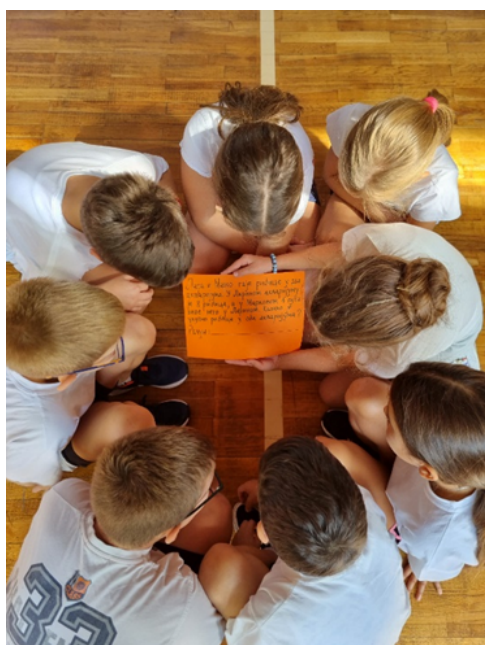
The experimental group, class 3-1 (22 students) determined the topic "Multiplication" in the Physical Education class through the application of knowledge from mathematics by realizing tasks through movement, play and physical activity. The control group, 3-2 class class (22 students) determined the topic "Multiplication" in the Mathematics class through the application of knowledge by solving tasks on the worksheet.

After a few days, both classes had a math test. Both groups were given the same tasks. Based on the analysis of completed tasks, it was observed that the students of the experimental group solved the tasks easier, faster and more accurately. The practical application of mathematics knowledge in physical education classes gave students confidence and self-confidence. Considering that they were successful and punctual in

the class where they had to practically connect the knowledge of math and physical activities, they approach the creation of tasks only on the sheet in a more relaxed way.

Respondents of these two groups have different attitudes about physical activities as an incentive for learning. The respondents of the experimental group think that it is easier and more interesting to learn through the game and they would be very happy to learn that way again. The students of the control group do not see the connection between mathematics and physical education, and believe that physical activities do not encourage the practice of knowledge in mathematics.

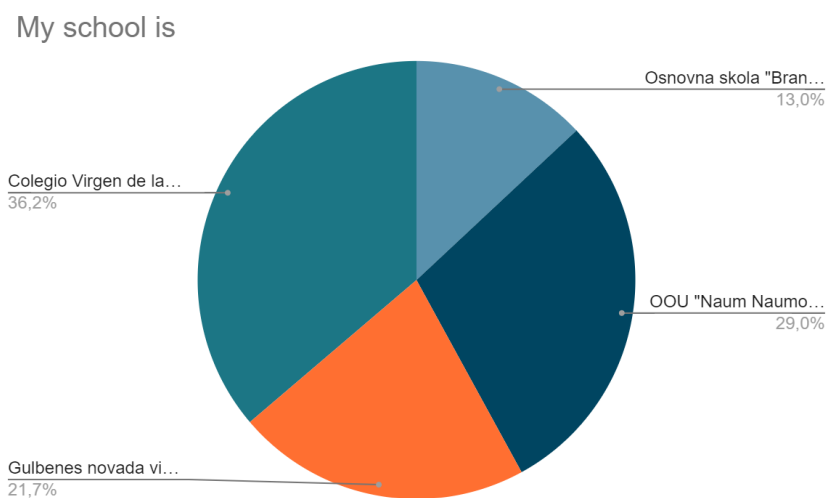
The best and easiest way to grow up and learn is through play and movement.



Students in OBR on math&sports lessons

NNB (here one page report to be put)

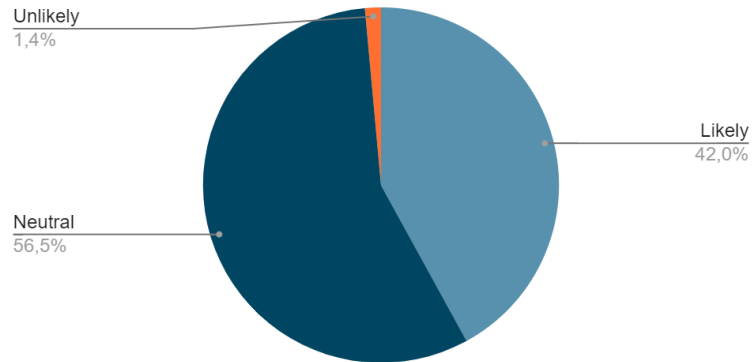
With the control group of students, the same questionnaire was fulfilled by 70 students who did not take part in the teaching of the new didactic unit. The distribution of students by their school is given on the following Figure.



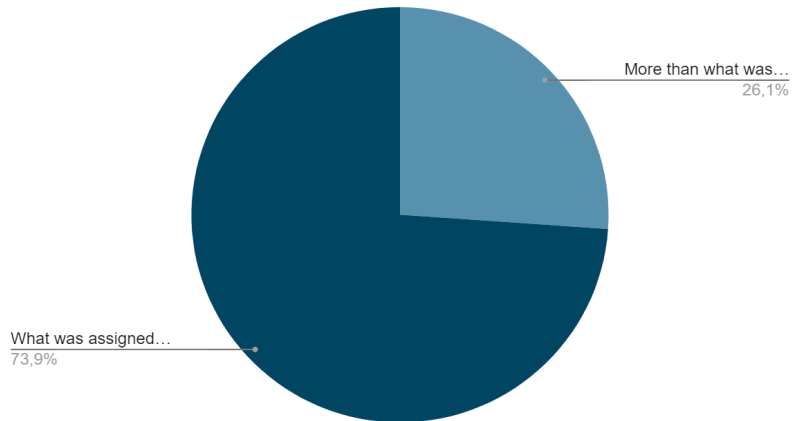
We had 50.7% girls, 47.8% boys and 1.4 % prefer not to say their gender. Concerning their age, we had 27.5% of 8 years old, 19.3% of 9 years old, 21.4% of 10 years old, and 33.6% of 11 years old students.

For the evaluation of the didactic unit we had the same questions as the questionnaire with the students who followed the new teaching methodology. We only divided the question The math-sports lessons were fun in two questions: The math lessons were fun, and The sports lessons were fun. The answers we got are given in the following Figures.

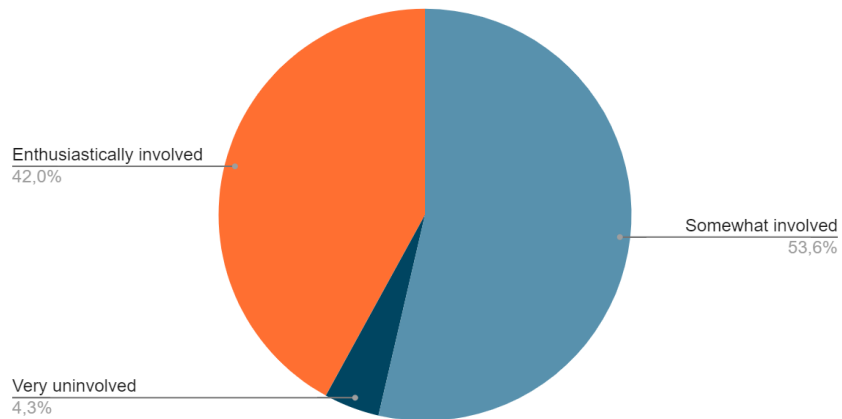
1. Considering your complete experience with the traditional lessons being taught, how likely would...



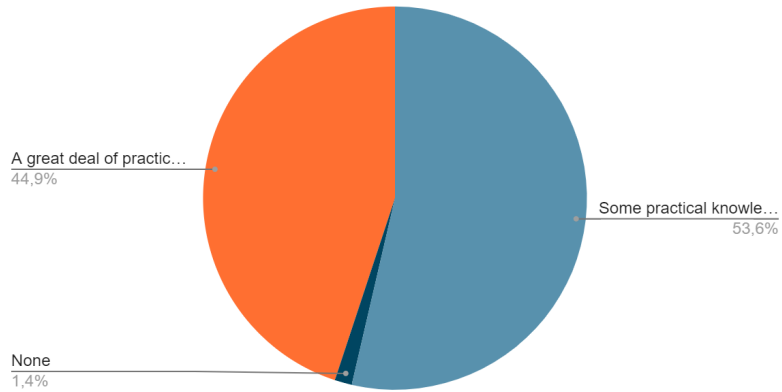
2. Rate the amount of work you did though the unit:



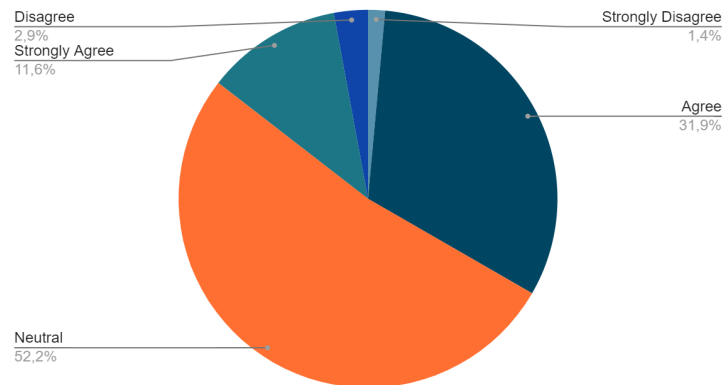
3. Rate the level of your involvement in the activities of this lessons



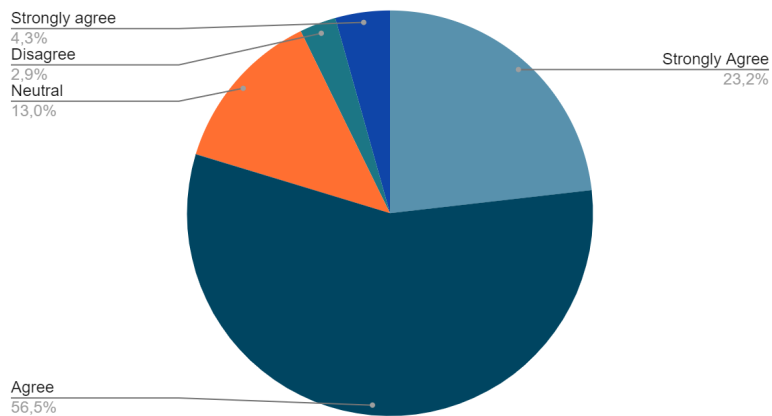
4. How much practical knowledge have you gained from this unit?



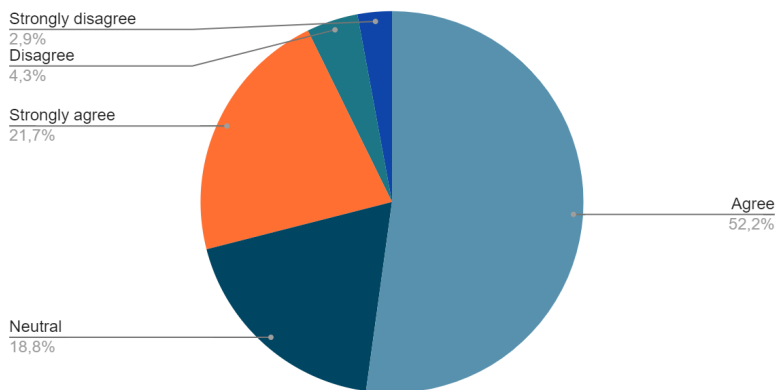
5. The math lessons were fun.



5. The sports lessons were fun.



6. The assignments given were interesting to do and enhanced my learning experience.



We can see that a very big percent of 56.5% of the students are neutral to recommend these lessons to their peers, and 42% of them will likely recommend it. Next, 26.1% percents of the students did more work than it was assigned during the unit, and 73.9% did only what was assigned. 42% of the students were enthusiastically involved in the activities of the unit, and 53.6% were somehow involved. 49.9% said that they get a great deal of practical knowledge by learning in this new way, and 53.6% gained some practical knowledge. The math lessons were fun for 33.3% of the students and the sports lessons were fun for 79.9% who agreed and strongly agreed. Also, big 52.2% of the students agrees that the assignments were interesting and that they enhanced their learning experience.

Considering their free answers we can say that students from the control group like sports more than maths, but they also find the collaborative learning and peer to peer learning very useful, and joyable. The motivation for learning maths stayed on the same level as before.

Teachers.

A teacher satisfaction survey is a feedback mechanism that is used to ascertain how satisfied teachers are with the teaching practices. Our survey was made up of

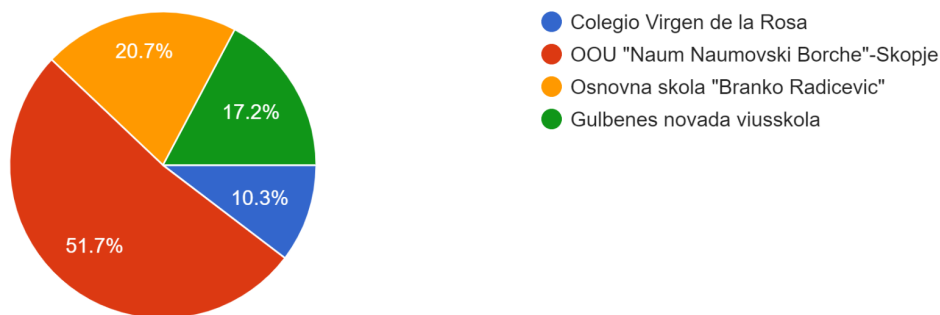
multiple-choice questions that cut across different management scopes necessary for quality education. At the end of the questionnaire, we put three free answer questions.

The survey was made during October and November 2022 in the four participating schools in the project. We had the following feedback.

- 29 Teachers answered the questionnaire, 3 from CVR, 15 from NNB, 6 from GUL and 5 from OBR. The results are given in the following Figure.

My school is

29 responses



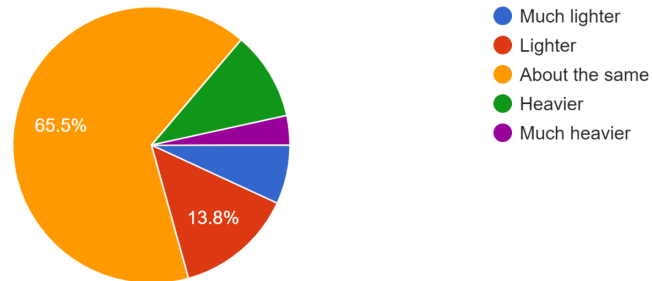
Considering their answers we can make the following analysis:

- The teachers considered that the workload for this unit is mostly about the same 65,5%, or maybe even lighter 13,8%.
- The pace of the unit was just right.
- The students have learned much with 48.3% and very much 27,6%, but it is interesting that there is no student that learned almost nothing.

-
- The level of difficulty is considered to be just right, see the Figures below.

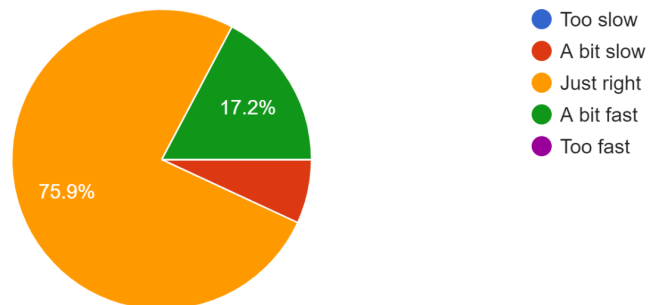
1. How heavy/light is the workload for this unit compared with other units?

29 responses



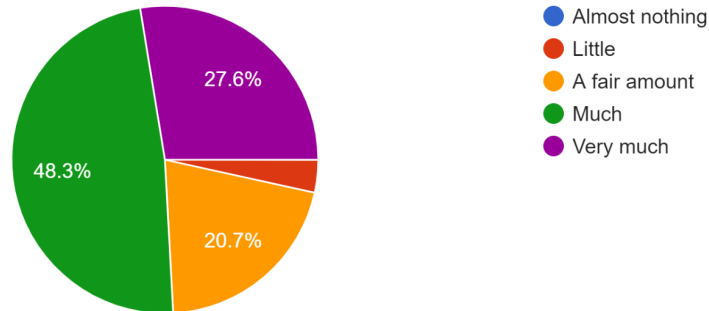
2. How is the pace in this unit?

29 responses



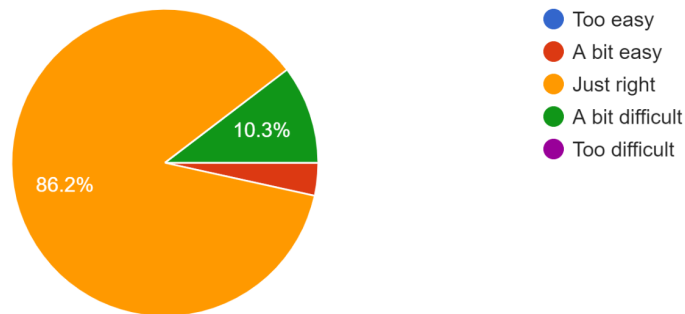
3. How much do you think you have learned in this unit?

29 responses



4. How would you rate the overall level of difficulty of the unit?

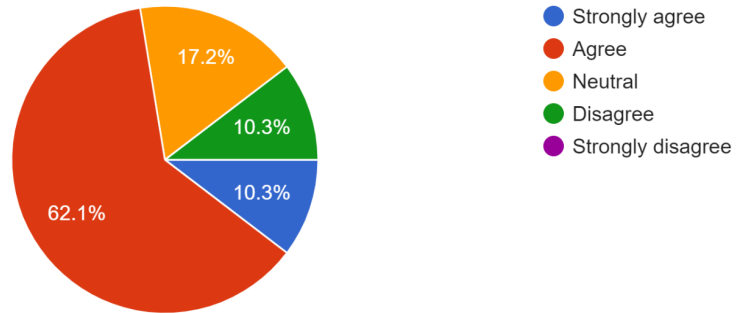
29 responses



Also, the teachers answered (62.1%) that it was easy for them to design lessons under the newly developed teaching methodology. For 58.6% of the teachers is easy to change the existing lesson plans for the new maths&sports environment. 73,9% of them know when students are experiencing difficulties, and know how to solve this problem. Big 93.1% of the teachers agree and strongly agree that they can promote a positive attitude towards sports for the students. 31% strongly agrees, and 48.3% of the teachers agrees that they can design and teach lessons that combines both maths and sports, and big 93.1% agree and strongly agree that they will continue to find better ways for teaching these subjects together, see the Figures below.

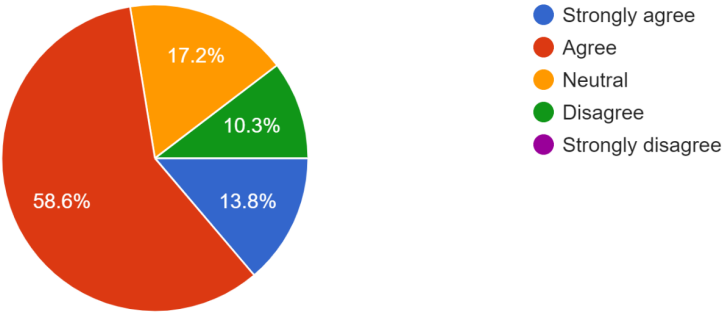
1. It is easy for me to start designing lesson plans for sports learning environments

29 responses



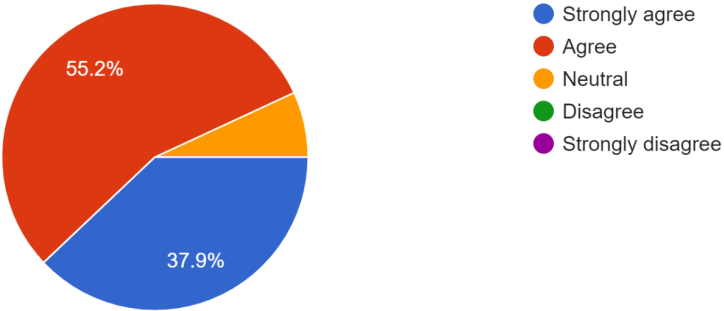
2. It is easy for me to change a lesson plan in a sport supported learning environment to adapt it to the needs of my students.

29 responses



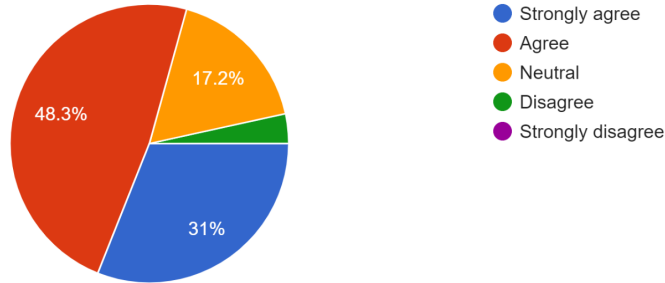
4. I can promote a positive attitude towards sport in my students

29 responses



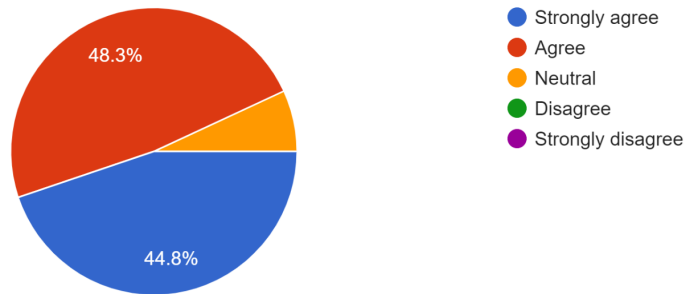
5. I can design and teach lessons that appropriate combine sport and mathematics teaching approaches

29 responses



6. I will continually find better ways to teach sport and mathematics together

29 responses



At the end of the questionnaires we gave to the teachers two free questions on what are the major strengths and the major weaknesses of this teaching methodology. We have evaluated their answers and we can say that:

- With this teaching methodology students are more excited, interested, involved and active on the classes that make a big impact on their motivation for learning. Students have fun, and they are more competitive, even though they are in more relaxed atmosphere.
- Anyway, the new teaching methodology has some weaknesses like pointed: big number of students in the class, lack of opportunities to correlate maths and

sports for some units, students giving their best only on the PE component, or maybe sometimes they are too tired to think about maths.

- The teachers suggested to make a repository where all the activities can be stored, and new activities can be added. This item will be covered in the online teacher guide that is also developed in this project.

These answers were also part of the discussions in groups that were made between teachers, and the direct interview we had with them. Some photos from these discussions follow:



2.2 Statistical analysis of the questionnaire

The first step is to assign numerical values (score) to the descriptive answers of the questions from the questionnaire, in the following way:

Question 1	Question 2	Question 3	Question 4	Question 5 & 6
3 = likely 2 = neutral 1 = unlikely	3 = more than needed 2 = just right 1 = almost nothing	3 = enthusiastically involved 2 = very involved 1 = somehow involved	3 = great deal 2 = some 1 = none	3 = agree 2 = neutral 1 = disagree

Next, in order to test if the answers of the questions imply improvement in the teaching/learning process, for each question we apply statistical method: hypothesis test for the difference between two means. The test procedure, called the two-sample t-test, is appropriate since the following necessary conditions are met:

- The sampling method for each sample is simple random sampling.
- The samples are independent.
- Each population is at least 20 times larger than its respective sample.
- The sampling distribution is approximately normal because the sample size is greater than 40, without outliers.

This method consists of four steps:

1. State the hypotheses
2. Formulate an analysis plan
3. Analyze sample data
4. Interpret results

2.2.1. State the Hypotheses

Remember that the questionnaire was given to the test group of students - the one that followed the newly developed teaching methodologies; and to the control group - students that followed traditional teaching methodologies.

Null hypothesis: The mean score in the test group is equal to the mean score in the control group.

This means that the newly developed teaching methodologies do not improve the learning process.

Alternative hypothesis: The mean score in the test group is bigger than the mean score in the control group.

This will mean means that the newly developed teaching methodologies improves the learning process.

If the test of hypothesis is successful we reject the null hypothesis and accept the alternative, and then the conclusion will be that the tested question is in favor of the new methodology.

2.2.2. Formulate an Analysis Plan

The analysis plan describes how to use the answers to the questions to accept or reject the null hypothesis. It consists of specifying the following elements:

- Significance level (probability to rejects the null hypothesis when it is true denoted by α). Recommended values are 0.01, 0.05, or 0.10; for our study we chose $\alpha=0.01$.
- Test method. Use the two-sample t-test to determine whether the difference between means found in the sample is significantly different from the hypothesized difference between means.

2.2.3. Analyze Sample Data

Using the answers to the questions, we find:

- the standard error (SE),
- degrees of freedom (DF),
- test statistic (t^*), and
- critical value (t_{α}) for the chosen significance level.

Formulas for calculation and more detailed explanation can be found in [1] or [2].

The values of these parameters for each question are given in tables in the annex.

2.2.4. Interpret Results

The summary of the results from Table 2, are given in the following table.

Question	t^*	$T_{0.01}$	Conclusion
1	5.802	2.357	$t^* > T_{0.01}$. Null hypothesis is rejected and the alternative is accepted.
2	3.337	2.350	

3	4.605	2.355	New teaching methodology is better than the traditional one regarding this question.
4	0.732	2.351	$t^* < T_{0.01}$. Null hypothesis cannot be rejected. We cannot say anything about the new teaching methodology regarding this question. Further analysis is needed.
5	5.349	2.374	$t^* > T_{0.01}$. Null hypothesis is rejected and the alternative is accepted. New teaching methodology is better than the traditional one regarding this question.
6	1.618	2.356	$t^* < T_{0.01}$. Null hypothesis cannot be rejected. We cannot say anything about the new teaching methodology regarding this question. Further analysis is needed.

We cannot say anything about the new teaching methodology regarding this question. Further analysis is needed.

There are enough statistical evidences to say that with respect to questions 1, 2, 3 and 5, the new teaching methodology is better than the traditional one.

The answers to the questions 4 and 6 are such that we cannot say with statistical relevance weather the new teaching methodology is better than the traditional one, or not. Further analysis is needed.

References:

1. <https://stattrek.com/hypothesis-test/difference-in-means>
2. <https://www.itl.nist.gov/div898/handbook/eda/section3/eda353.htm>

Table 2. Values of the statistical parameters for each question

Question 1						
How likely would you be to recommend these lessons to your peers?	Answers / Score			Total	Mean score	Standard deviation
	likely	neutral	unlikely			
	3	2	1			
test group	84	14	1	99	2.837	0.400
control group	29	40	1	70	2.405	0.524

alpha	SE	DF	t*	t_alpha
0.01	0.074	122.84	5.802	2.357

Question 2						
Rate the amount	Answers / Score			Total	Mean score	Standard deviation

of work you did though the unit.	more than needed	just right	almost nothing			
	3	2	1			
test group	50	49	0	99	2.505	0.503
control group	18	52	0	70	2.261	0.442

alpha	SE	DF	t*	t_alpha
0.01	0.073	159.10	3.337	2.350

Question 3						
Rate the level of your involvement in the activities of this lessons.	Answers / Score			Total	Mean score	Standard deviation
	enthusiastically involved	very involved	somewhat involved			
	3	2	1			
test group	76	1	22	99	2.546	0.836

control group	29	3	38	70	1.883	0.978
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alpha	SE	DF	t*	t_alpha
0.01	0.144	133.58	4.605	2.355

Question 4

How much practical knowledge have you gained from this unit?	Answers / Score			Total	Mean score	Standard deviation
	great deal	some	none			
	3	2	1			
test group	51	46	2	99	2.495	0.541
control group	31	38	1	70	2.434	0.529

alpha	SE	DF	t*	t_alpha
0.01	0.083	150.81	0.732	2.351

Question 5

The math-sports (math and sports) lessons were fun.	Answers / Score			Total	Mean score	Standard deviation
	agree	neutral	dissagree			
	3	2	1			
test group	95	4	0	99	2.960	0.197
control group	43	23	4	70	2.558	0.607

alpha	SE	DF	t*	t_alpha
0.01	0.075	79.36	5.349	2.374

Question 6

The assignments given were interesting to do and enhanced my learning.	Answers / Score			Total	Mean score	Standard deviation
	agree	neutral	dissagree			
	3	2	1			

test group	84	11	4	99	2.809	0.487
control group	52	13	5	70	2.667	0.609

alpha	SE	DF	t*	t_alpha
0.01	0.088	127.08	1.618	2.356

2.3 Educational Platform RIMAS

The Educational platform RIMAS is made in the Moodle environment. One can find the platform on the following link:

<https://vle.rimaska201.eu>

After registering, teachers can use prepared materials for finishing the course for teachers developed within this project. Through the course, teachers will be introduced to the new math&sport teaching methodology, and they can use the gained knowledge to rearrange their lessons within this new methodology.

3. Quality evaluation of the Training event.

In the period of 6th to 10th of March 2023, the Learning/Teachin/Training-LTT event took place in Novi Sad, Serbia. The schools CVR, GUL, NNB and OBR had 2 teachers and 10

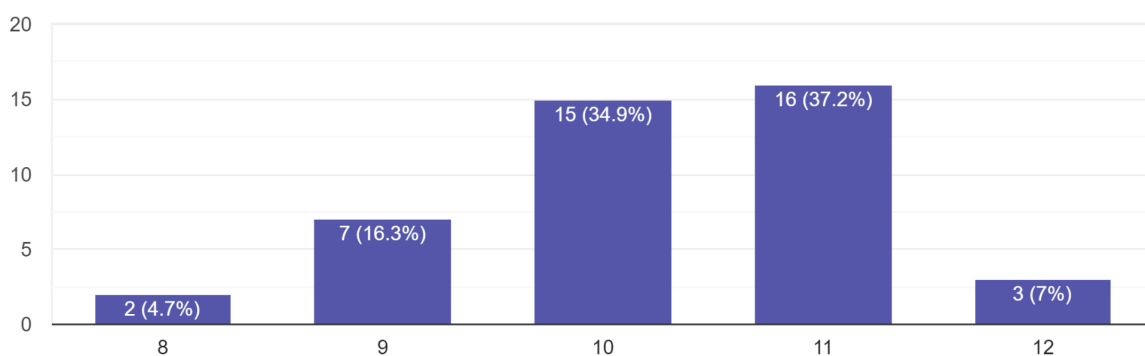
students present at this event. UNIB and SIM had two representatives, so the total number of the participants was 52. No representative from CSA were present.

The satisfactory questionnaires were made both with the students and the teachers.

The first questionnaire was made with the students. We had 43 answers, 10 from CVR, GUL and NNB, and 13 from OBR students. There were 58.1% girls and 41.9% boys answering the questionnaire. Their age is given in the table below.

What is your age?

43 responses



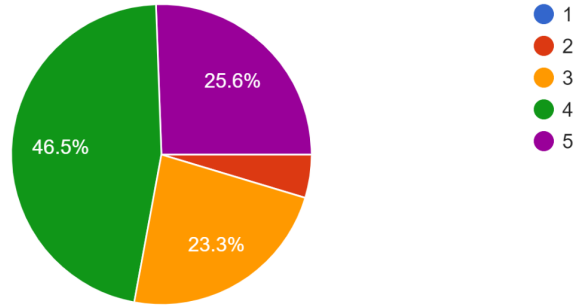
Depending on their age, they are in 3rd grade (18.6%), 4th grade (37.2%), 5th grade (16.3%) and 6th grade (27.9%).

In the general evaluation questions we had the following analysis.

Most of them liked math and there is no student that gave 1 point to the math. They know that math is very important for the future. Very big 74.5% like very much PE, but little less of them 51.2% evaluated that PE is very important for the future. One can see the data in the following tables.

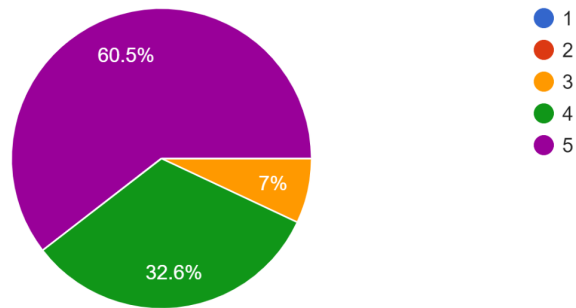
1. To what extent do you like math?

43 responses



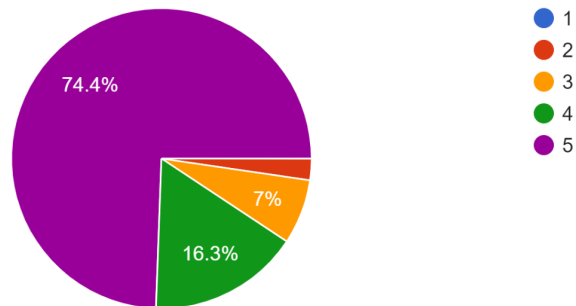
2. How useful is math going to be for you in the future?

43 responses



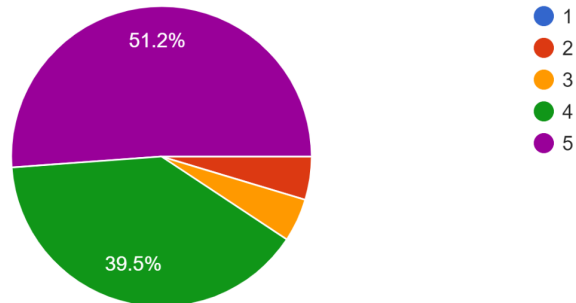
3. To what extent do you like PE?

43 responses



4. How useful is PE going to be for you in the future?

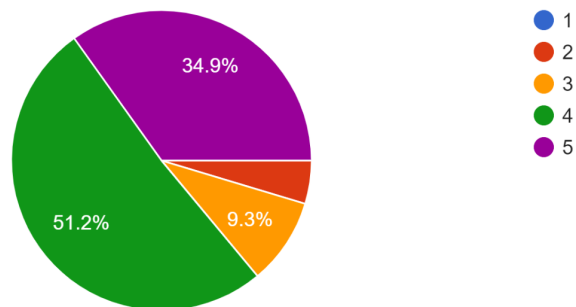
43 responses



Because of this project and the DU developed within, a big percentage of the students see the relation between math and PE. This is the project major achievement. We succeeded to make the relevant connection between these two subjects.

5. Do you feel there is some relationship between math and PE?

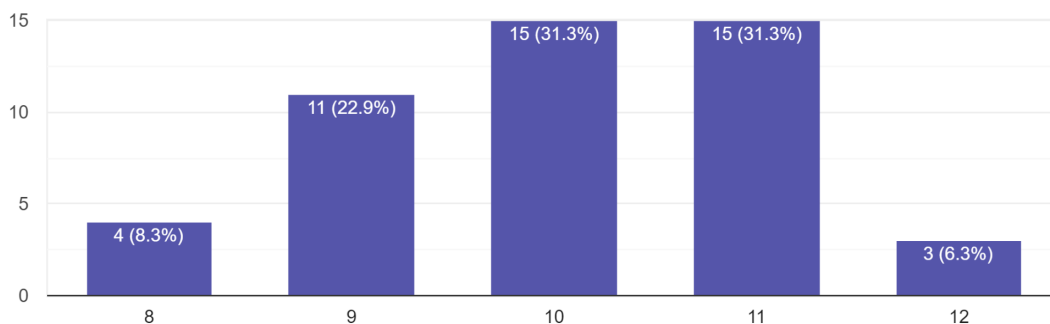
43 responses



The second questionnaire was again made with the students. On this one we had 48 answers, 10 from CVR, GUL and NNB, and 18 from OBR students. There were 54.2% girls and 45.8% boys answering the questionnaire. Their age is given in the table below.

What is your age?

48 responses



Depending on their age, they are in 3rd grade (29.2%), 4th grade (31.3%), 5th grade (14.6%) and 6thth grade (25%).

In the general evaluation questions of the didactic unit we had the following analysis.

1. Considering students complete experience with the math and sports lessons, 91.7% of them will recommend math and sports learning to their peers. Only 8.3% are neutral about this question.
2. 75% of the students were very involved in the activities in Novi Sad, and we had 25% with moderate involvement.
3. 84.% of the students enjoyed the activities, and 14.6% declared neutral on enjoying the activities.
4. 66,7% of the students collaborated very much with the students from other countries, 31.3% had a moderate collaboration.
5. 85.4% of the students liked their teaches, 0% do not like them.
6. 79.2% of students are positive about the equipment, the spaces and the school in general, only 20.8% are neutral.

With these data we can clearly see the the didactic unit in highly positive evaluated by the students. Also, we want to emphasis that none negative evaluation answer was given to the didactic unit by the students.

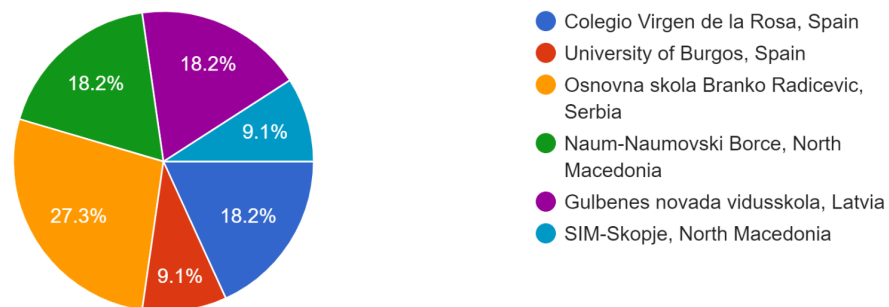
In the general evaluation questions about the Erasmus training we had the following analysis.

1. 96.6% of the students were positive about the preparation for the trip in Novi Sad, 3.4% feel neutral.
2. 75.9% of the students feel positive about their travel to Novi Sad, 24.1% feel neutral.
3. For 93.9% of the students the social programme (walk, complementary activities, sightseeing) was very interesting.
4. 72.9% of the students claimed that they learned very much.
5. 64.6% of the students have better connections with their classmates.
6. 58.7% of the students made international friends.

We can conclude that the Erasmus training had very positive life long impact on the students. They will carry on the memories that gain in Novi Sad for a long time.

The third questionnaire was made with the teachers involved in the LTT in Novi Sad. We had 11 responses from 6 participant organizations, as shown in the table below.

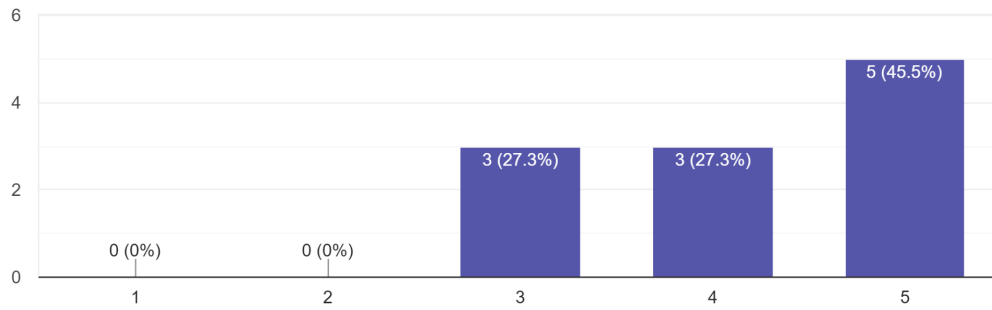
Partner organization
11 responses



We rated the questions from 1-lowest level to 5 -highest level, and the organization of the LTT from the teachers had the following feedback.

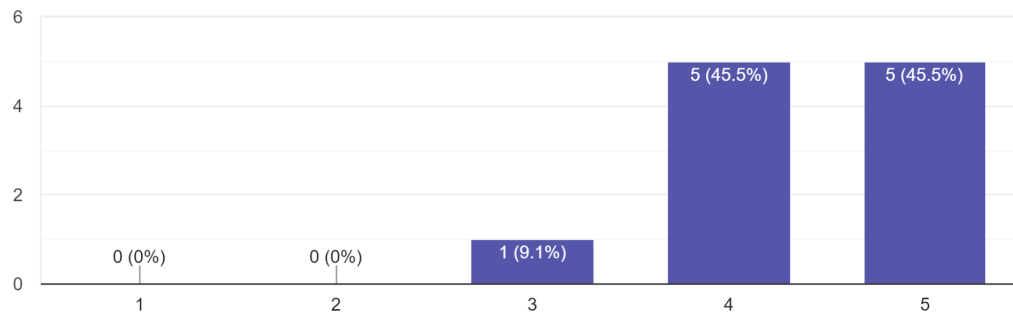
How do you evaluate the preparation for the LTT?

11 responses



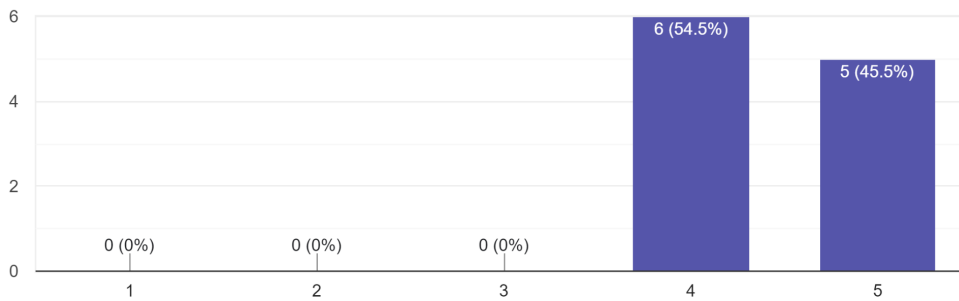
How do you evaluate the Venue of the LTT?

11 responses



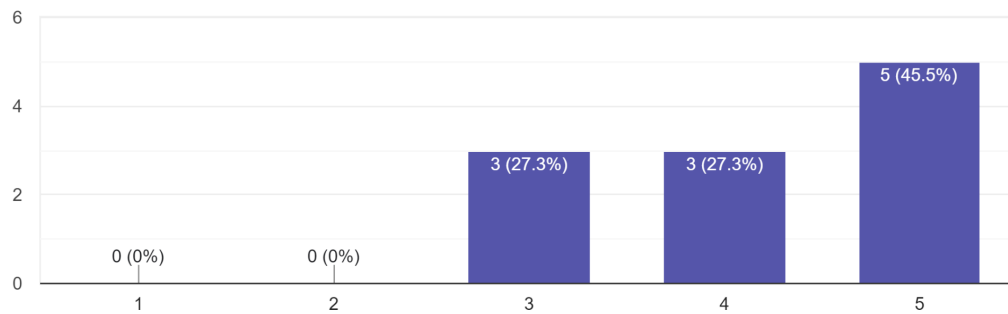
How do you evaluate the content of the LTT?

11 responses



The LTT was well planned and organized.

11 responses



The overall conclusion was that the LTT was organized well, that the students were very satisfied with the DU and the social program, maybe the food could be better organized because a lot of waste from the plastic trays were made.