



PRACTICAL EXPERIENCES
in the realization of creative workshops within the project
Be creative - secure your future
FUTURE4US

Project participants:

Scientific Center for Creative Development IDEALL Novi Sad, Serbia

Vocational Secondary School "Branko Radicevic" Ruma, Serbia

School of Economics and Administration Osijek, Osijek, Croatia

Art School "Enrico and Umberto Nordio", Trieste, Italy

Organizers of creative workshops:

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Basic information:

Time of realization: October 2018 - February 2020

Total number of creative workshops held: 66

Total number of student participants: 930

Total number of ideas registered: 4,900

Selected ideas for evaluation: 240



Information on creative workshops - stimulation for active participation:

a) Before implementation begins

For successful promotion of the project, it is necessary to spread the news about the project, the goals that are to be achieved, the participation of the school in the project (with emphasis on exclusivity - the only selected schools in the region), the interest of teachers and students to become involved and actively participate, as well as all interested parties (stakeholder) to be informed of what is just happening in their neighborhood, with an invitation to support the project appropriately.

At the Teachers' Council session, teachers were informed about the project itself and the responsibilities they would have if they were to be included in the implementation team, as well as the opportunities to apply for training to acquire the necessary skills to participate in creative workshops as moderators.

Then, activities were taken to promote the project among the students, during the classes of the department head. With the agreement of the department head, the headmaster and the subject teachers, the terms for the extra-curricular workshops were selected, as a counter-shift to the work of the school.

With the book of notices, the principal instructed all students and staff about the school's involvement in this project and their involvement in the project. At the same time, the Student Parliament meeting was held where this project was presented.

For all stakeholders, a project promotion and press conference were held at the school where all local media (printed newspaper, internet and TV stations, the school website) were involved. In addition to the media, the press conference was attended by hosts and guests: project authors, local government guests, business community partners, Parents Council, School Board, host school teachers, interested student and student Parliament representatives, and representatives of other primary and secondary schools (directors and fellow teachers).

Stimulation for active student participation involved active preparation, familiarization with detailed and timely information, and clear instructions. In this way, a benefit was formulated for the active participation of students in the project. Students were presented (and then explained in detail later in the workshop) the essence of the methodology of modern thinking in problem solving. They were presented only part of the training and indicated the parts of the workshop ("There will be a stock market, we have an interesting game" Doris ", " Come for the hats "...). This was interesting to them, as an incentive to participate in something new, different and unknown.

Particular attention was drawn to the colored hats, as well as the hiring of moderators to prepare materials they could follow in the classroom where the workshops were planned.



b) Preliminary preparations for holding workshops

Prior to each creative workshop, the facilitators provided all the necessary material. This meant printing lists of students from the group that attended the workshop that day (to record attendance), then a ID card (tag) with the students' names for the Doris game. Also, they printed lists with the names of students for the exercise "Virtual Exchange - Investing in Ideas". These pre-prepared lists simplify the work and save time for a smooth flow of activity in the creative workshop.

In addition, the moderators distributed to students all the necessary accessories - paper, pencils, felt-tip pens. Prior to the start of work, students recorded their attendance by signing up for attendance lists (Form 1).

Moderators paid considerable attention to and emphasized the presence of students involved in the educational system of education under the special educational program / SEP. Moderators were informed earlier about the attendance of SEP students at the workshop - they received information from department master and the Inclusion Team, with insight into the pedagogical profiles of the students. Consequently, facilitators are informed in a timely manner how to approach working with specific students.

It was also necessary to keep records of students from sensitive social groups, that is, travelers, students of sensitive health status and with easier problems in adaptation and learning.

c) During the workshops

In the introductory part of the workshops, students are emphasized the project goals - creative thinking, active participation, idea generation, fluctuation of ideas, possibility of materializing good - innovative ideas in the market, later application of learned new methods in everyday life and learning. It was explained that the goal is to gain insight into their own creativity and hidden potentials, and through a series of activities, from general to more concrete, that students can come up with their own new, original or innovative ideas. Being aware of their own capabilities and learning about one of the methods of evaluating an idea can lead them to start their own business in the future, from which they can successfully live.

In particular, the moderators made sure that the students did not feel any pressure in their work and learning, i.e. adopting new methods, as well as feeling pleasure in knowing and self-affirming, self-discovering and overcoming fear of the appearance and presentation of their ideas and thoughts to a group of peers.



1. SURVEY - SELF-ASSESSMENT OF INDIVIDUAL CREATIVITY

After the introductory brief, the first question is: What is creativity? what is creativity for you?

Students respond independently, and some of the answers are: "creating new ideas," "something new," "creating something new," etc.

After a few workshops we realized that if the first question was: who considers himself/herself to be creative? we won't get the right response, because only a small couple of students will raise their hand. We decided to modify this phase of the project and first ask ourselves what is creativity? And only after that "who considers himself/herself to be creative"? That turned out to be a much better solution, students were already initially given the impression of what creativity included, talked about it, and without fear, they began to freely realize that they could be creative. Initially, there were only a handful of students as students were fearfully expressing themselves about the perception of their own creativity, but later, as the activities went on, they realized that they were very creative, they just didn't dare say it.

There is obvious uncertainty in adolescents because of fear of condemnation and ridicule, lack of support by peers in the classroom and public speech After an explanation, with elements of encouragement, by the moderator on examples of what all creativity entails, progress and withdrawal from the comfort zone were observed. To this end, the facilitators gave the students full support through motivational sentences "no idea is stupid, every idea is welcome, my little idea - it will be great to someone, where I stood - you go on - continue" and the like. Moderators encouraged youthful, curious spirit, readiness for new challenges, adventures, games, fantasies, good emotions, companionship, fun, joy and pleasantness. The number of students who expressed their creativity at the beginning of the workshop was recorded by the moderators on the form number 1.

2. INTRODUCTION TO THE THEORY OF CREATIVITY - OBSTACLES AND STIMULATING EXAMPLES

To illustrate, we explain to students that there are various obstacles to fostering creativity and how they manifest themselves. To keep students' attention to the end, we shortened the explanation of most theories and focused on the first and second obstacles, namely self-censorship and fear of individual judgment (Voice of judgment). The students were explained that they should at least try to be creative at all times and that the goal of this project was to encourage some new thinking without condemning others' ideas.

At this stage, students were shown some examples of creativity that, by chance, became a great creative idea with great social impact and global application, about the first supermarket in the US and the first conveyor belt in the automotive industry. For the students, these examples are interesting and after that they slowly understand what creativity and the theory of self-censorship are. We emphasize once again that during these activities, they should not be afraid to express their opinions.



3. TEST QUESTION: IDEA - HOW TO SPEND A MILLION EUROS IN 24 HOURS?

The third activity proved to be very interesting. Now that students are well aware of what creativity is, learning about history through examples of creativity, we ask the question that everyone loves to answer: You have a million euros and 24 hours: how to spend them. What are you going to spend them on? There is a lot of laughter and indecision at first, but then there are some very interesting answers. Few adolescents were thinking specifically about investing their money for profitable purposes. A few of them would buy real estate and invest in land that could later be profitable for additional and later earnings. Some would invest in starting their own businesses and expanding their business in foreign markets. Most students said they could easily spend that amount, buying a few flats and cars, clothes and cosmetics. There is an obvious inability to move them out of the comfort zone and enjoy a concrete - given situation. They were not ready to visualize their future, they mostly kept to the immediate and current needs. They often decide to donate, at least half the amount for humanitarian purposes. This is an expected reaction as they have not yet generated ideas for new products and services in which they would like to invest money.

4. MAKING FREE-FORM FIGURES WITH 24 DORIS TILES

Each student received 24 Doris tiles, noting that each must first count the tiles to make sure they have the correct number.

In an activity with a Doris puzzle, students usually spend some time analyzing what the activity is about, and what its meaning is. In some ways, they are considered too adult to play and feel ashamed to start. The activity is most often considered inappropriate for their age (adults and "serious" adolescents).

So, we began repeatedly to remind students to relax and go back to their childhood days, to imagine that they were once again boring children and looking for a way to have fun playing different ways with a simple toy, creating constantly new and new fantasy characters.

It is important to lead them quietly and in a soothing tone of voice to a relaxed and carefree state of consciousness when those hidden forgotten children's creativity and imagination emerge from them.

The students were encouraged by the facilitator's motivational words: "We heat the brain, this is a warm-up exercise, it is important that there are no wrong answers and solutions." They were told that they should relax, free themselves from pressure, perfection ("is this good?"), let their imagination run wild, play as they wish, as they like and as long as they want.

The moderators explained to the students that in this part of the workshop, it is very important to stretch themselves, to free their creativity, to relax and to make free-form forms of "Doris" tiles as arbitrarily, according to their imagination and desire, as they wish.



After the Doris puzzle was given to each student, they were given an ID card (tag) and explained what they needed to do with it (to type in the names of the figures they made). Unexpectedly, they have a problem what to call their "masterpieces". They seek the support and advice of a moderator about choosing a figure name.

Since the students did this activity independently, in complete working silence, there was a need, on their initiative, to play ambient music, which stimulated their work, which became also a practice during other workshops with the Doris puzzle.

This student initiative was accepted by the moderators, and it proved to be very effective, stimulating, relaxing, working and enjoyable.

We emphasize that the music was played exclusively in this segment and it is noticed that after this part, the students were relieved, somehow relieved of pressure, they felt comfortable, which subsequently had a positive effect on the further course of the workshop.

The boys showed the most interest in this activity and were always short on time, which resulted in the multiplication of figure shapes.

The assumption is that this is a result of the influence of modern video games, which they play more often than girls. A few have commented on games that contain elements of creative expression to move to the next / higher level.

The moderators did their best to explain to them that the process of creative thinking, at least at this stage, is more important than the product itself, that this activity is only a step towards their next task.

Each figure that the students made and tagged with their name needed to be photographed. It was not clear to them what they were doing with these photographs, as if they had a desire for someone to value their work and evaluate the imagination and originality of the figures made.

The moderators explained to the students that there is a common Facebook group of participants, partners and friends in this project and that they can post photos of their work there as well as follow the work of other students.

Some students could barely put together one figure, and they needed encouragement that the figures were great and continue to do so, while others were productive and made up to ten different shapes. Such active children needed constant confirmation of their "ingenious skill" by the moderator.



We also point out that the students involved in the special education program (SEP) education system have worked smoothly and very hard on the task. They took several different forms, while some found it difficult to understand what was required of them, so they were provided with additional support by moderators and peers. They obviously had a fear of the new and the unknown.

In the end, students often enjoy this activity deeply and are only occasionally interested in other people's work. When, after 10 minutes, we interrupt them and encourage them to look at the work of other students, as if they were writhing from that state and then returned to their usual dynamics.

Occasionally, they find inspiration in the work of the student sitting next to them and occasionally draw very similar figures. But more often than not, we are very surprised by ideas and inspiration - from nature motifs, toys, the logo of their favorite sports club, symbols, imagined characters and objects ...

It did not happen that students commented negatively on the work of other students, moreover, praising each other and encouraging those who could not relax and indulge in imagination. In this part of the workshop the students are most relaxed and happy to accept it. The estimated time for this task is about 15-20 minutes, but we have limited it to 15 because from experience we have found that 15 minutes is enough for composing and commenting on ideas.

Invitation for students to look at other students' works, to get inspiration for their own ideas and to expand their own imagination

The moderators asked the students, without disturbing the creative work of others, to walk around the classroom and look at the works of their classmates, in order to get another interesting idea.

Of course, this activity did not go unnoticed - they could hardly wait to talk to each other and comment on their works and guess what someone did ("What do you think this is what I did?"). The students expressed their wish to see the results of work in this activity with students from their own group, their schools and the work of students from other partner schools. They were pleased to show their figures / works to others, explain what they had done and give suggestions to others.

Students did not criticize or ridicule the work of their peers. They were not frugal in words of praise, which proved to be good for further work and collaboration and freeing students from the uncertainty of appearing before a group in the class.

Students in SEP education did not approach others with a desire to share experiences because they were primarily focused on their work.

In any case, this walking activity in the classroom to observe the work of other students should be limited to a few minutes.



5. BRAINSTORMING: Group Session - Collectively generate ideas for new types of services

The principle of Brainstorming is first explained to the students. They are reminded that different ideas will be collected to solve the problem and that the goal is to gather as many different ideas as possible in the shortest possible time. Behavioral rules are being agreed for the realization of this activity - as many students need to be given the opportunity to present their ideas, students listen to each other patiently and respectfully, do not mock each other and ask for a word by raising their hand. They should express their thoughts as soon as possible, respecting the limited time for activity. The goal is to gather as many ideas as possible, and not allow individuals to occupy most of the time, and dominate the rest of the group. Students are encouraged to come up with their own idea, and with a smile and support, every student obeys. Occasionally additional questions are asked to clarify the idea.

The students are explained an imaginary problem that is looking for a solution: You find yourself in New York alone, without family and friends, with \$ 200 in your pocket. New York is a world-class megapolis, with a huge private and business sector, and great needs for different types of services. As soon as possible, the next day, you need to find a legal way to make money that you will be able to sustain for a certain amount of time until you find a permanent job. Keep in mind, at the same time, what your skills, knowledge and abilities are, what you are really good at, and how you can impose yourself as better than your competition. Why are you better than your competition? What will make you stand out and encourage your employer to choose you? What will make you different and original? What new service will you offer?

The facilitators designed a stimulating scenario to relax the participants in this part of the activity: "Close your eyes, relax, imagine the situation, you are in the lead of this movie".

The boundaries that we set ourselves, we break ourselves, we direct ourselves in narrow boundaries, we disable ourselves - here they cross, we let our imagination run wild and, in our ideas, we push the boundaries of the possible.

In this activity, students should be encouraged to express their creativity and their strengths, and think out of the box. If a student says he or she could sing on the street for money, we ask, "What makes you different from other street singers? How will you reach more audiences and earn more than others?" The answers are e.g. I will paint the body, I will sing exotic and unusual repertoire, I will costume myself, at the same time I will play an interesting instrument, I will dance while I sing, I will have a dog with me.

Without exception, there are always few students who dominate because they are more confident, more relaxed, and more unrestricted to express ideas and opinions. Individuals remain isolated and unwilling to put forward their ideas in public. Obviously, they feel uncomfortable in a large group. The key role of the moderator is to respond with a gentle and encouraging facial expression, words, gaze and smile to every opinion with acceptance and support, to skip those who do not want to come up with an idea and to look back at those students and try to reanimate them for participation, but without pressure.

Yet, it did not occur that students made fun of one another, even encouraging one another, by highlighting what anyone could do, according to the skills and strengths of their classmates. Confrontation in arguments is not recorded.



"Be brave, go forward, without fear and anxiety of wrong answers" - are only part of the motivational encouragement given to the students by the moderator.

The moderators recorded the ideas, without analyzing them, although some students wanted to initiate a discussion, wanted to hear the opinions of their classmates, or asked questions to better understand the proposal.

Students in the SEP program responded very poorly to this task, but because of the rule that no pressure should be exerted - the moderators did not invite them or encourage them to participate in this activity.

6. INDIVIDUAL THINKING - Brainwriting

Students are presented with a new activity in which they will be able to independently and freely present on a blank A4 paper and describe their idea of a creative, original or innovative product or service that they believe would be: very good to exist as a solution to a practical problem; as a need in terms of making life easier for an individual or group; or as a cheaper solution and more accessible to the masses. Students are reminded that a product or service should be possible to produce and realize within the next 10-15 years, to avoid futuristic ideas such as teleportation, time machines, medicine for all ailments, etc., as well as trivial ideas that students present just to get rid of the task. We try to direct the students as much as possible so that they understand that they need to really work on the new idea, concretize it, and describe it better. We try to convince them at the beginning of the exercise that this or that idea may be their future, their own lucrative business, and we give examples of how some people have achieved great business and financial success with their simple solutions and ideas (example Glovo! delivery, example Uber transportation, an example of a larger piece of cake for the same price, with two spoons for two (which brought ten times the number of guests to a famous pastry shop), etc.

And since good and intelligent solutions are not only the product of scholars, educated intellectuals, we give a current example of a girl who made one such solution for the automotive industry:

One car company was looking for a solution to the "dead A corner", which is why there are about 840,000 traffic accidents in the US alone, often with fatalities. The front blind spot problem creates a body frame around the windshield and the front windows on the vehicles.

Using the relatively inexpensive and affordable technology found in most electronics stores, 14-year-old Alaina Gassler of the US state of Pennsylvania has come up with a simple solution to this problem. It's about installing a camera facing in the direction that would cover the driver's view and then projecting the image onto the inside of the car body frame. This gives the impression that what is happening in the dead corner is seen through the body, as if it were transparent.

The moderators asked the students to work in silence so that their (right) brain (in charge of creativity) could function smoothly so that ideas would not be transcribed by others. To relax and express their thoughts through a new product¹ - an idea, because the essence is to beat originality and innovation and that in the future it is possible to realize the idea and place it on the market.

¹ Under the concept of new products and services, students should be aware that this can be existing products that have an significant improvement (additional function or value, or have different packaging or use), another way of providing existing services, existing technology that is applied on other devices or fields,



In the realization of this activity, those students who were mostly withdrawn, shy, insecure, lethargic or passive, as well as those very informed, literate, curious, interested, came to the fore.

The students were reminded that it was very important to sign the paper, but to keep it anonymous until the end of the workshop, not to exchange ideas while writing, not to communicate with other students, not to share what they wrote about. At the same time, it is important to describe as closely as possible the product or service and / or sketch if possible.

The students were explained that only the most original ideas would be selected, which does not exclude others. We have indicated to them that there are certain criteria, for which we are trained, on the basis of which the choice of the most original idea is made.

A common question of students was whether moderators would read all ideas publicly in front of the whole group. Despite the initial desire for anonymity, the moderators noted that some students wished that their ideas would be read.

It was explained to them that we would only read the selected ones, without revealing the author's name. That information brought them obvious relief.

Students have 20 minutes to write down their ideas, and then they submit the paper with their ideas to the moderators.

In each workshop, it happens that individuals do not have a single idea, that is, they cannot relax enough and devote themselves to creative thinking. We accept this and take a blank signed paper.

This assignment was very demanding for students attending a modified curriculum / SEP. Most of them do not have fine graphic motor skills (the moderators encouraged the students to present their idea with a drawing). Given their specific features, attention should be paid to their capabilities, which requires additional preparation by the moderator for the workshops.

7. SELECTING THE BEST IDEAS FROM THE BRAINWRITING SESSION

When all students submit their ideas on paper, the moderators step back and read in silence all the ideas they have received. When all ideas have been read, those ideas which, in the first reading, seemed interesting and new, original, elaborated or suitable for evaluation by the Six Thinking Hat method, are affixed with a symbol or sign that the idea deserves re-reading and is shortlisted. By re-reading the shortlisted ideas, three to five ideas are selected so that they can be thoroughly evaluated by the Six Hats method. When reading, if moderators were not sure that a similar or the same product already existed, they checked through an internet browser. Exceptionally, if more ideas of equal "weight" were to be found in the shortlist, priority should be given to the idea of a student who has been maximally active and constructive in all activities so far, as a reward for the total effort and engagement for the success of the creative workshop.

The environmental sensibilities of young people have been observed - they are very environmentally conscious. Nevertheless, these ideas later did not prove to be lucrative on the stock market. Ideas

revolutionary inventions, or Innovations that replace complex and costly devices with substantially less expensive products, but with an acceptable level of quality).



related to humanity and environmental protection have proven to be recognized, but not important enough, with the premise that profit cannot be made with them.

Most often, for the selection of ideas, moderators are guided by the following criteria:

-originality and imagination,

- practicality and innovation.

-Good and new solution to the problem of wider group of people (sick, vulnerable groups in society - people with disabilities, pregnant women, old and infirm, children, unemployed persons, etc.),

- possible fast realization of the idea, preferably in the next maximum of 5 - 10 years,

- Possible good market success, low price, availability.

Note: it just sometimes happened that a group of students was largely innocent. Evidently, there was a repetition of the same or similar ideas, mainly related to the advancement of mobile phones, the Internet, school and housekeeping robots, without sufficient input and the ability to solve a wider range of problems. The moderators concluded that individuals live completely carefree, without wanting to change something substantially for a better future, and they believe that there is no culturalist philosophy of youth education, which implies informative and readership of young people interested in learning about and deepening topics crucial and existential for their lives. and future occupation. These students have not envisaged themselves in society, i.e. they do not see themselves as the active subject of modern society.

It happened that certain classes communicated with each other about the workshops, resulting in repeated or minimal changes to ideas. The good thing about the moderators in this case was that the young people talked about the workshops, which left a deep mark on them, exchanged experiences, shared feelings about them.

The conclusion is that more time is needed for these passive students to become interested in active participation in the workshops, to get to know their creativity, to gain self-confidence and self-awareness, and to organize more sessions (e.g. once a month), with new stimuli, (e.g. creative solution of a given problem in a close environment with obvious need and concrete benefits for the community and its members), emphasizing the expectations of individuals to contribute to the solution of the problem as capable, smart, responsible and conscientious members of the community. Encouragement can be an appeal to conscience with an emphasis on unlimited trust, e.g. "We have full confidence that you can help us and that we can rely on you, because we know that only you, as the generation that will be our mainstay of the future, can come up with new useful ideas. We do not expect the impossible, just ask you without obligation, think and share your thoughts with us, and no idea at this time is stupid ... "



8. DECLARE 3-5 IDEAS THAT WILL BE ESTIMATED USE SIX HATS FOR THINKING, BUT THE AUTHORS ARE ANONYMOUS

After a pause and a moderator vote, clear information is given to the students, which directions the moderators took in selecting ideas. It is always emphasized that it was difficult to make a choice, explaining once again the criteria they were guided by. It was always necessary to emphasize this again in order to avoid disappointment in the students. Explain to them that the time for detailed analysis and selection was insufficient, and that due to the limited time, we could only evaluate 3-5 ideas, although there were many great ideas. Also, no matter what ideas the moderators in the workshop choose, all ideas are sent to the project coordinator who re-reads and evaluates them, and they all compete for the best project ideas.

Immediately before reading the selected ideas, there would be silence in the classroom because of the expectation of the students whose idea is among the chosen ones. Regardless of the level of engagement in the work so far during the workshop, when it comes to this moment, everyone secretly hopes that their idea is among the best.

At that point, it is necessary to encourage the students and indicate the reasons why only some ideas have been selected for evaluation. "Due to the lack of time, even though you were very creative, innovative, hardworking, we had to choose a few ideas that we will consider today - through a new method ... let's go step by step ... and hope your sincere engagement and open involvement in bringing the best , the freshest and most cost-effective decisions. Please do not declare whose idea was chosen, not to be the subject of our discussion, please be a skilled actor now and do not let any gesture reveal you. We know you can do it."

Again, it is very important when we write selected ideas on the board that the authors remain anonymous and do not show in any way that the idea is theirs, in order to avoid subjectivity in the final choice of the best idea, i.e. investing in a virtual stock market.

The students are very curious at this stage, they were interested in the ideas of classmates, but also to have their ideas read. The anonymity of the author is often very difficult to retain, which is why we repeatedly mention why it is important. Namely, through practice we have learned that students are very subjective when evaluating ideas with the Six Hats method, if they know who the author is. If a student is not nice to someone or is not popular in the classroom, students can be very strict and critical, and in every possible way try to expose all the weaknesses of the idea.

After reading the first idea, the atmosphere in the workshop begins to "warm up" slightly, everyone eagerly wants to hear the selected ideas.

Selected ideas are presented to the students in sequence - one name of the idea is selected, which best represents the idea (e.g. "Public transportation for vulnerable groups", "Pillow singing lullaby", "Solar trees for street lighting" ...). The moderator briefly but succinctly explains to the students how the author conceived of this product or service (based on the student's description given in the



explanation of ideas), so that they could be clear about what the author intended. Selected ideas are simultaneously written on the board under ordinal numbers.

9. CHOOSING A STUDENT FOR 5 HATS²

The activity began with the presentation of the interesting Six Thinking Hat method used in contemporary teaching and as an effective evaluation method.

The students were explained that the ideas selected would be evaluated using the Six Thinking Hat method, explaining that it was one thinking and thinking method that required the visual assistance of a hat in different colors. Volunteers are looking for hats to wear. Here, there was no difficulty in picking around interested students, they mostly arranged themselves and kindly ceded to a friend or girlfriend to take the hat. Before distributing hats, it is not necessary to explain what a hat represents, mostly students chose hats according to their personal affinity for particular colors (eg as a fashion accessory). This part of the workshop always appealed to everyone - they stepped out, chose the color of the hat they wanted and were in the mood to take pictures with the moderators. A common question was whether they could get these hats as a gift when the workshop was over. This was not possible, and they were told that the following groups of students would also need hats. (One of the ideas was for students to make hats of their favorite color and promote creative workshops at their school, which found interest and approval).

As for the students who were withdrawn - there was also the promotion of such students by the moderators (they agreed in advance to support them and empower certain students). Then the choice fell, not on voluntary registration, but on the suggestion: "I think you would agree that this hat was just made for you."

The students in the SEP program also wanted to wear some of the hats, proudly, with the support of their peers.

When hats were distributed to students, an explanation was given about the Six Hats method for thinking and the meaning of particular colors and their role in evaluating ideas.

De Bono developed a parallel thinking technique so that one problem, with the help of knowledge, experience and mind, could be considered from a number of different points of view. The parallel thinking technique directs the thinking process in six different directions that include: facts, emotions, logically negative and positive views, creativity and control of the thought process. Each of these features has a specific hat. Hats of white, blue, red, yellow, green and black metaphorically establish the "rules of the game". After defining the theme, the problem, the game begins, in which, in an arbitrary order, the moderator and the participants exchange opinions represented by a given hat color. The process ends when all hats are made and when the problem is recognized from 6 different forms of thinking.

² The white hat of information or fact (which serves to give the workshop participants additional explanations about the idea and its implementation) is not used in this case, as it would cancel the anonymity of the author, which is an important item to avoid bias in the phase of investing in ideas.



RED HAT - hat of emotions - will emotions according to this idea stimulate, encourage and carry us persistently and without giving up until its final realization?

YELLOW HAT - hat of optimism - any idea, even if it looks uninteresting or bad to us, is good for something. What is good about this idea? What makes it useful, interesting, what solutions does it bring? For whom is the idea good?

BLACK HAT - hat of pessimism - any idea, even obviously good, useful and interesting, carries some threats and dangers, or negative consequences. Let's discover the weaknesses of this idea!

BLUE HAT: - management hat - how to make this product easier to identify on the market? Does the product / service have a better competitor? Should it be advertised in some way and how? Would investors recognize this idea as an opportunity to invest?

GREEN HAT - a growth and opportunity hat that leads us to ask ourselves, how to prevent or overcome the weaknesses and threats we have identified? How can an idea be improved so that there are no weak points? How can it be made even better, more fun, more useful, more practical?

10. DISCUSSION BY THE DE BONO 6 METHOD OF THINKING HATS

Explanation to students: You can close your eyes and imagine a white hat - it is a hat worn by a friend who passes on information to you and will read you an idea that we will discuss and discuss. "But we do not have a white hat because our author should be invisible, or remain anonymous.

It was also explained to the students that it is very important to know what falls under a particular question, the area (under which hat), because if we understand everything we have observed, discussed, concluded under a particular hat, it will be very easy for us to draw an objective conclusion after this method about the idea we presented.

Red hat - represents emotions. Students expressed themselves as they felt when they heard about the idea. The answers were to feel great or relaxed, or surprised, joyful, not being threatened by the idea they heard. There were also statements that they did not like the idea, that it was stupid, or that it was not needed / useless and the like. On the other hand, they found some ideas ingenious, practical, they were "caught" and surprised at how interesting and much needed an idea was. They often wondered how they hadn't noticed it before, and declared themselves very excited.

Emphasizing emotions such as happiness and excitement is certainly a good sign, because positive emotions will definitely lead to interest and even more creative thinking, in terms of making a product even better.

Next was the **yellow hat**. Here the students were supposed to say what was good about the product, whether they liked it or not. They should have found at least one good thing in that product. Some student confusion was noted here. They believe that it is obvious what is good in a particular product or service, i.e. they dwell on the obvious, that which is on the surface. But when they began to describe with words what was good, they saw how often they complement one another with the good sides of a product or service, and it became clear how much more open and creative they became with each step.



After that comes a **black hat**. It should say what are the bad sides of the idea. It was interesting when the moderators directed the discussion to keep students only at the level of pessimism, not to go for possible solutions, to correct the disadvantages. They were explained to be patient and to preserve their thoughts for later.

Yet, it was noticeable here that students immediately paired it with a green hat, which is the hat of development. As soon as they noticed that something was wrong with the product or idea, they thought about how to fix it. This is where their creativity came to the fore. According to experience, they always had to give them at least 5 to 10 minutes before the green hat to think about the idea, to think of how to improve it, how to sell and market it in the end. When we gave them those few minutes, we noticed that the results were much better. A good portion of the students had some idea of what and how it should be repaired.

Green Hat - Growth and Opportunities - Under the umbrella of this hat, students found new opportunities, suggestions, improvements to ideas, opportunities for adaptation, found a variety of solutions, suggestions and answers, in the direction of improvement. There were various answers, from the idea that the idea was ingenious and that nothing needed to be corrected, to the point that, as far as they had modified it, the idea had taken a completely different view. Then the moderators directed the flow to the very beginning and it is necessary to "add characteristics" to the basic starting idea. "What would improve our idea? How would you do that? Do you think the idea is complete now?" were the questions of the moderator. The students were very active in this part of the discussion and reflection, they were happy to think of ways in which the idea could be improved, to make it as clear and applicable to a wider audience as possible, to make it as practical as possible.

Eventually we come to a **blue hat**. It is discussed here that the idea, which in the previous stages has been improved, revised and "packed", as a product, will be marketed and monetized. How to reduce the price, how to market it. There were quite a few innovative ideas. We noticed that it fits in very well with the green hat, especially if we give the students some time to further shape their thought process.

Some of the ideas were considered by the students to be not yet time for placement, that they were not cost-effective, that they should be regulated with other organizations or patrons (the state, laws) or simply unite for the same purpose. It is also interesting that the students saw the cause - and - effect relationships and possible paths for collaboration and networking of products / materialized ideas in realistic contexts with cost - effective economic momentum. The discussion ranged from individual to group work, and the idea / problem was viewed from different angles. Thus, the idea for which students will invest money in the stock market becomes a product of common thinking.

In the end, it was concluded that the 6 Hats method was ideal for this workshop, but with minor modifications. For example, take a 5-minute break after a yellow hat and explain to students what is required in the last 3 hats. Certainly, the results are much better then, because students have time to articulate their thoughts.



In the end, we would just list some of the benefits of this method that we noticed:

- the ability of each member of the group to express their opinions freely without being criticized,
- focused thinking,
- the path to more creative thinking,
- better communication,
- better decision making.

11. BUDGETING STUDENTS (10 x \$100 notes)

The introduction to this part of the workshop can be explained as follows: "In this part of the workshop, we take our ideas to a slightly higher level, we have heard them, we have considered selected original ideas from all angles, and now we will give you money, which is not virtual but not even real. Each of you will receive \$ 1000 and after calling you will be able to invest your money in the idea that you think is the most profitable, that it will bring you profit, that you will reverse and multiply your capital / money invested. Let's see what business sense / talent you have".

The 10 x \$100 money received (printed only for the occasion) was distributed to students. The moderators asked them to count it. It was also very interesting that if by chance a student got a banknote or two extras (which accidentally stuck), they immediately reported the surplus.

It was interesting for them to hold so much money in their hands, they were smiling, happy to take pictures with the money. Happiness reactions were also followed by comments about what they could buy or do with that money ... only that this was real. They were told to think well and that, if by any chance they had guessed or found out whose particular idea was, to invest their money in what they thought was the idea with the highest chance of earning money rather than investing in the ideas of their friends because In the real world of the stock market, money is invested in shares of certain companies for the expected profit, not out of empathy for friends, because the loss on the stock market will not be compensated by "friends".

Note: Due to the short time available to the moderators, and based on experience in the realization of the workshops, it is recommended that all materials needed for the workshop be prepared and sorted into transparent, plastic folders the day before. Each folder contains one A4 blanc paper, a Form 5 questionnaire, and 10 x \$100 notes. Five minutes before the workshop begins, one such sheet of material is placed on each table and a bag containing 24 Doris tiles. Students were explained that they would retrieve and use the materials in turn, as instructed by the moderator. At the end of the workshop, the banknotes and questionnaire are returned to the folder and moderators pick them up.



12. INVESTING IN IDEAS

Following the "5 hats" method, we approach the selection of the best idea. This is done by giving each student \$ 1000 to invest in the idea he or she wants. Everyone has the option to invest all the money on one idea, or decide how much to invest for each idea. After the students were given banknotes, we repeated that one by one the student would approach the desk where the moderator was sitting, and invest the money as desired. They were stressed once again that they could distribute the money they received as they wanted to the ideas they selected. In order to make it easier for them to recall ideas they could invest in, the moderators wrote the ideas on paper and on the school board, in ordinal numbers.

The students were repeatedly advised, by the moderator, that the most important thing is to invest in the idea / product that they find most innovative, to make the investment their own decision, in a subjective sense, without consulting their friends.

Students then approach the desk individually and invest their money, following the "rules". It was noted that they took the task very seriously. They were guided by the conclusions reached in the previous phase of the workshop. They showed a very responsible attitude towards the society in which they live, guided by what is for the common good. In some situations, it has been observed that in certain products that would facilitate / improve the work of certain craftsmen, they did not invest money (or invested very modest sums) out of fear that this new "product" would leave people unemployed. The pleasant surprise was watching their very expressive empathy.

Most often, they invest money in products that will provide safety, security (in traffic, for example), innovative home appliances, which will make their everyday life easier, or various applications for new technologies. The conclusion is that they invest within the limits of their interests, their age, the environment in which they live and the lifestyle they lead. Despite the efforts of the moderators, it was often very difficult to "move" them out of these frames. For example. when an analysis of a product is estimated to be expensive in the market, some students do not automatically invest in it, they do not even consider it. The profitability of an idea has not been considered crucial in investing. The environmental sensibility of young people has been observed - they are very environmentally conscious. Nevertheless, these ideas did not prove to be lucrative on the stock market. Also, ideas related to humanity and environmental protection have proven to be recognized, but not important enough, with the premise that no profit can be gained from them.

In this part of the workshop we noticed the particular interest of the students, and they really liked it. One by one, students approach the desk where the moderator sits. On the table are A4 papers with the names of the ideas. Students speak their name, state how much they invest in and put money under the paper on which the name of the idea is written. On Form 4, the moderator writes the name of the student, and notes how much he or she has invested in the idea. In the end, all the money invested for each idea is counted, and the idea in which the most "money" is invested becomes a winning one.



Of particular importance is that ideas are anonymous so that students cannot know whose idea they are investing in, and thus retain the necessary dose of objectivity. The problem with investing is actually obvious. Students still do not think as investors, but invest in an idea that is close to them, that is, in what they think they need, even if another idea is better. In our view, students should be reminded before investing and several times not to invest in an idea they just like, but to approach it as real investors, to invest in an idea that they believe will earn them money on invested capital.

For most students under the SEP program, this phase of the workshop was interesting because of the "money" they were given and the opportunity to invest. The investment process itself was a difficult task for them, which they could not do without the help of a moderator. Otherwise, the term "virtual stock market" is completely abstract to them.

13. ANNOUNCEMENT OF INVESTMENT RESULTS

When the students finished investing, the moderators collected the money and then ranked it. According to the amount of money invested, they ranked ideas / products from last to first place.

Afterwards, the moderators read the ideas, from last place (the idea that won the least money on the stock market) to the first, winning one. Reading the idea, they spoke the author's name as well as how much money the idea won on the stock market.

The atmosphere among the students was very warm. They loudly applauded the authors of the ideas and applauded them, no matter what place they took. The moderators urged them to come forward in front of the group.

Photographing with moderators would follow - first, the moderators would take pictures with all the students whose ideas were on the stock market, and then they would only take pictures with the author of the winning idea.

It has happened repeatedly that the authors of the winning ideas are students who have not stood out in previous segments of the workshop. These are quiet, withdrawn students, very shy. To the realization that their ideas had won, they approached with disbelief. Also, insecurity and fear of ridicule and condemnation of peers were observed in such students. Fortunately, there has never been such a situation. Other students supported them unreservedly. No animosity or peer envy was observed. During some workshops, though rarely, an SEP student would win with his / her idea. The rest of the group was particularly pleased with this.

14. ANONYMOUS SURVEY

In the introduction, when the content of the workshop was presented to the students, it was indicated that they would receive a survey questionnaire in the final section, where they would



anonymously evaluate. It is said that it is very important for the moderators, as well as the author of the project, their honest opinion on the activities that they went through during the workshops.

It was observed that students were seeking clarification on the questions in the survey. Later, when the survey was summarized and the questions were revised, it was noticeable that students understood and filled in this modified survey more and more easily.

With the instructions of the moderator, the students answered the survey questions faster and more efficiently.

We did not notice a bit of disappointment in the students. Mostly after the survey they offered help to moderators about workshop requisites, arranging the classroom and oral comments were very positive, with questions when we are planning such a workshop again.

A detailed analysis of the surveys reveals a considerable difference in the surveys of lower grades and high school graduates. The first graders are still ready to accept Doris as fun and interesting, while graduates find it hard to go back to the time when they were kids and with much less elan. The part that students like best is the Six Hats Thinking Method. This is mainly because their activity seems like something completely new, interesting and inventive. The students stated that they would like more group work, a kind of debate, an accompanying presentation in the introductory part, etc.

The final part of the workshop is most interesting for the students, especially the part when they are investing money.

Students under the SEP program were not able to complete the survey themselves (neither the first nor the second version). They needed the help of a moderator, which meant that simplifying the requests / questions asked was helpful.



Revised survey

No.	Question	Grade/Answer				
1	Are the creative workshops interesting and useful	1	2	3	4	5
2	Does the workshop contributed to raising or discovering your creativity?	1	2	3	4	5
3	Are you satisfied with the methodology used in the creative workshops?	1	2	3	4	5
4	How satisfied are you with the conduct of workshops by teachers?	1	2	3	4	5
5	Your suggestion for the additional activities in the workshop?					
6	Should these workshops be introduced as a regular activity in the classroom?	YES			NO	

15. OBSERVATIONS, OPINIONS AND SUGGESTIONS

The suggestion is that the workshop adjusts slightly to different ages, as there is a difference in the perception of certain activities in first grade and high school students, for example. Also, you should definitely plan more time for Brainstorming, as this is a crucial part where students actually get actively involved in the workshop.

If time is limited, the choice of ideas for evaluation should be reduced to 3, as ideas can then be analyzed in more detail. Also, a quicker evaluation solution, then, is to present all three ideas and then analyze each idea under each hat (e.g. for a red hat, emotions for idea 1, idea 2 and idea 3, then for a yellow hat the good side of idea 1 , ideas 2 and ideas 3...) and so on, instead of a single evaluation ie. 3 cycles of 5 hats each.

As for the practical implementation of the workshop in the school curriculum, the opinion is that it would be great, with some adjustments, of course, depending on the subject. Students in each class showed an enviable dose of creativity and interest in this type of work. Especially a workshop would be good for subjects like Entrepreneurship.

It was also noted that the entire workshop was conceptualized as one big game. It is well known that students learn the most through play and we believe that such activities in our education should be more frequent. We think it would be good and useful to conduct one such workshop among teachers, we think the results would be surprising.



As at school, in almost every grade, there are students with disabilities, based on work experience, it is concluded that there are no exceptional specifics in cooperation with these students, compared to other students. What is required is for such a student to sit immediately in front of the moderator, and to repeat the instruction for a particular activity several times, clearly and patiently, and to check that the student has understood the task. The materials used are very simple and there is no difficulty in using them. It is good for the student to sit with a particularly sensitive peer who is willing to support. Somewhat less understanding exists with Brainwriting session activities, but after good and directed instruction, the difficulty is gone.

Students with disabilities get along well in the workshop - this is a rare situation in a regular high school, when they are no different from peers, there is no one way, one solution, one outcome ... the student is free to relax, and whatever to declare, write and conclude is true. There are no wrong solutions, no failure, no expectations. It is not uncommon for ideas of students with disabilities to be selected as the most creative and even winning ones. Simply, these students are not burdened with their status in the classroom now, they are not afraid to be ridiculed and lose "popularity", most importantly to participate equally and be supported.

In any case, it seems that students with disabilities, with the support of peers and moderators, fully understand each task, as well as the purpose and purpose of the workshop. They fit perfectly and there are no major difficulties in collaboration. Students who have a teaching assistant could use his help and support, but most often this was not required.

Make a presentation that would be presented to the students in the introductory part of the workshop, after a short, introductory speech by the moderator (Power Point presentations at the beginning of the workshops with introductory activities, good practice stories and introduction of students to project sessions).

Organize an exhibition of Doris figures by making a presentation at Power Point and displaying it to all students after all departments have gone through the workshop (public class).

Students like their work to be visible, recognized, praised, valued. The bearers of winning ideas should be given a symbolic gift - the proposals were a box of Doris sets, blocks, pens, key rings, magnets, etc. with the project logo.

Separate parts of the workshop - sessions, to be included once a month - repetition of segments, eg: once a month introduction with new stories, i.e. examples - what did the students notice, did they discover a new product we talked about, did they hear a new story about innovators and new ideas - good practice example and the like. They can check it all through the website, as well as the posted "Doris" puzzle figures on the Facebook group.

Student groups can be mixed - in terms of volunteerism and interest. This way ideas can be revised and the like. So, offer a program of workshops that are drawn from one workshop by segment, and then give students the opportunity to decide according to their interests.

Also, make a presentation at the school level to give examples of the best / winning ideas and their authors. Also, put all the ideas of the students (even which were repeated and which are interesting, but already exist and were not shortlisted for lack of originality) on the school website.

Students, holders of the "title" creators of the best ideas in the workshop could present their ideas in public. It would be useful for teachers, perhaps parents, to attend that final presentation of ideas.



Workshops should also be organized for teachers so that they can develop their own creativity in this way.

Make flyers with pictures of students - winners from all three partner schools, because students love to see how their classmates / peers worked. It is challenging for them to have the same task assigned to students in different countries. They want to see how their peers think outside their school.

Organize an online conference with other partner schools, where students would be present and able to talk to peers.

Since after the workshops they always asked if and when it would be again, that they talked to their peers about the workshop and when it was finished, and the impression about the finished workshop was always positive - it would be good to separate the workshop into several segments that they could be a separate school subject ("Learn to learn") or within the department head class.

The school's facilitators and experts to launch the "Learn to Learn" De Bono method and thus train the student educators - bearing in mind that students would prefer to learn from a peer educator.

When this is realized, students could play the role of moderator in creative workshops.

Make brochure-based material as a guide on how to apply the new methods presented in the workshop for further learning.

In order to avoid repeating the same / similar ideas without avoiding non-innovation in the work, the day before the workshop, students should be tasked with choosing an area that interests them and seems important to them, and to engage in research work in that field. (to get acquainted with what is already there and to design something that does not exist that would benefit). It is a method of CPS creative problem solving.

Hats attracted the most attention for students, so it would be interesting for students to make them themselves and put them together the day before the workshop. Walking through the school with hats on their heads would attract attention and increase interest in participating in workshops.

In order to create a relaxed, homely atmosphere, the moderators provided the students "not to sit on their needs" (to go to the toilet freely, eat a sandwich and refresh themselves with water or tea).

Since the workshop is time-consuming (if both sessions take place on the same day), the expertise of the moderator is necessary to keep the students engaged - the narration must be dynamic, linguistically and stylistically correct. Also, depending on the age of the students, their mood, it is necessary to adjust the work to the current situation.

Guided by the experience of working with different ages, the moderators noted that more frequent breaks should be made when working with younger students.

Pictures of the student-winners posted on Facebook have always been endorsed by peers with "likes". A Facebook group should be popularized to maximize the involvement of students and their classmates outside of school.

Working with students at SEP requires additional moderator work. It is necessary, several days before an agreed workshop in a particular department, that the moderators receive all the necessary information from the department head - whether there are students in the SEP, how many, the names of those students and their pedagogical profile. Depending on the form of the SEP



(SEP1, SEP2), in some workshops it is necessary for one moderator to devote much of his time to working with that student, while another moderator works with the rest of the group.

After the workshops, the students shared positive impressions with their departmental elders and parents, and often the moderators were asked what kind of workshops the students enjoyed so much (although they had been informed before, after realization, the interest grew even more).

The moderators enjoyed working and learning with their students - young people who presented their creativity in a completely different way.

The benefit for the moderators in this project is the relationship of trust built with the students as well as the opportunity to get to know each other in a different way and participate in creative learning together.

Young hearts and young minds have been awakened, which does not always allow traditional methods of learning at school, new challenges have been accepted by educators, resulting in a very positive atmosphere, with much work and happy fatigue. The emotion of pleasure spread as a clear sign of the success of each workshop.

For any additional information, you can contact all partners in the project through the contacts listed on the websites of the participating schools.

