

Innovation Laboratories in the Development of Competences
of Special Pedagogy Teachers and People with Special Educational Needs

project number: 2014-1-PL01-KA202-003428

SCENARIO

Basic information	
Institution	The Maria Grzegorzewska University, Warsaw, Poland
Date	04.2017
Target group	<p>Students of the Education and rehabilitation of people with intellectual disability in the field of Special pedagogy.</p> <p>Subject: Methodology of teaching Design Technology and Information Communication Technology.</p> <p>Students acquire the competence to work with students with intellectual disabilities. They learn about their educational and therapeutic opportunities as well as rehabilitation. In addition, students acquire qualifications for conducting classes in I-III classes of primary schools, knowledge of teaching methods, areas of integration, directions of changes in early school education, contemporary concepts of initial education and the nature of teacher work.</p>
Number of participants	8-15
How is the target group related to the people with special educational needs / with disabilities?	After graduation students will work with people with intellectual disability of different ages. Gained qualifications give an opportunity to work in kindergartens and special schools for children with a wide range of intellectual disability, in educational and rehabilitation centres as well as in inclusive schools.
Short justification why such a group will use the scenario and what benefits we expect to achieve by using i-Lab.	<p>During the classes on "Methodology of teaching Design Technology and Information Communication Technology" students will get acquainted with the core curriculum, the thematic scope and methodology of the implementation of ICT and technology classes in grades I-III. Conducted classes have a practical form. All students, in groups of 2-3, prepare projects of technical and computer classes for pupils. During next meetings, the students carry out technical work and computer exercises planned in their projects. Usually, students have a problem in generating topics and examples of exercises in integrated teaching that take place in grades I-III.</p> <p>The i-Lab space, icebreaker and brainstorming techniques will enable students both to express their ideas freely and to generate a large base of original ideas. Moreover, students will have a chance to know a new attractive activation method which is another practical use of information</p>

	and technology communication in a learning process.
--	---

Short presentation of the i-Lab

<p>What is i-Lab?</p>	<p>The i-Lab is a method that reflects the synergy of the several components such as a special design of an environment, activities stimulating creativity, appropriate equipment, or the access to the computers with Virtual Brainstorming (VBS) software.</p> <p>The i-Lab takes into account:</p> <ul style="list-style-type: none"> - inspiring learning environment - this is a unique place where a group of people can meet together to explore and develop their thinking. It is characterized by an unusual design of the room and the presence of the multimedia; - technology - the laboratory is equipped with the appropriate computer software called Virtual Brainstorm (VBS); - moderating techniques - social techniques to stimulate the creativity, motivation, and group dynamics. <p>The combination of these three components encourages people to: work effectively, discover and develop thinking skills, participation in the collaborative activities, which can speed up the process of thinking and creating.</p>
<p>Description and characteristics of i-Lab</p>	<p>The Innovation Lab is a place where two zones are separated: the relaxation zone and the work zone. Both parts are closely linked with an easy access from one to the other. Unusual equipment in the room plays a vital role in the relation and work zone, providing stimulation and comfort for the i-Lab users. In the zone of the relaxation one can conduct a part of the workshop, dedicated to the development of creative thinking. The work zone provides possibilities for computer brainstorming. Both colors and design create a special aura and are aimed at stimulating creativity. The whole room is designed on the basis of a metaphor for further support of the thinking process.</p>
<p>What is VBS software and why is it important?</p>	<p>The Virtual Brainstorming (VBS) software is an example of the adaptation of the brainstorming method directed to the development of a group creative thinking to an internet application. It is an integral part of the Innovation Laboratory which technically supports the brainstorming process (collection of ideas, evaluation, summary report). The brainstorming put in the IT system provides the opportunity to organize the learning process more effectively which manifests in a more effective acquisition and idea management. This eliminates the difficulty of the traditional brainstorming. The software is accessible to visually impaired people.</p>

The scenario

Number of the scenario	PL-015
Title of the scenario	Methodology of teaching Design Technology and Information Communication Technology – searching for new work topics of works
Area of the scenario	Special pedagogy, methodology of technical and computer education
Description of the scenario	Students during earlier classes will learn the core curriculum of the technical and computer classes and the guidelines for its implementation. The session in i-Lab is focused on generating as many ideas as possible and on creating a database of computer and technical education topics that students use in their lesson plans for pupils from grades I-III.

Didactic process

Goals	<ol style="list-style-type: none"> 1. To develop a set of tasks in reference to the core curriculum. 2. To develop the imagination and ingenuity of students. 3. To develop skills pf communication in the group. 5. To develop the ability to evaluate the results.
A short description of the didactic process	<p>Introduction</p> <ol style="list-style-type: none"> 1. Presentation of the i-Lab concept and its basic assumptions. 2. Presentation of the objectives of the actions undertaken. 3. Implementation of the ice-breakers to deepen group cognition and to stimulate creative thinking. 4. Introduction to the problem of the session – revision of technical and computer core curriculum assumptions. <p>Main part</p> <ol style="list-style-type: none"> 1. The brainstorm is conducted with the use of the Virtual Brainstorming software. Students generate as many ideas as they can concerning the topic of practical tasks. Once the ideas are generated, students evaluate them taking into account originality and the best fit to the capabilities and needs of the group. 2. Presentation of the results and discussion on the top-rated ideas. <p>End</p> <ol style="list-style-type: none"> 1. Students divide into groups of 2-3 people and they choose the topic which they will use in their project of the lesson. 2. Summary of the session.
The methods	Presentation, discussion, activation methods, ice-breakers, brainstorm

Functions of the didactic methods	<ol style="list-style-type: none"> 1. To develop imagination and ingenuity of students. 2. To awaken the involvement of the students. 3. To encourage students to present their own ideas. 4. To develop the ability to evaluate own work results.
--	--

Methods and helps used during the implementation of the scenario

Icebreakers (title, short description, link)	<p>Me, myself and I - based on the photo</p> <p>Participants choose one or more printed illustrations that best illustrate their mood and they present themselves by using them.</p> <p>Associations</p> <p>The group is in a circle. The facilitator throws the ball to one of the participants and says the first word, e.g. a computer. Then the participants throw a ball to each other giving an association to the word said by the person from whom they received the ball. The exercise activates the participants and simultaneously introduces them into the subject of the session.</p> <p>Abstraction</p> <p>Each student draws an abstraction. After the drawing phase, everyone passes the paper to the person on the right. The students reflect on the picture and give it a title to the drawing they received. Then the drawings are put on the magnetic board and they are discussed on the role of creativity and interpretation of the nonverbal stimulus in communication.</p> <p>Engineers</p> <p>Students are divided into groups of 2-3 people. Each group builds together a device that no one has yet invented. Students have blocks, plasticine, coloured papers, pens, adhesive tapes, glue, colourful elactic, balloons. After finishing the task, the students present their equipment and discuss its purpose and functions.</p>
Materials (what is necessary)	<p>Illustrations, blocks, plasticine, coloured papers, pens, adhesive tapes, glue, colourful elactic, balloons</p>
The other techniques (title, a short description, link), recommendations	<p>Lack</p>

Benefits for Participants

How to work individually? (short description)	<p>For students with individual needs, it is necessary to analyze whether the selected work methods are available to them and how to adapt them if needed. For students with motor impairments it is necessary to modify the space so that they can move freely. It is required to ensure that visually impaired students are equipped with appropriate assistive devices such as magnifiers. Students with hearing impairments should have all instructions</p>
--	--

	printed or presented on the screen.
How to work with the group? (short description)	It is recommended to ensure good communication in the group and activate all participants in the session. In the case when there are people with disabilities in the group, it is necessary to individualize tasks according to their needs. In this case, students with disabilities should also be included in all tasks. If a student is using an individual assistant, the assistant must be provided with a place to work.

The Results

Achieved goals	The session in the Innovation Laboratory involves all students. It activates the creative thinking, imagination and ingenuity of the participants. The initiative makes the session more dynamic. The participants willingly work in the group which facilitate the communication processes. Students develop their ability to analyze the core curriculum and they search for topics which are evaluated by the group.
Work cards (if used)	Lack

The scenario is the result of the project:

Innovation Laboratories in the Development of Competences of Special Pedagogy Teachers and People with Special Educational Needs

Project implement in "Erasmus +" program

Action KA2 – Cooperation for Innovation and the exchange of good practices

Strategic Partnership for vocational and education training

Project No: 2014-1-PL01-KA202-003428

The European Commission and Polish National Agency cannot be held responsible for any use which may be made of the information contained therein.