

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**

<b>Basic information</b>	
<b>Institution</b>	The Maria Grzegorzewska University, Warsaw, Poland
<b>Date</b>	04.2017
<b>Target group</b>	<p>Students of the Rehabilitation of people with multiple disability in the field of Special pedagogy.</p> <p>Subject: New technologies in rehabilitation of people with multiple disability.</p> <p>Students acquire the competence to work with people with multiple disability in different age, including children, adolescents and adults. After graduation students can work in the following places: rehabilitation and education centres, occupational therapy workshops, social welfare institutions, community self-help homes.</p>
<b>Number of participants</b>	20 (2 groups of 10)
<b>How is the target group related to the people with special educational needs / with disabilities?</b>	After graduation students will work with people with multiple disability of different ages and with the different range and type of disability, Therefore, it requires skills of using new technologies to improve or to keep the functional possibilities of people with disabilities.
<b>Short justification why such a group will use the scenario and what benefits we expect to achieve by using i-Lab.</b>	<p>Realization of the subject "New technologies in rehabilitation of people with multiple disabilities" students will learn about devices and computer programs created to the individual needs of people with different types of disabilities. New technologies can facilitate communication, reading, writing and other activities which help people with a disability to learn and work. However, due to the individual needs and abilities of people with disabilities, it may be difficult to find a proper solution. It is not enough just to know the equipment and programs available in the market and to have pedagogical knowledge, but creative thinking and empathy are required.</p> <p>The i-Lab space, icebreaker techniques, and Virtual Brainstorming software will enable students to express their ideas freely, facilitate group creative processes and allow to synthesize acquired skills in a creative way.</p>

**A brief presentation of i-Lab**

<b>What is i-Lab?</b>	The i-Lab is a method that reflects the synergy of the several components
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	<p>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"> <li>- 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;</li> <li>- technology - the laboratory is equipped with the appropriate computer software called Virtual Brainstorm (VBS);</li> <li>- moderating techniques - social techniques to stimulate the creativity, motivation, and group dynamics.</li> </ul> <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><b>Description and characteristics of i-Lab</b></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><b>What is VBS software and why is it important?</b></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**

<p><b>Number of the scenario</b></p>	<p>PL-005</p>
<p><b>Title of the scenario</b></p>	<p>Technologies supporting communication of people with multiple disabilities</p>

<b>Area of the scenario</b>	Special pedagogy: rehabilitation of people with multiple disability
<b>Description of the scenario</b>	<p>The scenario is focused on the problem of using new technology by people with disabilities.</p> <p>The session concentrates on revision of earlier gained knowledge and its use in practice.</p> <p>The task of students is to find software and hardware solutions to improve communication in reference to the needs of a person presenting with a multiple disability.</p>

### Didactic process

<b>Goals</b>	<ol style="list-style-type: none"> <li>1. To develop the ability to analyze the individual needs of people with complex disabilities.</li> <li>2. To develop the imagination and ingenuity of students.</li> <li>3. To use acquired knowledge to find solutions that can be applied in practice.</li> <li>4. To development of software and hardware solutions dedicated to the individual needs and capabilities of a person with multiple disabilities.</li> <li>5. To develop the ability to evaluate the results.</li> </ol>
<b>A short description of the didactic process</b>	<p><b>Introduction</b></p> <ol style="list-style-type: none"> <li>1. Presentation of the i-Lab concept and its basic assumptions.</li> <li>2. Presentation of the objectives of the actions undertaken.</li> <li>3. Implementation of the ice-breakers to deepen group cognition and to stimulate creative thinking.</li> <li>4. Introduction to the problem of the session – presenting a person with a multiple disability. Descriptive characterization and film.</li> </ol> <p><b>Main part</b></p> <ol style="list-style-type: none"> <li>1. The brainstorm is conducted by the use of the Virtual Brainstorming software. Students not only list as many well-known programs and devices as possible to improve the communication of the person presented but also give solutions invented by themselves. Once the ideas are generated, students evaluate them by applying the best fit to the capabilities and needs of the model person.</li> <li>2. Presentation of the results and discussion on the top-rated ideas.</li> <li>3. Analysis of selected solutions in groups. Students share in 2-3 groups and do a SWOT analysis which concerns the ideas chosen by the group taking into account the needs and capabilities of the model person, the functionality of the solution, the availability of the price</li> </ol>

	<p>and so on. The analysis is presented graphically on the "panel walls".</p> <p><b>End</b></p> <ol style="list-style-type: none"> <li>1. Choice of the most interesting ideas.</li> <li>2. Summary of the session.</li> </ol>
<b>The methods</b>	Presentation, film, discussion, activation methods, ice-breakers, brainstorm, SWOT Analysis
<b>Functions of the didactic methods</b>	<ol style="list-style-type: none"> <li>1. To develop imagination and ingenuity of students.</li> <li>2. To awaken the involvement of the students.</li> <li>3. To encourage students to present their own ideas.</li> <li>4. To develop the ability to evaluate the results.</li> </ol>

**Methods and material used during the implementation of the scenario:**

<b>Icebreakers (title, short description, link)</b>	<p><b>Small items</b></p> <p>Each student invents a small object that will fit in the palm of his hand. The list of students' names of their subjects is written on the drawing wall. Then students in the group exchange the names of these objects for 5 minutes. The task is to do as many exchanges as possible. At the end of the exchange phase students check what they have or what has been lost. This exercise stimulates participants, puts in a good mood, but also develops concentration.</p> <p><b>Abstraction</b></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><b>What can you do with a plastic bottle?</b></p> <p>In three subgroups students generate as many ideas as possible of opportunities of use of a plastic bottle. Ideas are written on a sheet of paper, then the representative of each subgroup presents the results. We are looking for the most original idea. Exercise is a warm-up to the implementation of electronic brainstorming.</p>
<b>Materials (what is necessary)</b>	Board, paper, markers, pens, crayons, plastic bottle

<b>The other techniques (title, a short description, link), recommendations</b>	Lack
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### Benefits for Participants

<b>How to work individually? (short description)</b>	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 be equipped with printed instructions.
<b>How to work with the group? (short description)</b>	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

<b>Achieved goals</b>	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. Students develop their ability to analyze the individual needs of people with multiple disabilities, actively present their ideas. They are able to think of the solutions to a specific problem that has been evaluated by the group.  Students are eager to work in a team that fostered communication skills.
<b>Work cards (if used)</b>	Work card with the characteristics of a person with a multiple disability

**The scenario is the result of the project:**

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