

# DESCI



Developing and Evaluating Skills for Creativity and Innovation

## Desci Scenarios

1st EXPERIMENTAL SCHOOL OF  
ATHENS



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## Gastronomy Business Club

Module	Gastronomy Business Club
<p><b>Objective</b></p>	<p>The "Gastronomy Business Club" will be implemented as an after school program at our school. The primary aim is the implementation of "Gastronomy Business" in practice, aiming at students coming in contact with the professional field and the production - business process.</p> <p>In particular, the club involves experiential contact of students with the gastronomic culture of peoples. Students, through gastronomy, will travel to various countries of the world, and will discover the magic of gastronomic creativity, while highlighting the beneficial impact of the Mediterranean food culture but also the pleasure of tasting. Through gastronomic culture, students will learn to treat food not only as a biological necessity, but also as a means for creation and development of their personality. They will prepare and trade products based solely on fresh, high quality ingredients and will invest in the presentation as well as the food styling of the dishes they will create.</p>
<p><b>Activities</b></p>	<p>In this Club students will learn the cuisines of the world at Global, European but also national and local level. They will 'travel' in order to discover new flavors and enjoy local gastronomy; they will get to know local fresh ingredients, their use and the culinary habits of the place, while they will deepen their knowledge in the history and traditions of their gourmet destination. They will create recipes based on the culinary culture of each place.</p> <p>The Club will seek to work systematically with the Greek Gastronomy Museum but also with culinary experts - professional chefs, who will consult and guide the team of students through their own professional experience and knowledge.</p> <p>Each club session will normally take 2 hours. Culinary experts will present their personal experiences from the world of business and will also make reference to their studies in order to help students in their</p>

	<p>career choices. The program will therefore help students explore career opportunities while assessing skills and competencies needed to meet the labor market.</p>
<p><b>Knowledge/ability</b></p>	<p>Throughout the club, students will gain real experience of the business world: they will set up their own business, will allocate roles and responsibilities, will draw up a business plan and take on responsibility for the progress of the business. They will also develop skills necessary for their future personal career and success. They will understand the meaning of self-employment, they will take initiatives and learn to deal with adversities in business with the help of culinary experts-professional chefs.</p> <p>Moreover, students will operate a real business in order to sell their products. They will produce their products and try to find customers willing to buy them.</p> <p>They will also develop skills necessary for their future personal career and success. They will understand the meaning of self-employment and will take initiatives. They will also learn to deal with adversities in business with the help of culinary experts – professional chefs.</p> <p>The expected knowledge for students is summarized as follows:</p> <ul style="list-style-type: none"> <li>➤ To understand the important role of business in society (increase in employment, self-employment).</li> <li>➤ To learn basic and classic cooking techniques.</li> <li>➤ To get acquainted with the use of cooking utensils.</li> <li>➤ To learn the criteria and standards for the selection of the finest fresh ingredients.</li> <li>➤ To make measurement procedures and the appropriate combination of ingredients in a standard procedure to obtain the desired results.</li> <li>➤ To experiment with different ingredients and flavors.</li> <li>➤ To effectively design a food product or a menu.</li> <li>➤ To calculate food costs and price a menu.</li> <li>➤ To design the nutrition label for a product.</li> </ul>

	<ul style="list-style-type: none"> <li>➤ To make evaluations of the biological value of a product.</li> <li>➤ To promote and advertise the product in order to sell it.</li> </ul>
<b>Soft Skills</b>	<p>"Gastronomy Business Club" approach emphasizes learning in four key areas:</p> <ul style="list-style-type: none"> <li>➤ Ownership: Students take responsibility for their own learning.</li> <li>➤ Experiential learning: Students' learning is based on hands - on experience.</li> <li>➤ Cooperation: Students learn with and from others and understand the dynamics of working as part of a team.</li> <li>➤ Reflection: Students experience the consequences of their decisions and apply that learning to future challenges.</li> </ul>
<b>Technical Skills</b>	<p>The expected technical skills for students are summarized as follows:</p> <ul style="list-style-type: none"> <li>➤ To get acquainted with the use of cooking utensils - cook's knife, paring knife, palette knife, serrated knife, vegetable peeler, wooden spoon, tablespoon, teaspoon, dessertspoon, balloon rotary whisk, fork, spatula, rolling pin, pastry brush.</li> <li>➤ To get acquainted with the use of kitchen equipment - cooker, food mixer and liquidizer, pressure cooker, microwave oven, fridge, freezer, baking tray, grater, mixing bowls, measuring jug, chopping cutting, cooling rack, sieve, colander, frying pan, saucepan.</li> <li>➤ To learn how food ingredients weigh and get measured using scales and measuring jugs.</li> <li>➤ To obtain knowledge about kitchen hygiene.</li> <li>➤ To learn how the food can spoil by micro-organisms such as Yeasts, Mould and Bacteria.</li> <li>➤ To learn about food preservation.</li> <li>➤ To produce their own product or service.</li> <li>➤ To advertise and launch the product or service.</li> </ul>
<b>Prerequisites</b>	<p>For an efficient implementation of the program, a cross-curricular approach to the content of Home Economics and Biology through CLIL is considered necessary. Through the CLIL approach in Home Economics,</p>

	<p>already in practice, students study concepts such as: Food science and nutrition, dietary practices, food labels, and so on.</p> <p>Through the CLIL approach in Biology, already in practice, students study concepts such as: The structure and functions of the digestive system, the structure and function of various associated organs, the enzymes, the absorption of products of digestion, and so on.</p>
<p><b>Output of the activity</b></p>	<p>Students will work in a team of 25, divided as follows:</p> <ol style="list-style-type: none"> <li>1) The Public Relations group, will take over the promotion and advertising not only of the club that will function as gastronomy laboratory, but also of the products they will produce, using fresh high-quality ingredients of the Greek land, in collaboration with organic farmers, local producers etc.- 5 students.</li> <li>2) The group for the Organization of events (catering), will undertake the design and offer a variety of dishes for various social events. This requires managing and mobilizing staff skills, the skill of self-control under pressure, good communication skills and organization and methodical approach skills. - 4 students.</li> <li>3) The accounting management group (cash flow, budgeting, costing, etc.) - 2 students.</li> <li>4) The Research and Innovation group, will undertake the job of recipe search, literature review, designing the nutritional label of products, evaluation of the biological value of products, creating innovative recipes of high nutritional value. - 5 students.</li> <li>5) The Production group, divided as follows: <ol style="list-style-type: none"> <li>1) The Supply group will take over the search for fresh ingredients and the corresponding suppliers, and select them based on price and quality of fresh ingredients. - 2 students.</li> <li>2) The Food Production group will develop recipes based on the Mediterranean Diet Model using nutritional Products Protected Designation of Origin (PDO).</li> </ol> </li> </ol>

	<p>Chefs: 3 students in cooking and 1 student in pastry.</p> <p>Sous-Chefs: 3 students.</p>
<b>Methodological framework</b>	<ul style="list-style-type: none"> <li>➤ Laboratory (operating method).</li> <li>➤ Experimental research (investigative method).</li> <li>➤ Action research (heuristic participatory approach).</li> <li>➤ Role playing.</li> <li>➤ Cooperative learning.</li> <li>➤ Scenario building.</li> </ul>
<b>Inspiring practice</b>	<p>Inside school: The Entrepreneurship school club that operated at the school from 2013 to 2015 with high student participation.</p> <p>Outside school: Social Innovation Relay competition and programs to promote entrepreneurship.</p>
<b>Tools/technologies/materials</b>	<p>Software tools: Nutritional Data Index (NBI), Body Mass Index (BMI), Calorie Calculator, Calories Burned Calculator, Exercise Calories Calculator.</p>
<b>External Tutor</b>	<ul style="list-style-type: none"> <li>➤ Cooperation with culinary experts – chefs, who will advise and guide the student group through their own professional experience and knowledge.</li> <li>➤ Cooperation with members of the business community.</li> </ul>
<b>Duration</b>	1 year
<b>Place</b>	At Gastronomy Museum.
<b>Sources</b>	<p><a href="http://nutritiondata.self.com/">http://nutritiondata.self.com/</a></p> <p><a href="http://www.calculator.net/bmi-calculator.html">http://www.calculator.net/bmi-calculator.html</a></p> <p><a href="http://www.nhlbi.nih.gov/health/educational/wecan/index.htm">http://www.nhlbi.nih.gov/health/educational/wecan/index.htm</a></p> <p><a href="http://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/">http://www.mayoclinic.org/healthy-lifestyle/nutrition-and-healthy-eating/</a></p> <p><a href="http://caloriecontrol.org/healthy-weight-tool-kit/assessment-">http://caloriecontrol.org/healthy-weight-tool-kit/assessment-</a></p>

calculator/

<http://nutritiondata.self.com/tools/calories-burned>

<https://www.bhf.org.uk/caloriescalculator>

GENERAL DESCRIPTION

Title of Scenario Android software products for the virtual enterprises								
<b>Type of school and school system</b>		Middle School of General Education						
<b>Class</b>	<b>Grade of the students</b>	<b>Age of the students</b>	<b>Total Duration</b>	<b>Year</b>	<b>Number of hours</b>	<b>Frequency</b>		
II	a	2-15	1	1	1	2/week		
<b>Short Description</b>		Learn the basic concepts of programming in android environment & create android products for the enterprises.						
<b>Outputs</b>		Android software products for virtual enterprises and the school community.						
<b>Stakeholders involved</b>		<i>School community.</i> <i>Users of Google store</i>						
<b>Environment</b>		<i>Produced products according to the student needs.</i> <i>Focuses on using modern devices for learning – playing.</i>						
<b>Objectives</b>		Learn the basic concepts of object oriented programming and use them for implementing android products.						
<b>Key words</b>		<i>Android products, object oriented programming</i>						

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### DETAILED DESCRIPTION IMPLEMENTATION SCENARIO

For designing the Alternating Training Plan, you can describe each phase of scenario filling the following template.

<b>Phase N</b>	III		
<b>Short description</b>	Learn the basic concepts of programming in android environment & create android products for the enterprises.		
<b>Phase Duration</b>	1 YEAR	<b>Number of hours</b>	2/Week

*For each phase, more modules can be scheduled*

<b>Module</b>	<b>Android software products for the virtual enterprises and the community</b>
<b>Duration</b>	1 year
<b>Learning outcomes</b>	a) to learn the basic concepts of programming in android environment. b) to creatively use the above concepts so as to create, android products for the enterprises.
<b>Knowledges</b>	<ul style="list-style-type: none"> <li>➤ What is a software house.</li> <li>➤ What is “google store” and “play store”.</li> <li>➤ What is like an android programming environment.</li> </ul> <p>The expected abilities for the students are summarized as follows:</p> <ul style="list-style-type: none"> <li>➤ To understand the important role of software houses in modern society.</li> <li>➤ To implement android software products for mobile use.</li> <li>➤ To make their android products available to the end user (upload the android products to the appropriate web structures with the right form .apk –executable form of their product).</li> </ul> <p>To distinguish between different forms of the android programs (aia source code files, .apk executable files).</p>
<b>Technical skills</b>	<ul style="list-style-type: none"> <li>➤ To learn how to make an android software product.</li> </ul> <p>To be able to upload their android product to the appropriate web structures with the appropriate program form.</p>
<b>Soft Skills</b>	<ul style="list-style-type: none"> <li>➤ Teamwork.</li> <li>➤ Ability to make decisions.</li> </ul> <p>Ability to apply theoretical knowledge to real situations and</p>

	problems.
<b>Prerequisites</b>	<ul style="list-style-type: none"> <li>➤ How to connect their mobile phones with the MIT platform environment.</li> <li>How to convert their android program to the right .apk form.</li> </ul>

*For each module, more activities can be scheduled*

<b>Activity</b>	Android software products for virtual enterprises and the school community.
<b>Duration</b>	The program will be implemented as an after school course. The duration of the program will be for one year and the course duration will be two hours per week.
<b>Place</b>	School (computer laboratory)
<b>Stakeholders involvement</b>	<p>Students will:</p> <ul style="list-style-type: none"> <li>➤ Produce android products for the enterprises.</li> <li>➤ Produce android products for the school community.</li> </ul> <p>Upload their products to google store or play store so as to make their products worldwide available.</p> <p>Students will act as professional programmers and use MIT App Inventor Forum for technical consulting when needed.</p>
<b>Outputs</b>	Android software products
<b>Methodologies</b>	<p>Laboratory (operating method).</p> <p>Experimental research (investigative method).</p> <p>Cooperative learning.</p> <p>Scenario building.</p>
<b>Inspiring practices</b>	Real world software houses and programmers of android products, Online learning through M.I.T Appinventor Website.
<b>Tools/technologies/</b>	Software tools:

<b>materials</b>	MIT android software (APPINVENTOR).
<b>Sources</b>	<a href="http://appinventor.mit.edu/">http://appinventor.mit.edu/</a> <a href="http://appinventor.mit.edu/explore/ai2/tutorials.html">http://appinventor.mit.edu/explore/ai2/tutorials.html</a> <a href="http://www.apkmirror.com/apk/google-inc/google-play-store/">http://www.apkmirror.com/apk/google-inc/google-play-store/</a> <a href="https://www.androidpit.com/how-to-install-the-play-store">https://www.androidpit.com/how-to-install-the-play-store</a>

GENERAL DESCRIPTION <b>“Logical games” Math Club</b>							
<b>Title of Scenario</b> “Logical games” Math club							
<b>Type of school and school system</b>		Middle School in general education					
<b>Class</b>	1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> Grade.	<b>Age of the students</b>	12-15	<b>Total Duration</b>	1 year	<b>Number of hours</b>	40
<b>Short Description</b>		<p><i>The program Educational games in Maths ' will be implemented in the after school program “Mathematical Thinking Club”. The primary aims of the program are:</i></p> <p><i>a) to learn mathematics through real life situations, such as by creating an educational game</i></p> <p><i>b) to creatively use the history of mathematics, mathematics itself and computer programming in designing and creating video games.</i></p> <p><i>The students who will participate in the “Mathematical Thinking Club” will:</i></p> <ul style="list-style-type: none"> <li><i>➤ visit and attend the “Art &amp; Mathematics” program at the local Math Museum (Heracleidon Museum),</i></li> <li><i>➤ visit local escape rooms ,</i></li> <li><i>➤ visit the local museum of Ancient Greek Technology,</i></li> </ul> <p><i>in order to collect ideas for their video games.</i></p>					
<b>Outputs</b>		<p><i>Students will:</i></p> <ul style="list-style-type: none"> <li><i>➤ Produce an educational video game.</i></li> <li><i>➤ Wright the scenario for the video game exploiting history of mathematics.</i></li> <li><i>➤ Create math puzzles for the different game tracks.</i></li> <li><i>➤ Promote their video game by presenting it to relevant competitions.</i></li> </ul>					
<b>Stakeholders involved</b>		<p><i>Producers: Students of the after school club « Mathematical Thinking Club».</i></p> <p><i>Advisors: Companies or people that produce games.</i></p> <p><i>End users: Students of the 1st Experimental Gymnasium of Athens- Students of the nearby schools, peers from their neighbourhood.</i></p>					
<b>Environment</b>		<p><i>Internal Coherence with the school environment:</i></p> <p><i>They will make use of their mathematical Knowledge that they gain in school.</i></p> <p><i>They will learn to evaluate and improve other students’ work.</i></p> <p><i>They will develop communication skills and skills that are required in the</i></p> <p><i>commercial sector, in order to promote the games.</i></p>					

	<p><i>They will learn about computer programming.</i></p> <p><i>External coherence with the school environment:</i></p> <p><i>The students, with the production of the games, will try to cover the need of</i></p> <p><i>the community for qualitative entertainment.</i></p>
<b>Objectives</b>	<p><i>The expected knowledge for students is summarized as follows:</i></p> <ul style="list-style-type: none"> <li>➤ <i>To put school mathematics in practice, in real life situations.</i></li> <li>➤ <i>To denaturize theoretical knowledge (mathematics, history of mathematics) to a product for commercial exploitation (video games).</i></li> <li>➤ <i>To create video games.</i></li> </ul> <p><i>The expected technical skills for students are summarized as follows:</i></p> <ul style="list-style-type: none"> <li>➤ <i>To learn how to make an educational video game.</i></li> <li>➤ <i>To process graphics and sounds in order to use them in their video game.</i></li> <li>➤ <i>To implement their video game using a programming language.</i></li> <li><i>To produce the documentation for their game (the user manual).</i></li> </ul> <p><i>The expected soft skills for students are summarized as follows:</i></p> <ul style="list-style-type: none"> <li>➤ <i>Ownership: Students take responsibility for their own learning.</i></li> <li>➤ <i>Experiential learning: Students' learning is based on hands - on experience.</i></li> <li>➤ <i>Cooperation: Students learn with and from others and understand the dynamics of working as part of a team.</i></li> <li>➤ <i>Reflection: Students experience the consequences of their decisions and apply that learning to future challenges.</i></li> </ul>
<b>Key words</b>	
<b>Phases</b>	<p><i>In the first phase, the students of the group, will play some contemporary and ancient games in order to figure out the mathematical structure that underlies them. After that they will try to implement the gained knowledge in order to create their own game.</i></p> <p><i>In the second phase of the group's activity the students will propose ideas for new educational games</i></p>

	<i>In the second phase of the group's activity the students will create the games, mostly, in electronic form.</i>
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**DETAILED DESCRIPTION IMPLEMENTATION SCENARIO**

For designing the Alternating Training Plan, you can describe each phase of scenario filling the following template.

<b>Phase 1</b>	Being familiar with the structure of the educational games.		
<b>Short description</b>	<i>In the first phase, the students of the group, will play some contemporary and ancient games in order to figure out the mathematical structure that underlies them. After that they will try to implement the gained knowledge in order to create their own game.</i>		
<b>Phase Duration</b>	<i>1,5 months</i>	<b>Number of hours</b>	<i>10 hours</i>

*For each phase, more modules can be scheduled*

<b>Module 1</b>	<i>Being familiar with the structure of the educational games.</i>
<b>Duration</b>	<i>1, 5 month</i>
<b>Learning outcomes</b>	<i>Develop strategies in order to win in educational games.</i>
<b>Knowledges</b>	<i>They will learn how to use mathematics outside of their usual context.</i>
<b>Technical skills</b>	
<b>Soft Skills</b>	<ul style="list-style-type: none"> <li>➤ <i>Students take responsibility for their own learning.</i></li> <li>➤ <i>Students learn with and from others and understand the dynamics of working as part of a team.</i></li> <li>➤ <i>Students experience the consequences of their decisions and apply that learning to future challenges.</i></li> </ul>
<b>Prerequisites</b>	

<b>Phase 2</b>	<i>Propose ideas for making new games.</i>		
<b>Short description</b>			
<b>Phase Duration</b>	<i>1,5 month</i>	<b>Number of hours</b>	<i>10 hours</i>

*For each phase, more modules can be scheduled*

<b>Module 1</b>	<i>Propose ideas for making new games.</i>
<b>Duration</b>	<i>1, 5 month</i>
<b>Learning outcomes</b>	<p><i>They will learn how to present- communicate their ideas to the other members of the group.</i></p> <p><i>They will learn how to make use of the ideas of the other members of the team in order to improve those ideas.</i></p> <p><i>They will evaluate the ideas of the other members of the team.</i></p> <p><i>they will learn to accept the evaluation of their ideas by the other members of the team.</i></p>
<b>Knowledges</b>	<i>As in learning outcomes.</i>
<b>Technical skills</b>	
<b>Soft Skills</b>	<ul style="list-style-type: none"> <li>➤ <i>Students take responsibility for their own learning.</i></li> <li>➤ <i>Students learn with and from others and understand the dynamics of working as part of a team.</i></li> <li>➤ <i>Students experience the consequences of their decisions and apply that learning to future challenges.</i></li> </ul>
<b>Prerequisites</b>	<i>Simple mathematical knowledges</i>

<b>Phase 3</b>	<i>Creating the educational games.</i>		
<b>Short description</b>			
<b>Phase Duration</b>	<i>3 month</i>	<b>Number of hours</b>	<i>20 hours</i>

*For each phase, more modules can be scheduled*

<b>Module 1</b>	<i>Creating the educational games.</i>
<b>Duration</b>	<i>3 month</i>
<b>Learning outcomes</b>	<p><i>They will learn</i></p> <ul style="list-style-type: none"> <li>➤ <i>To put school mathematics in practice, in real life situations.</i></li> <li>➤ <i>To denaturize theoretical knowledge (mathematics, history of mathematics) to a product for commercial exploitation (video games).</i></li> <li>➤ <i>To create video games..</i></li> </ul>
<b>Knowledges</b>	<i>As in learning outcomes.</i>
<b>Technical skills</b>	<ul style="list-style-type: none"> <li>➤ <i>They will learn how to make an educational video game.</i></li> <li>➤ <i>They will process graphics and sounds in order to use them in their video game.</i></li> <li>➤ <i>They will implement their video game using a programming language.</i></li> <li>➤ <i>They will to produce the documentation for their game (the user manual).</i></li> </ul>
<b>Soft Skills</b>	<ul style="list-style-type: none"> <li>➤ <i>Students take responsibility for their own learning.</i></li> <li>➤ <i>Students learn with and from others and understand the dynamics of working as part of a team.</i></li> <li>➤ <i>Students experience the consequences of their decisions and apply that learning to future challenges.</i></li> </ul>
<b>Prerequisites</b>	<i>For an efficient implementation of the program, a basic knowledge of computer use is necessary as well as special knowledge in image and sound processing and basic programming concepts are required.</i>

<b>Title of Scenario</b> Virtual Enterprises							
<b>Type of school and school system</b>		Middle school (General education)					
<b>Class</b>	B	<b>Age of the students</b>	14	<b>Total Duration</b>	<i>1 school year</i>	<b>Number of hours</b>	28
<b>Short Description</b>		Students in groups of 13 engage in a role playing of simulating the functions of enterprises that put into market products produced in school by after school clubs of interest and excellence. In this way students get acquainted with the entrepreneurship and acquire knowledge about the work cycle of real enterprises.					



<b>Outputs</b>	<i>Business plans and web sites for the virtual enterprises</i>
<b>Stakeholders involved</b>	<p>Students of the living lab (learners).</p> <p>Two school teachers.</p> <p>Executives of successful companies (external tutors).</p> <p>Students of after school clubs (end-users).</p>
<b>Environment</b>	<p>Internal Coherence</p> <p>The scenario aims to foster positive attitude towards entrepreneurship to students and let them acquire useful knowledge on the work cycle of business. It aims to apply school knowledge in real world situations.</p> <p>External Coherence</p> <p>Nowadays in Greece unemployment rates concerning young people are very high. Helping young people to start their own business might be a solution to the unemployment problem. The scenario offers middle school the opportunity to get acquainted with business world and help them consider entrepreneurship a possible future career solution.</p>
<b>Objectives</b>	<p>The expected <b>knowledge</b> for students is summarized as follows:</p> <ul style="list-style-type: none"> <li>• To understand the important role of business in society (increase in employment, self-employment).</li> <li>• To understand the distinction of enterprises according to their legal status, their ownership, type of activity and size.</li> <li>• To discover and develop their latent entrepreneurial skills which can help to expand their professional development options.</li> <li>• To understand what a business plan is.</li> <li>• To become aware of the fact that programming and design of an enterprise's operations is a prerequisite for achieving goals.</li> </ul> <p>The expected <b>soft skills</b> for students are summarized as follows:</p> <ul style="list-style-type: none"> <li>• Ownership: Students take responsibility for their own learning.</li> <li>• Experiential learning: Students' learning is based on hands - on experience.</li> <li>• Cooperation: Students learn with and from others and understand the dynamics of working as part of a team.</li> <li>• Reflection: Students experience the consequences of their decisions and apply that learning to future challenges.</li> </ul> <p>The expected <b>technical skills</b> for students are summarized as follows:</p> <ul style="list-style-type: none"> <li>• To conduct market research.</li> <li>• To implement a business plan of an enterprise</li> <li>• To advertise and launch a product or service.</li> <li>• To successfully manage the finances of the company (sales &amp; marketing, market analysis, financial analysis, evaluation of investment plans, etc.),</li> </ul>

	using spreadsheet software. <ul style="list-style-type: none"> <li>To implement a commercial web site.</li> </ul>
<b>Key words</b>	Entrepreneurship, business plan, virtual enterprise

<b>Phases</b>	<p>Orientation and planning</p> <p>Specifying the field of each virtual enterprise</p> <p>Work groups/role assignment/contribution to the deliverables</p> <p>Enterprise work cycle simulation/Production of deliverables</p> <p>Discussion and evaluation of deliverables</p> <p>Presentation of the products to the school community</p> <p>Evaluation of the living lab experience</p>
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**DETAILED DESCRIPTION IMPLEMENTATION SCENARIO**

For designing the Alternating Training Plan, you can describe each phase of scenario filling the following template.

<b>Phase 1</b>	Orientation and planning		
<b>Short description</b>	<i>Acquaintance with the work cycle of enterprises and expression of personal interests</i>		
<b>Phase Duration</b>	<i>6 weeks</i>	<b>Number of hours</b>	<i>6</i>

<b>Module</b>	<i>Acquaintance with the work cycle of enterprises</i>
<b>Duration</b>	<i>2 hours</i>
<b>Learning outcomes</b>	<i>Objective of the modules in relation to the phase/scenario in particular competences that the students is expected to acquire through the module</i>
<b>Knowledges</b>	<i>The expected knowledge for students is summarized as follows:</i>

	<ul style="list-style-type: none"> <li>➤ <i>To understand the important role of business in society (increase in employment, self-employment).</i></li> <li>➤ <i>To understand the distinction of enterprises according to their legal status, their ownership, type of activity and size.</i></li> <li>➤ <i>To name the main departments of a virtual enterprise</i></li> </ul>
<b>Technical skills</b>	➤ <i>To use business terminology.</i>
<b>Soft Skills</b>	➤ <i>Ownership: Students take responsibility for their own learning.</i>
<b>Prerequisites</b>	<i>Students must be able to use the schools electronic class</i>

<b>Activity</b>	<i>Studying learning material on the work cycle of enterprises</i>
<b>Duration</b>	<i>2 hours at school, 4 hours at home</i>
<b>Place</b>	<i>School, Home</i>
<b>Stakeholders involvement</b>	<i>Teachers give an introductory lecture on the idea of entrepreneurship and describe the different departments of companies. They present the learning material uploaded in the schools electronic classroom and invite students to study at home</i>
<b>Outputs</b>	<p><i>The expected knowledge for students is summarized as follows:</i></p> <ul style="list-style-type: none"> <li>➤ <i>To understand the important role of business in society (increase in employment, self-employment).</i></li> <li>➤ <i>To understand the distinction of enterprises according to their legal status, their ownership, type of activity and size.</i></li> <li>➤ <i>To name the main departments of a virtual enterprise and describe their work cycle</i></li> </ul>
<b>Methodologies</b>	<i>Flipped classroom</i>
<b>Inspiring practices</b>	
<b>Tools/technologies/materials</b>	<i>Presentations, school's electronic class in moodle (<a href="http://1gympeirath.gr/moodle">http://1gympeirath.gr/moodle</a>)</i>
<b>Sources</b>	

<b>Module</b>	<i>Business web game</i>
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<b>Duration</b>	<i>4 hours</i>
<b>Learning outcomes</b>	<i>Students get to know the decisions that are related with business running</i>
<b>Knowledges</b>	➤ <i>To recognise the decisions executives should take in a company according to their position in the companies organization chart</i>
<b>Technical skills</b>	➤ <i>To list the decisions business executives should take in order to run the business</i> ➤ <i>Use of ICT applications</i>
<b>Soft Skills</b>	➤ <i>Decision making</i>
<b>Prerequisites</b>	<i>Students must be able to use web applications that require registration</i>

<b>Activity</b>	<i>Playing the business web game</i>
<b>Duration</b>	<i>4 hours at school / 2 hours at home</i>
<b>Place</b>	<i>School / Home</i>
<b>Stakeholders involvement</b>	<i>Teachers present the web game to the students.</i>  <i>The students practice the game at home individually and then form groups of three persons and run the game at school</i>
<b>Outputs</b>	<i>Log files from the game execution</i>
<b>Methodologies</b>	<i>Flipped classroom</i>
<b>Inspiring practices</b>	<i>Business games used in business education</i>
<b>Tools/technologies/materials</b>	<i>Business web game</i>
<b>Sources</b>	<i><a href="http://play4guidance.eu/p4g-business-game/">http://play4guidance.eu/p4g-business-game/</a></i>

<b>Phase 2</b>	<i>Specifying the field of each virtual enterprise</i>
<b>Short description</b>	<i>Students present virtual CVs and express their preferences on the field of their ideal virtual company as well as on the position they</i>

	<i>would like to take in the company's organization chart</i>		
<b>Phase Duration</b>	<i>2 weeks</i>	<b>Number of hours</b>	<i>2</i>

<b>Module</b>	<i>Virtual CV presentations</i>
<b>Duration</b>	<i>2 hours</i>
<b>Learning outcomes</b>	<i>Students learn to write a CV and present themselves in audience</i>
<b>Knowledges</b>	➤ <i>To recognise the decisions executives should take in a company according to their position in the companies organization chart</i>
<b>Technical skills</b>	➤ <i>To write a CV</i>
<b>Soft Skills</b>	➤ <i>Self presentation</i> ➤ <i>Address an audience</i>
<b>Prerequisites</b>	<i>Students must be able to use office applications to create documents and presentations</i>

<b>Phase 3</b>	<i>Work groups/role assignment/contribution to the deliverables</i>		
<b>Short description</b>	<i>Assignment of roles to the students, definition of the expected contribution of each student to the final deliverables</i>		
<b>Phase Duration</b>	<i>2 weeks</i>	<b>Number of hours</b>	<i>2</i>

<b>Module</b>	<i>Assignment of roles to students</i>
<b>Duration</b>	<i>2 hours</i>
<b>Learning outcomes</b>	<i>Describe the tasks of each position in a business organization chart</i>
<b>Knowledges</b>	<i>Describe the tasks of each position in a business organization chart</i>
<b>Technical skills</b>	<i>How to make an organization chart</i>
<b>Soft Skills</b>	➤ <i>Show responsibility</i> ➤ <i>Decision making</i>
<b>Prerequisites</b>	<i>Use software to create charts</i>

<b>Phase 4</b>	Enterprise work cycle simulation/Production of deliverables		
<b>Short description</b>	<i>Simulation of the work cycle of each enterprise, Visits of tutors, Production of deliverables</i>		
<b>Phase Duration</b>	<i>12 weeks</i>	<b>Number of hours</b>	<i>12</i>

<b>Module</b>	<i>Naming the company, Definition of the vision/field</i>
<b>Duration</b>	<i>2 hours</i>
<b>Learning outcomes</b>	<i>The students learn to articulate the vision of the company</i>
<b>Knowledges</b>	<i>What is the vision of a company</i>
<b>Technical skills</b>	
<b>Soft Skills</b>	<ul style="list-style-type: none"> <li>➤ <i>Think creatively</i></li> <li>➤ <i>Decision making</i></li> <li>➤ <i>Negotiate</i></li> </ul>
<b>Prerequisites</b>	

<b>Activity</b>	<i>Define the enterprise vision, Name the company</i>
<b>Duration</b>	<i>2 hours</i>
<b>Place</b>	<i>School</i>
<b>Stakeholders involvement</b>	<i>Students</i> <i>Teachers (as facilitators)</i>
<b>Outputs</b>	➤ <i>The companies names and visions</i>
<b>Methodologies</b>	<i>Brainstorming</i>
<b>Inspiring practices</b>	
<b>Tools/technologies/materials</b>	<i>A forum in the school's electronic class in moodle (<a href="http://1gympeirath.gr/moodle">http://1gympeirath.gr/moodle</a>)</i>
<b>Sources</b>	

<b>Module</b>	<i>Development of the business plan</i>
<b>Duration</b>	<i>7 hours</i>
<b>Learning outcomes</b>	<i>To develop a Business plan collaboratively</i>
<b>Knowledges</b>	<i>The contents of a business plan</i>
<b>Technical skills</b>	Business plan development
<b>Soft Skills</b>	<i>Experiential learning: Students' learning is based on hands - on experience.</i>  <i>Cooperation: Students learn with and from others and understand the dynamics of working as part of a team.</i>
<b>Prerequisites</b>	<i>Know what a business plan is and what it should contain</i>

<b>Activity</b>	<i>Students undertake the roles of business executives and work collaboratively to create the business plan</i>
<b>Duration</b>	<i>5 hours</i>
<b>Place</b>	<i>School, Home</i>
<b>Stakeholders involvement</b>	<i>Teachers as facilitators</i>  <i>External tutors</i>  <i>Students of the virtual enterprises</i>  <i>Students of the after school clubs</i>
<b>Outputs</b>	<i>The business plan</i>
<b>Methodologies</b>	<i>Role Playing, Collaborative learning</i>
<b>Inspiring practices</b>	
<b>Tools/technologies/ materials</b>	<i>Presentations, school's electronic class in moodle (<a href="http://1gympeirath.gr/moodle">http://1gympeirath.gr/moodle</a>)</i>
<b>Sources</b>	

<b>Activity</b>	<i>Preparing the visit to the Company</i>
<b>Duration</b>	<i>2 hours</i>
<b>Place</b>	<i>School, Company</i>
<b>Stakeholders involvement</b>	<i>Teachers as facilitators</i> <i>Students of the virtual enterprises</i> <i>Executives of the visited company</i>
<b>Outputs</b>	<i>The interview questions</i> <i>The interview</i>
<b>Methodologies</b>	<i>Metaplan</i>
<b>Inspiring practices</b>	
<b>Tools/technologies/materials</b>	<i>Presentations, school's electronic class in moodle (<a href="http://1gympeirath.gr/moodle">http://1gympeirath.gr/moodle</a>)</i>
<b>Sources</b>	

<b>Module</b>	<i>Development of the web site</i>
<b>Duration</b>	<i>3 hours</i>
<b>Learning outcomes</b>	<i>To develop collaboratively a web site using a Content Management System</i>
<b>Knowledges</b>	<i>What is a Content Management System</i> <i>Which are the roles of users in a Content Management system may</i>
<b>Technical skills</b>	<i>Digital content development (web sites)</i>
<b>Soft Skills</b>	<i>Experiential learning: Students' learning is based on hands - on experience.</i> <i>Cooperation: Students learn with and from others and understand the dynamics of working as part of a team.</i>
<b>Prerequisites</b>	<i>Basic ICT skills</i>

<b>Activity</b>	<i>Students collaboratively develop the business</i>
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	<i>web site</i>
<b>Duration</b>	<i>3 hours</i>
<b>Place</b>	<i>School, Home</i>
<b>Stakeholders involvement</b>	<i>Teachers as facilitators</i> <i>External tutors</i> <i>Students of the virtual enterprises</i>
<b>Outputs</b>	<i>The web sites</i>
<b>Methodologies</b>	<i>Role Playing, Collaborative learning, Laboratory sessions</i>
<b>Inspiring practices</b>	
<b>Tools/technologies/materials</b>	<i>Presentations, school's electronic class in moodle (<a href="http://1gympeirath.gr/moodle">http://1gympeirath.gr/moodle</a>)</i>
<b>Sources</b>	

<b>Phase 5</b>	Discussion and evaluation of deliverables		
<b>Short description</b>	<i>Each group of students presents the deliverables to a plenary session within the living lab. The students of the other group provide feedback.</i>		
<b>Phase Duration</b>	<i>2 weeks</i>	<b>Number of hours</b>	<i>2</i>

<b>Module</b>	<i>Presentation of the products</i>
<b>Duration</b>	<i>2 hours (1 hour for each group)</i>
<b>Learning outcomes</b>	<i>To evaluate deliverables</i> <i>To give feedback</i> <i>To plan action based on feedback received</i>
<b>Knowledges</b>	
<b>Technical skills</b>	
<b>Soft Skills</b>	<i>Present own work</i>

	<p><i>Articulate criticism</i></p> <p><i>Accept criticism</i></p>
<b>Prerequisites</b>	

<b>Phase 6</b>	Presentation of the products to the school community		
<b>Short description</b>	<i>Students revise the deliverables taking into account the feedback provided within the living lab. Final presentation of the products are prepared and presented to the whole school community.</i>		
<b>Phase Duration</b>	<i>2 weeks</i>	<b>Number of hours</b>	<i>2</i>

<b>Module</b>	<i>Refine products, Present final versions to the school community</i>		
<b>Duration</b>	<i>2 hours (1 hour for each group)</i>		
<b>Learning outcomes</b>	<i>Use feedback to refine products</i>		
<b>Knowledges</b>			
<b>Technical skills</b>	Refine products/deliverables producing new versions, taking into account available feedback		
<b>Soft Skills</b>	<p><i>Adress large audience</i></p> <p><i>Attend to detail</i></p>		
<b>Prerequisites</b>	<i>The deliverables and feedback on them should be available</i>		

<b>Phase 7</b>	Evaluation of the living lab experience		
<b>Short description</b>	<i>Tools from the DESCi evaluation toolkit are used to evaluate the living lab</i>		
<b>Phase Duration</b>	<i>2 weeks</i>	<b>Number of hours</b>	<i>2</i>

<b>Module</b>	<i>Evaluation</i>
<b>Duration</b>	<i>2 hours</i>
<b>Learning outcomes</b>	<i>Students get used to the idea that all learning experiences should be evaluated</i>
<b>Knowledges</b>	<i>How to evaluate a learning experience</i>
<b>Technical skills</b>	
<b>Soft Skills</b>	<i>Reflection: Students experience the consequences of their decisions and apply that learning to future challenges.</i>
<b>Prerequisites</b>	<i>Students should be able to fulfill electronic forms</i>