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# LEARNING & CREATIVITY PLAN (L&C PLAN): A CUSTOMIZED E-SHOP

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#### 1. Overview

Title

Driving Question or Topic Ages, Grades, ... Duration, Timeline, Activities Curriculum Alignment Contributors, Partners Abstract - Synopsis

#### A CUSTOMIZED E-SHOP

What i need to know about the costs, revenue and profit in my business?

AGES:15-16 9<sup>th</sup> - 10<sup>th</sup> grade

4 LEARNING HOURS 2\*90 MINUTES 6 ACTIVITIES

Business Costs, Revenue and Profit

Five activities for two learning periods of 90 min (first lesson) include the analysis and the calculation of a firm's profit, the analysis of its costs and how this firm creates and increases its revenue. So, for all these reasons, in the second period of 90 min (second lesson), every group of students designs and creates a customized e-shop, that formulates a real problem. In this way, they understand the mechanism of the market in action.

References, Acknowledgements

- Pearson Edexcel International GCSE (9-1) Economics -First published 2017, author: Rob Jones. ISBN 978-0-435-18864-1 (Student's book). Case Study (Lesson 16): Greenway Construction (activity 1).
- Pearson Edexcel International GCSE (9-1) Economics -First published 2018, author: Clare McCormack. ISBN:978-0-435-19134-4 (Teacher Resource Pack).

#### 2. STEAME Framework\*

Teachers' Cooperation 1st Tea

1st Teacher: Economist

2nd Teacher: Technology Specialist and/or Computer Scientist (the two teachers can work together during the second lesson)

STEAME in Life (SiL)
Organization

A real meeting with executives of a big firm with well-known products and on a call (via teleconference or face to face) and with a businessman whose main activity is organizing and running an e-shop.

**Action Plan Formulation** 

**STAGE I**: Preparation by two teachers [STEPS 1-4], and

**STAGE II**: Action Plan Formulation [Preparation STEPS 1-3]...

Refers to the creation of this Learning Plan, by the two teachers in collaboration.

STAGE II: Action Plan Formulation [Development STEPS 4-14, 16-17]...

Refers to the realization by the students of the six activities of the Learning Plan.

**STAGE II**: Action Plan Formulation [STEPS 15, 18]...

Refers to the evaluation by the teachers [15], and the presentation by the

students of their results [18].

#### 3. Objectives and Methodologies

# Learning Goals and Objectives

By the end of the L&C Plan, students should *define* and *calculate* (in euros):

- total revenue
- total fixed costs
- total variable costs
- total costs
- average total costs
- profit

# Learning Outcomes and expected Results

After the project, learners will be able to investigate the market and become more competitive using new technologies. This procedure develops their critical mind and fosters their curiosity about new markets and about their future as entrepreneurs. Their communicative skills and their ability to collaborate will be enhanced, as they will be obliged to make decisions as partners. The result will be the virtual e-shop with the aid of spreadsheet for billing and pricing the product.

# Prior Knowledge and Prerequisites

Basic knowledge of mathematics and spreadsheet document, global market perception (comparing prices and features)

### Motivation, Methodology, Strategies, Scaffolds

The main methodologies and techniques of the course are based on inquiry-based learning. In this way, students are encouraged to explore the material, prioritize data, ask questions and share ideas. Inquiry-based learning uses different approaches to learning, including small-group discussion and guided learning. Students are involved in designing and conducting their own scientific research after having some queries and case studies. Specifically, students learn by making their own e-business, instead of memorizing facts and material. This allows them to build knowledge through exploration, experience and discussion. In addition, students get the chance to explore economic terms more deeply and learn from their own first-hand experience. Students have the opportunity to investigate a problem and find possible solutions, make comments and questions to test ideas, think creatively and use their intuition.

As they explore this Learning Plan, students build critical thinking and

communication skills. The cognitive skills that students develop can be used to improve comprehension in every subject, as well as in day-to-day life. Last but not least, team working and brainstorming can get the student on the path to success.

#### 4. Preparation and Means

Preparation, Space Setting, *Troubleshooting Tips*  A free design platform of the Internet will be the basic tool and with the use of spreadsheet document, children will make the appropriate calculations for the final pricing of the product. Tablets and laptops in the classroom, will be necessary for students, in order to investigate the market and of course to develop their e-business. According to lesson activities students could work or individually or in groups of 4-5 students or in plenary session.

# Resources, Tools, Material, Attachments, Equipment

- "The logo Game" application:
   apps.apple.com/us/app/logo-game-quiz/id953721694
- Infographic "Fixed vs Variable Costs":
   napkinfinance.com/napkin/fixed-cost-vs-variable-cost
- Calculation of the profit:

news.wtm.com/wp-content/uploads/2016/12/Profit-Feature.jpg

- Kahoot: <u>kahoot.it/</u>
- Template for e-shop: www.umlet.com

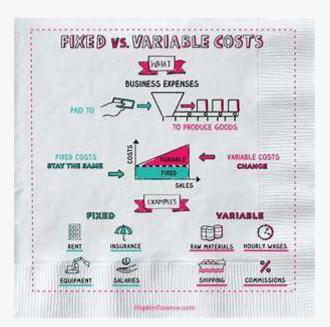
Safety and Health

#### 5. Implementation

Instructional Activities, Procedures, Reflections The plan can be completed in four learning hours, the two first hours with 5 activities related to the understanding and analyzing the billing of a product and the two second hours with one activity, which is the creation of their own e-business.

#### 1. Brainstorming (20 minutes)

First of all, students are divided into groups of 4-5 persons. The teacher gives them a worksheet without explain anything or analyze the economic terms. With the help of the following infographic, children will try to answer the questions.



## 2. Game for finding the well-known logos (5 minutes)

Students play with "The Logo Game" application that shows various images of business logos (or parts of logos) and ask users to identify each business.



#### 3. Playing with quizzes about the six terms (15 minutes)

Students working either individually or in small groups, play a Kahoot quiz-game prepared by the teacher. They try to answer multiple choice questions on the 6 economic terms without being taught it, with what they have understood from the first activity.



#### 4. Definition of the economic terms (30 minutes)

Teacher's presentation and plenary discussion, based on students' findings of the previous activities, defines the terms: costs, average costs, revenues and profit. The correlation with examples from real life is important and helpful. Through calculations and small case studies, students answer 5 multiple choice questions in the end of the presentation.



#### 5. Case study (20 minutes)

In the end of the first lesson, students will summarize their knowledge via the worksheet, as a case study. This case study will help them to organize the data (table) and apply all the terms that they have already learned. The questions, based on the STEAME investigative approach, develop their critical minds.

#### 6. Creation of the e-shop (90 minutes)

Every group of students creates a customized e-shop, where the consumers can choose their outfit (quality, design, color combinations etc.). As far as the application of this concept is concerned, students will separate in groups and every group will choose the style of the outfit (casual/formal) which it wants to produce and promote. We are going to investigate the market, to locate suppliers and learn about similar businesses (competitors)

#### Assessment - Evaluation

- A self-assessment with immediate results, is the Kahoot game (activity 3).
- A group-assessment is the multiple-choice questions and the small case studies in the end of the Teachers' Presentation (activity 4).
- An *evaluation using a rubric with four criteria*, is the worksheet submission (activity 5).

Apart from their ability to perceive and apply the economic terms, we can monitor their collaboration skills, during the above two activities.

# Presentation - Reporting - Sharing

A presentation by each group takes place as an extra activity (an additional 20-minute lesson), analyzing the steps from the billing until the pricing of the product. Students should present all the variables that take into consideration in order to complete the e-shop.

#### Extensions - Other Information

Event - real meeting with executives of a big firm with well-known products and on a call (via teleconference or face to face) and with a businessman whose main activity is organizing and running an e-shop.

## Resources for the development of the STEAME Learning and Creativity Plan Template

# STEAME Prototype/Guide for Learning & Creativity Approach

**Action Plan Formulation** 

Major steps in the STEAME learning approach:

# STAGE I: Preparation by one or more teachers

- 1. Formulating initial thoughts on the thematic sectors/areas to be covered
- 2. Engaging the world of the wider environment / work / business / parents / society / environment/ ethics
- 3. Target Age Group of Students Associating with the Official Curriculum Setting Goals and Objectives
- 4. Organization of the tasks of the parties involved Designation of Coordinator Workplaces etc.

# STAGE II: Action Plan Formulation (Steps 1-18)

#### **Preparation (by teachers)**

- 1. Relation to the Real World Reflection
- 2. Incentive Motivation
- 3. Formulation of a problem (possibly in stages or phases) resulting from the above

#### <u>Development (by students) – Guidance & Evaluation (in 9-11, by teachers)</u>

- 4. Background Creation Search / Gather Information
- 5. Simplify the issue Configure the problem with a limited number of requirements
- 6. Case Making Designing identifying materials for building / development / creation
- 7. Construction Workflow Implementation of projects
- 8. Observation-Experimentation Initial Conclusions
- 9. Documentation Searching Thematic Areas (STEAME fields) related to the subject under study Explanation based on Existing Theories and / or Empirical Results
- 10. Gathering of results / information based on points 7, 8, 9
- 11. First group presentation by students

### <u>Configuration & Results (by students) – Guidance & Evaluation (by teachers)</u>

- 12. Configure mathematics or other STEAME models to describe / represent / illustrate the results
- 13. Studying the results in 9 and drawing conclusions, using 12
- 14. Applications in Everyday Life Suggestions for Developing 9 (Entrepreneurship SIL Days)

#### Review (by teachers)

15. Review the problem and review it under more demanding conditions

### <u>Project Completion (by students) – Guidance& Evaluation (by teachers)</u>

- 16. Repeat steps 5 through 11 with additional or new requirements as formulated in 15
- 17. Investigation Case Studies Expansion New Theories Testing New Conclusions
- 18. Presentation of Conclusions Communication Tactics.

# STAGE III: STEAME Actions and Cooperation in Creative Projects for school students

Title of STEAME Project : _		
Brief Description/Outline of	f Organizational Arrangements /	Responsibilities for Action

STAGE	Activities/Steps	Activities /Steps	Activities /Steps
	Teacher 1(T1)	By Students	Teacher 2 (T2)
	Cooperation with T2	Age Group:	Cooperation with T1 and
	and student guidance		student guidance
Α	Preparation of steps 1,2,3		Cooperation in step 3
В	Guidance in step 9	4,5,6,7,8,9,10	Support guidance in step 9
С	Creative Evaluation	11	Creative Evaluation
D	Guidance	12	Guidance
E	Guidance	13 (9+12)	Guidance
F	Organization (SIL)	14	Organization (SIL)
	STEAME in Life	Meeting with Business	STEAME in Life
		representatives	
G	Preparation of step 15		Cooperation in step 15
Н	Guidance	16 (repetition 5-11)	Support Guidance
1	Guidance	17	Support Guidance
K	Creative Evaluation	18	Creative Evaluation