Cap sur l'école inclusive en Europe

## Pedagogical Sheet <br> "Agora Varvakios (At Athens' Market Halls): a pedagogical approach for inclusive classes based on Universal Design for Learning (UDL)"

Section of the module / D

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It is a non-formal educational methodology, based on the active participation of students, experimented from the theoretical angle of the Universal Design of Learning (UDL) which is a theoretical approach to teaching and learning making the inclusion of everyone easier.

The goal of our action is manifold. On the one hand, the visit to the Market Halls of Athens enables us (a) to learn food groups, and (b) to discover the methods of conservation and preparation of dishes, and, on the other hand, this visit will enable (c) to review simple mathematical operations.

## General definition / Brief description of the content

We are proposing a visit to Athens Central Market, which will culminate in the purchase of food products that will be cooked by pupils for a meal.
A. As regards knowledge

Pupils must:
In mathematics:

1. Name numbers by recognizing their symbolic writing
2. Differentiate the value of numbers according to their position
3. Recognize the basic characteristics of the decimal numbering system and be able to round numbers if necessary.
4. Compare and be able to put natural numbers in order
5. Control results through mental operations
6. Perform the four basic operations with ease
7. Be able to use a tablet or cell phone or calculator to check their results

In nutrition, biology and social and family economy

1. Recognize and describe food stuffs
2. Classify food stuffs by group
(Group I: Dairy Products, Group II: Meat, Fish, Egg, Pulses, Group III: Fatty Substances, Group IV: Cereals and Derivatives, Starchy Foods, Potatoes, Group V: Fresh Fruits and Vegetables, Group VI: Sugar and sweet products, Group VII: Drinks)
3. Identify food groups and their characteristic constituents
4. Know the nutritional intake of food stuffs by group
5. Know how to feed oneself and to balance one's diet
6. Be able to select a variety of foods for a meal
7. Know how to prepare and preserve food stuffs
B. As concerns the learning process
8. Practice on perception, identification and memorization skills concerning numbers
9. Develop perception, identification and memorization skills concerning food
10. Develop critical and creative thinking leading to sure conclusions
11. Acquire communication skills through dialogue and argumentation.
12. Be able to argue about the nutritional value of foods
13. Be able to compare prices and find the best solution
14. Develop the ability to work in groups and use knowledge and skills to achieve collective goals
C. On the emotional level
15. Have fun in class
16. Get along among the group

## Use / Fields of application

- Pupils of primary school and junior high school (9-14 years old)
- Number of pupils per class: 15-25
- Knowledge areas/fields: Language, Mathematics, Nutrition, Biology, Social and Family Economics
- Estimated course duration: 3 hours of teaching


## Principles and theoretical foundations / Methodology

To achieve this, we need a combination of pedagogical methods, based on the collaborative approach, learning through discovery, prioritization and discussion. A great support for us is the UDL which, as our theoretical framework, is meant to be inclusive from the start, because it promotes a variety of
pedagogical practices aimed at the success of everyone despite one's differences. According to UDL, everyone learns in a different way, which involves differentiated teaching practices on the part of the teacher in order to reach all types of pupils. The three axes of the UDL are: (a) WHAT (achievements): perceptions, languages, comprehension, 2) HOW (methods): action, expression, realization, 3) WHY (emotional) : interest, effort, self-regulation.

## Bibliography



 Gymnasium. Livret A. Plans d'enseignement et matériel de soutien pour les élèves ayant des difficultés d'apprentissage.] АӨńva: ҮПЕПӨ - П.І.

http://www.capres.ca/dossiers/la-conception-universelle-de-lapprentissage-cua/

## Tools

- Tablet computers
- For disabled people, the equipment required to move around. If there are people with serious problems, the assistant must be present.


## PROPOSED ACTIVITIES

## I. Conduct

## Phase $n^{\circ} 1$ : Exploration

Goal: The pupils visit the big market (Athens' Market Halls) in mixed teams, to recognize food stuffs and the group to which they belong, their modes of conservation, to review calculations and the simple mathematical operations. They have a budget to make purchases so that they go back to school or at a gastronomy museum to cook in a second time.

## Procedure:

A.

- Pupils are split into five (5) groups
- Each group has its secretary, coordinator, representative, cashier and members
- Each group has a tablet computer.
B.
- Teams have a sum of money to make purchases to cook afterwards.
- Each group has a recipe: they must decide what they want to buy based on their recipe and the money they have.


## Phase n²: Deepening

Goal: The teams visit the market while deepening the goals of phase one and cultivating critical thinking and team spirit.

## Procedure:

- Recipes are differentiated according to the capacities of the groups, by having three levels of recipes: an easy recipe, a recipe with medium difficulty and a complicated recipe. The combination of all recipes can make a menu. Appetizers, salads or dessert can be simple recipes, dishes, medium-difficulty or complicated recipes. In this way, the work of the pupils is differentiated without making them feel disadvantaged.
- By team, exercises are also distributed to rank food stuffs they see at the Market Halls in the corresponding food groups. The exercises are also differentiated according to the needs of the team pupils. Note: Teachers need to know what food stuffs are sold at the market to prepare the exercises, presented on a piece of paper or on the tablet computer.
- The same is done to make pupils aware of how food is stored.
- Teams are "flexible" and a pupil can start with an easy recipe and later on, if he / she gets tired quickly, he / she can go help the team cook the dish too.
- Teams must buy the necessary food, checking the price figures, comparing their values, counting and doing mental operations. One of the pupils in the group checks results using the tablet computer / calculator / laptop.


## Phase n³ : Consolidation

Goal: Teams evaluate their purchases and present them to the other teams.
Procedure: by team and in plenary,

## A. (by team)

Goal: pupils verify that they have bought everything they need by saving money at the same time.
B. (in plenary)

Goal: pupils are able to justify their purchases and to argue about them

## Phase $n^{\circ} 4$ : Assessment

Goal: Review and assessment of the action.
Semi-directional plenary debate.

## Indicative questions:

- What did you like about this activity in the market halls of our city?
- How did you decide on what was not good for you? Or on what was not necessary?
- Was it easy for you to find good quality food at low prices?
- Was it difficult to make decisions? How did you make your decisions?
- Have there been disagreements within the team about food stuffs you would not buy? How did you solve your differences?
- If you repeat this activity for a second time, would you make the same choices?


## Examples of exercises used:

https://macrisocialsciences.blogspot.gr/2017/11/blog-post.html (naming food stuffs)
https://macrisocialsciences.blogspot.gr/2016/02/blog-post 62.html (dairy products)
https://macrisocialsciences.blogspot.gr/2016/02/blog-post 26.html (dairy products) https://macrisocialsciences.blogspot.gr/2016/01/blog-post.html (fruit or vegetables) https://macrisocialsciences.blogspot.gr/2015/11/blog-post 19.html (Foods of nutritional or nonnutritional value).
https://macrisocialsciences.blogspot.gr/2015/11/blog-post 55.html (Autumn food) https://macrisocialsciences.blogspot.gr/2015/11/blog-post 18.html (putting together food stuffs from the same food group).
https://macrisocialsciences.blogspot.gr/2015/11/blog-post 92.html (learning about food groups). https://macrisocialsciences.blogspot.gr/2015/11/blog-post 1.html (crosswords about food groups).

