

E.E.E.E.K Xanthis

**Education with the contribution of I.C.T. in Agriculture
Food & Environment laboratory.**

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The school name is E.E.E.E.K. (Laboratory Specific Professional Education & Training). It founded and has been operating since 2002. It belongs to the Upper Secondary Vocational Education is the only School of Special Education in the city. Located in Genissea, at 10km distance from the city of Xanthi and is co-located with the high school (secondary general education school).



Studies last six years. Students with enrollment in the first class choose the workshop that will follow. For the school year 2016-2017, 47 students have enrolled, with disabilities and special educational needs (autism, down syndrome, mental retardation, multiple disabilities) in 10 sections.



On equipped classrooms taught courses:

Greek language

development handling capacity of written and spoken language and communication development.



Mathematics

practical skills arising from the application of mathematics in everyday life.



IT/Computer

use for searching, updating
and processing information.



Music

develop understanding and
enjoyment of music, release
creative capacity.



Aesthetic education

culture personal aesthetic
expression as creator and
viewer.



Social & professional education

develop knowledge, skills and
positive attitudes for the
individual and society.



Physical education

developing movement skills,
physical ability cultivation
and better health.



Laboratory of pottery, ceramics

knowledge, understanding
and conquest of the ancient
art of ceramics, creating
contemporary artists.



The laboratory of agricultural

food and environmental

development capabilities and skills for understanding and knowledge of the harmonious relationship between man and nature and the interaction with the ecosystem.



The last class (6th) acts as professional qualifications in order to the students to develop skills and their familiarity with the working environment. The internship takes place in a public and private companies, with the support of the School.

Students in their graduating receive degree (Level 2a) with professional rights.



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In parallel with the curriculum, environmental and Health education programs, as well as Career and Culture programs are implemented.



Within educational visits EEC (Environmental Education Centers) conducted activities for more knowledge of students.



Cooperation with special and general education schools, primary and secondary schools in activities involving mixed groups of students.



Participation of school and students awards from *Special Olympics*.



Join a seasonal festive bazaars and contact of students with the local community offering their creations.



Cultural events with participation of special education schools from nearby cities.



The course of the Agriculture, Food and Environment using ICT (Information & Communication Technology).

The Agriculture Laboratory, Food and Environment have chosen about 2/3 of students. For the laboratory needs a greenhouse available, garden and two classrooms with equipment. At the same time used the hall of the IT laboratory and the class with the interactive whiteboard.



The lesson in the laboratory of Agriculture Food and Environment is mainly laboratory and done with experiential methods. The use of ICT complements the knowledge received by students and serves as a parallel axis to the understanding and learning of each object.



The lesson is in all practical-theoretical-experiential and takes place mainly in the laboratories of Agriculture and Computer with internet connectivity. The teachings are implemented with large and small, individual and group projects.




It has been observed that with the ICT in teaching cultivated team spirit of cooperation, the most "powerful" student helps the "weak" classmate. Learning gets more interesting and better achieve the objectives when teaching is group cooperation in the game form.



The ICT seen as a key tool for the educational support of people with Special Educational Needs (SEN). The ICT give people with SEN autonomy to succeed in school and in society. Also supports the efforts of the students for understanding and improving the school climate.



The ICT contribute to:

- Motivation for learning
 - Concentration of attention in this work
 - Work Rate depending on options
 - Possibilities for more practice
 - Increased enthusiasm and interest
 - Development of social and personal skills
 - Less notes in class
 - Increase self-confidence
- 

Application of ICT in the laboratory:

Firstly: The ICT applied at the beginning of each section in order for students to have a first contact with the object under study.

At the same time: Contributes at the same time with the experiential and practical training of students to make learning easier and feedback.


Finally: It takes place at the end of each course, as a diagnostic evaluation instrument of understanding of the course material

Through ICT students opportunities are provided for active participation in learning. Students show everything they have learned, they feel competent and effective learners, develop and most importantly, they are given the opportunity to express all the skills that are not highlighted in the traditional classroom.



Compatibility with the curriculum

The course at the Agricultural Laboratory, Food and Environment gives the right to education to deal with a wide range of issues depending on the disabilities of students and work with books from various levels of education. Their intellectual level is the main factor that determines how extensively will deal with the teacher that you will stay in simply practical matters or to deepen the subject on a scientific basis. The selection of information must be done with great care so as not to tire the students.



The software used is small to moderate difficulty.

Also, the students, in groups or individually, working on exercises - worksheets using PC / interactive whiteboard and office (word). These exercises created by teachers for specific subject studying students and adapt the capabilities and features.

Φυλλάδιο «Χημική φυτοπροστασία»:

Διαβάζουμε τις Ερωτήσεις που είναι στα αριστερά, μετά βλέπουμε με προσοχή τις Εικόνες και γράφουμε τις λέξεις που λείπουν στις Απαντήσεις στα δεξιά. Στο τέλος διαβάζουμε μόνο τις Απαντήσεις.

Ερωτήσεις	Απαντήσεις
Τι είναι η χημική φυτοπροστασία;	Χημική φυτοπροστασία έχουμε όταν χρησιμοποιούμε γεωργικά φάρμακα (φυτοφάρμακα) για να καταπολεμήσουμε τα ζιζάνια, τους εχθρούς και τις ασθένειες των φυτών.
Τα φυτοφάρμακα τα αγοράζουμε από ειδικά καταστήματα και ενώσεις αγροτικών συνεταιριστών ή από οπουδήποτε;	Τα τα αγοράζουμε από
Τα φυτοφάρμακα είναι σε συσκευασίες ή χύμα και τα αγοράζουμε με το κιλό;	Είναι σε

Last but not least, students work exercises available on the Ministry of Education website. (Digital school, e-books & fotodentro).

Note that for the school (E.E.E.E.K) there are no specific books and programs. Selected material from all levels of education and training to adapt to the demands and needs of students. Also used material produced by teachers themselves.



ICT in our school are:

1. Computers
2. Interactive whiteboard
3. Software
4. Projector
5. Printer
6. Camera




Example

Course: Laboratory of Agriculture, Food & Environment

Course title: Parts of plants - Aromatic plants

Class: 3rd class of EEEEEK Genisea

Totally 8 students are being studying at the 3rd grade who suffer from mental retardation, syndrome of Down, IHL and mobility problems. Their speech is considered to adequate. All the students have achieved good communication skills. While, some of students are bilingual due to the multiculturalism of the region.



Groups: The students have been working in groups of two and three persons. The groups are mixed regarding their abilities and possibilities of each student, so they can complete each other and help and lure one another into conquering the goal.




ORGANIZATION OF TEACHING AND REQUIRED TECHNICAL INFRASTRUCTURE.


Structure of Teaching :

1st Teaching Part

Initially, the teaching of this section will be conducted on a theoretical level, inside the classroom with the help of technology (e-books, software, video-projector).



Teaching goals:

- 1) To be able to recognise the parts of the plant.
 - 2) To become familiar with the software's environment and getting to know the working screen.
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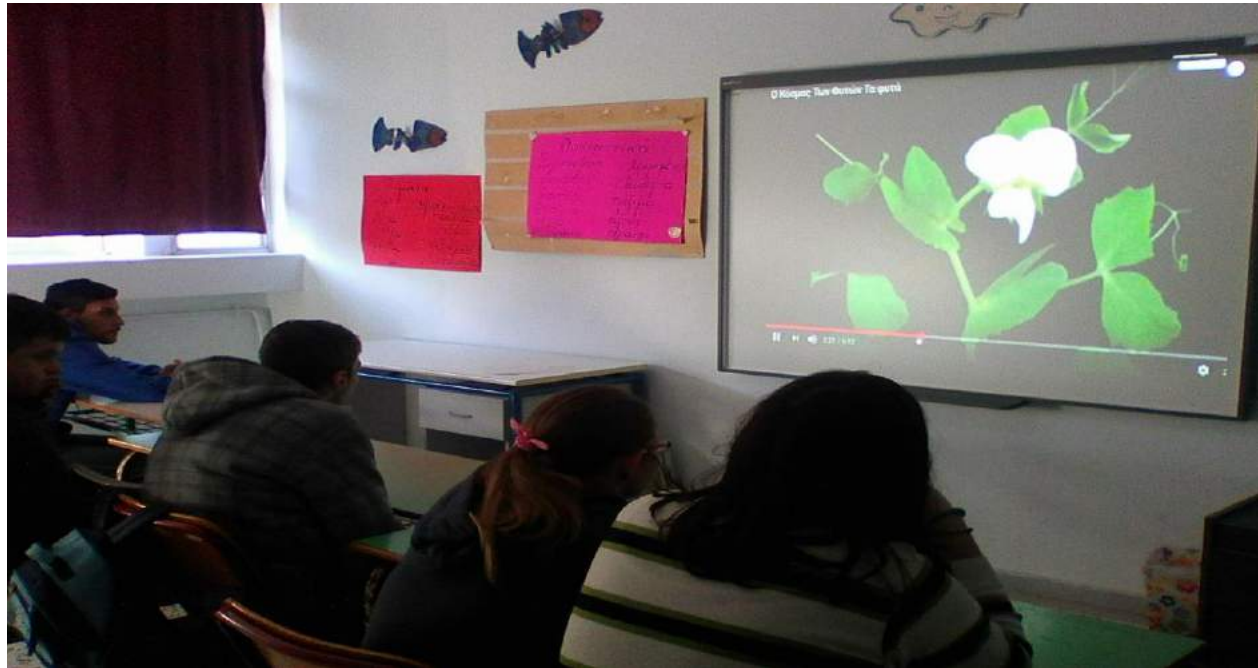
Activity

The activity mostly refers to the presentation of the software and the use of the basic operating principles. Since it is a new activity for the students, the teacher mentions and demonstrates the functions and the features of the software to them and asks them to execute the application, so he can be able to stimulate their interest.

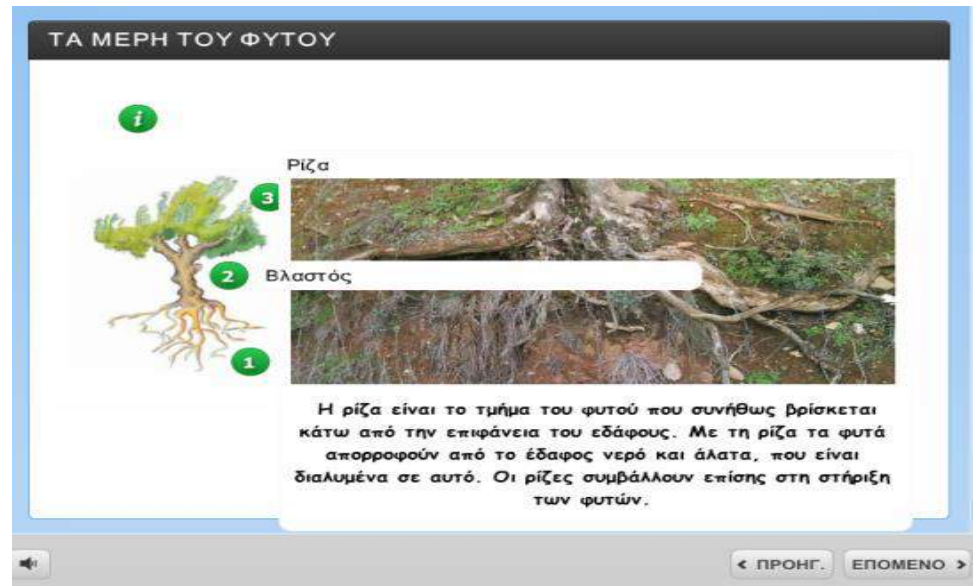
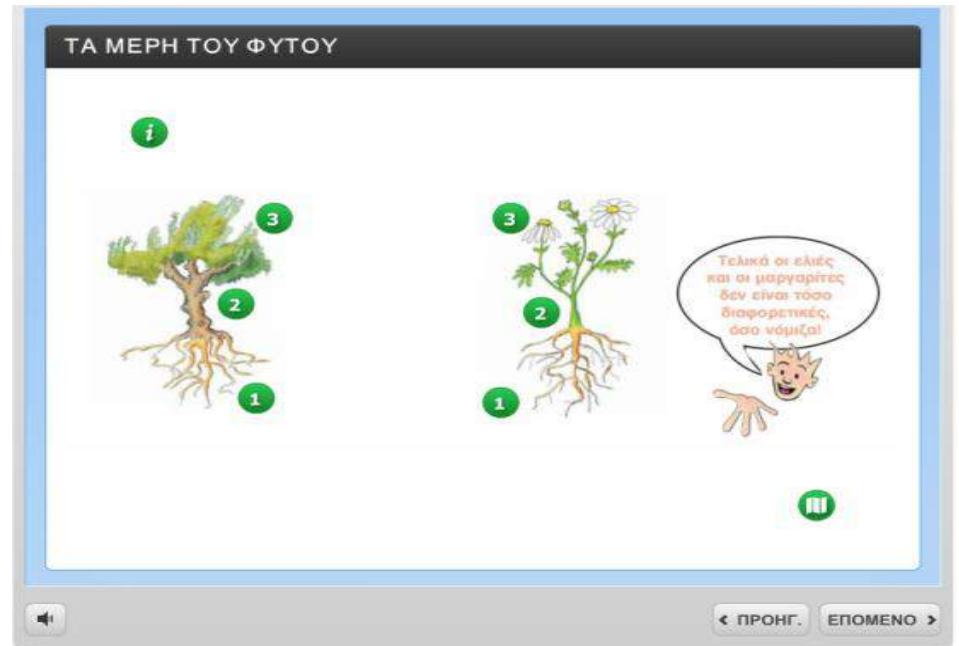
The students, come into contact with the theoretical part of the teaching subject, through the software and the webpage of the Ministry of Education with e-books, students, so they can understand and learn the parts of the plant.



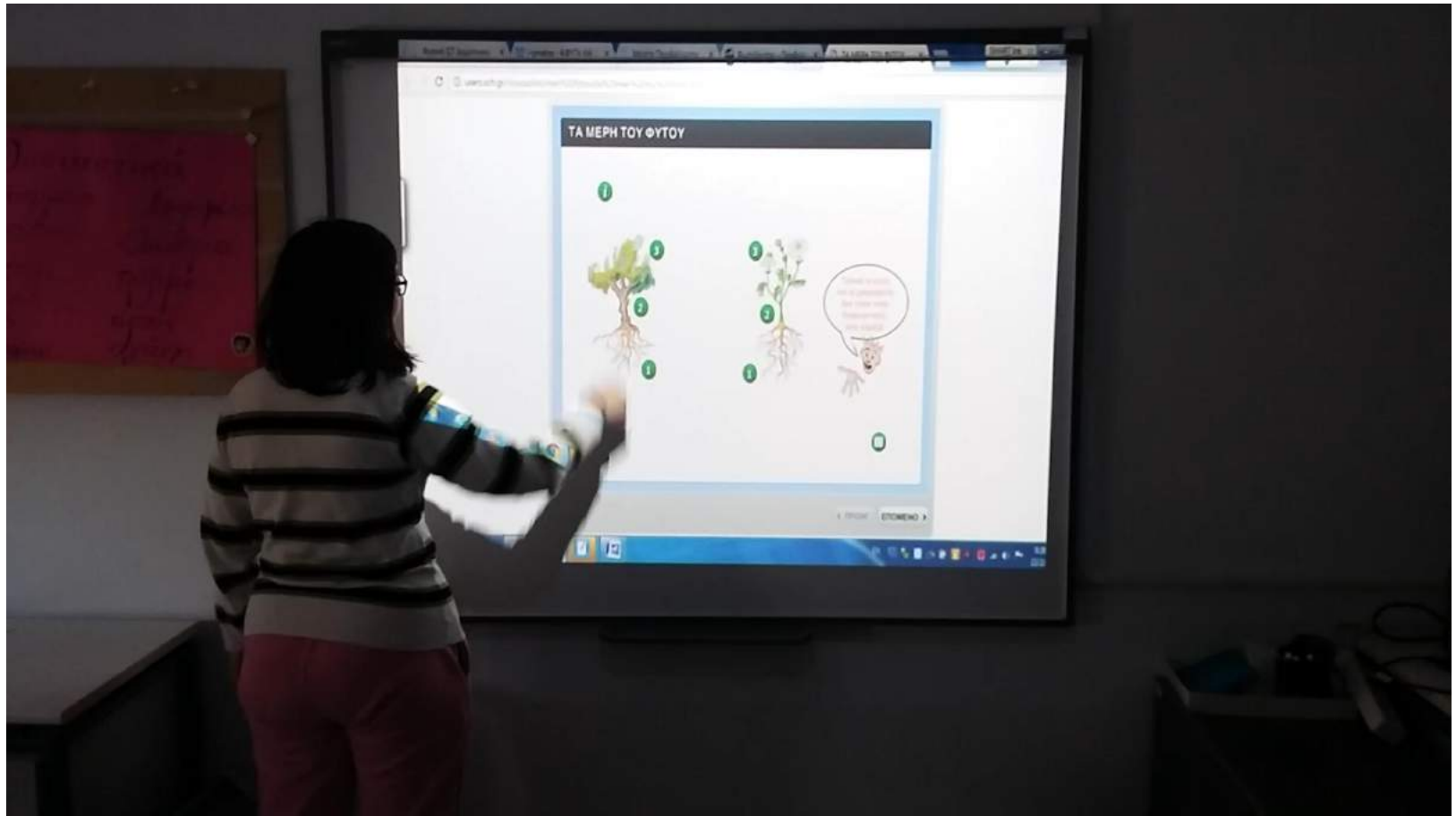
By monitoring on the video projector, the students can gather information about the parts of the plant



The students use software, by clicking on the icons which display images of parts of the plant along with the audio information for each.



Video of students executing the exercise on interactive whiteboard



Afterwards, the students together with the teacher answer the questions concerning the morphology of the plant.

Κεφάλαιο 3 Ο βλαστός, τα φύλλα και οι ρίζες των φυτών

- Πώς στηρίζεται ένα φυτό.
- Τι χρειάζονται τα φύλλα του.
- Πώς φτάνει το νερό από το χώμα σε όλο το φυτό.

1

Στις εικόνες είναι ζωγραφισμένα τα μέρη δύο φυτών. Εγώ, σαν καλός κηπουρός, γνωρίζω πολύ καλά τα φυτά μου! Εσείς, όμως, θα τα δείτε αλόκληρα, αν ενώσετε με γραμμές τα μέρη τους.

Μενού Πλοήγησης



They view the images and match the correct answer.

Ενώνουμε τα μέρη των δύο φυτών

A B Γ

Δ E Z



The students fill in the missing words.

2



Ονομάζουμε τα μέρη του φυτού στις επικέτες και τα χρωματίζουμε.

Μενού Πλατίνια

Finally, everyone involved in the activity related to the morphology of the parts of the plants (leaves, branches, and roots).

4



Θα χρειαστούμε: φύλλα, βλαστούς και ρίζες φυτών, δύο κλαδιά διαφορετικών φυτών, π.χ. ένα κλαδί δάφνης και ένα κλαδί πεύκου, ένα φυτό φασολιάς, ένα μεγεθυντικό φακό και μια μετροταινία.

- ✓ Με ένα μεγεθυντικό φακό εξετάζουμε τη ρίζα, το βλαστό και τα φύλλα του φυτού της φασολιάς. Γράφουμε τις παρατηρήσεις μας στο σημειωματάριό μας.
- ✓ Επιλέγουμε δύο κλαδιά από διαφορετικά φυτά. Συμπληρώνουμε τον πίνακα 1 για το ένα φυτό. Κατασκευάζουμε στο σημειωματάριό μας έναν όμοιο πίνακα και κάνουμε το ίδιο και για το δεύτερο φυτό που επιλέξαμε.

ΠΙΝΑΚΑΣ 1

ΦΥΤΟ	
φύλλο	βλαστός
1. Χρώμα στο πάνω μέρος	1. Χρώμα
2. Χρώμα στο κάτω μέρος	2. Λείος ή όχι
3. Με τι μοιάζει το σχήμα του	3. Σπάει εύκολα ή λυγίζει
4. Μήκος του φύλλου σε εκατοστά	4. Πάχος σε εκατοστά
5. Πλάτος του φύλλου σε εκατοστά	

✓ Μελέτημα και συζήτηση ανά δυά που συμπληρώσαμε στους δύο πίνακες


With a magnifying glass
and microscope study
and record their
observations.



2nd Teaching part

In the following section, experimental learning takes place on the herb garden and the greenhouse of the school, together along with the use of I.C.T. in order to provide to the students with the appropriate learning and feedback.

Teaching goals:

1. To transplant herbs into pots and also into the soil.
 2. To be able to recognize the herbs that grow in herb garden.
 3. To search and retrieve information from the internet on herbs.
- 

Activity

The students identify the plants while they transplant young plants from seeds into pots, which were reproduced in the lab from themselves. The transplanting is conducted when the students are able to count the young plants with 4 to 5 leaves.



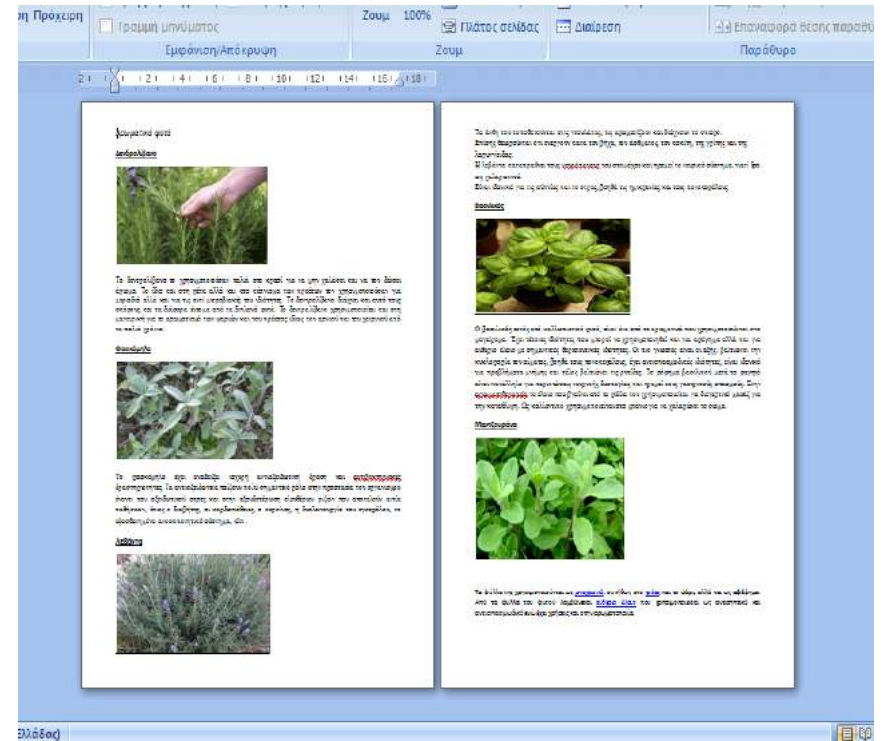
- ▶ Recognize and transplant the herb garden, mature plants like laurel, lavender, thyme . By transplanting place the plant in such a depth as to occupy the root system and a portion of the stem.



- ▶ On mature plants of the herb garden cut plant stems (cuttings) and put them in the mist in the greenhouse in order to produce new plants.



The students are searching images from aromatic plants, through the internet so they can detect the same plants that they cultivated to herb garden and afterwards they create the own folder in their PC .



The students register below the images some characteristics of the specific plants that they find from on the reliable sources internet.


In order to create their own material and in print, at the end the lesson the students are asked to use the printer and print the section that were taught.



3rd Teaching Part

Finally, in this stage the teaching is carried out in the PC auditorium with the use of the interactive whiteboard that performs various exercises in order to evaluate the performance of the students.

Teaching goals:

1. The students to comprehend and solve specific exercises from the interactive table.
 2. The students to understand that the leaves as well as the flowers of aromatic plants from our herb garden have various uses.
- 

Activity

- ▶ This activity is conducted in order to evaluate the student's assessment in relation to the subject.
- ▶ Creation exercises via the office software

The students work on the interactive whiteboard. The first exercise includes filling gaps with words, in which the students read the text associated with herbs and fill the blanks with the words that they are on the right side.

Φύλλο εργασίας - 25

Ενότητα: Αρωματικά φυτά και βότανα

Άσκηση: Διάβασε το κείμενο και συμπλήρωσε τα κενά με τις λέξεις που είναι στα δεξιά.

Τα [red box] περιέχουν αιθέρια αρωματικά φυτά έλαια και έτσι έχουν ένα ιδιαίτερο άρωμα.

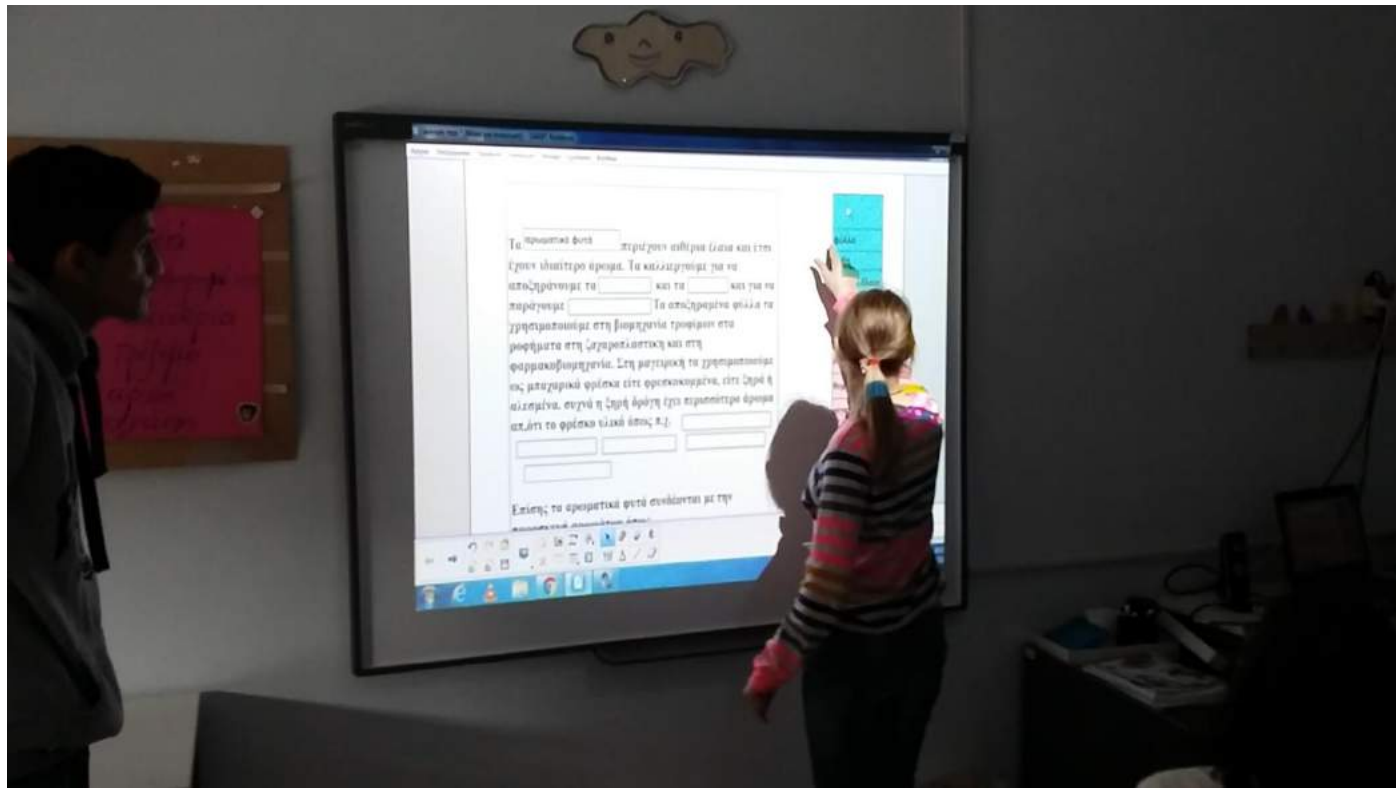
Τα καλλιεργούμε για να αποξηράνουμε τα [red box] φύλλα και τα [red box] (δρόγες) και για να παράγουμε άνθη αιθέρια έλαια

[red box]

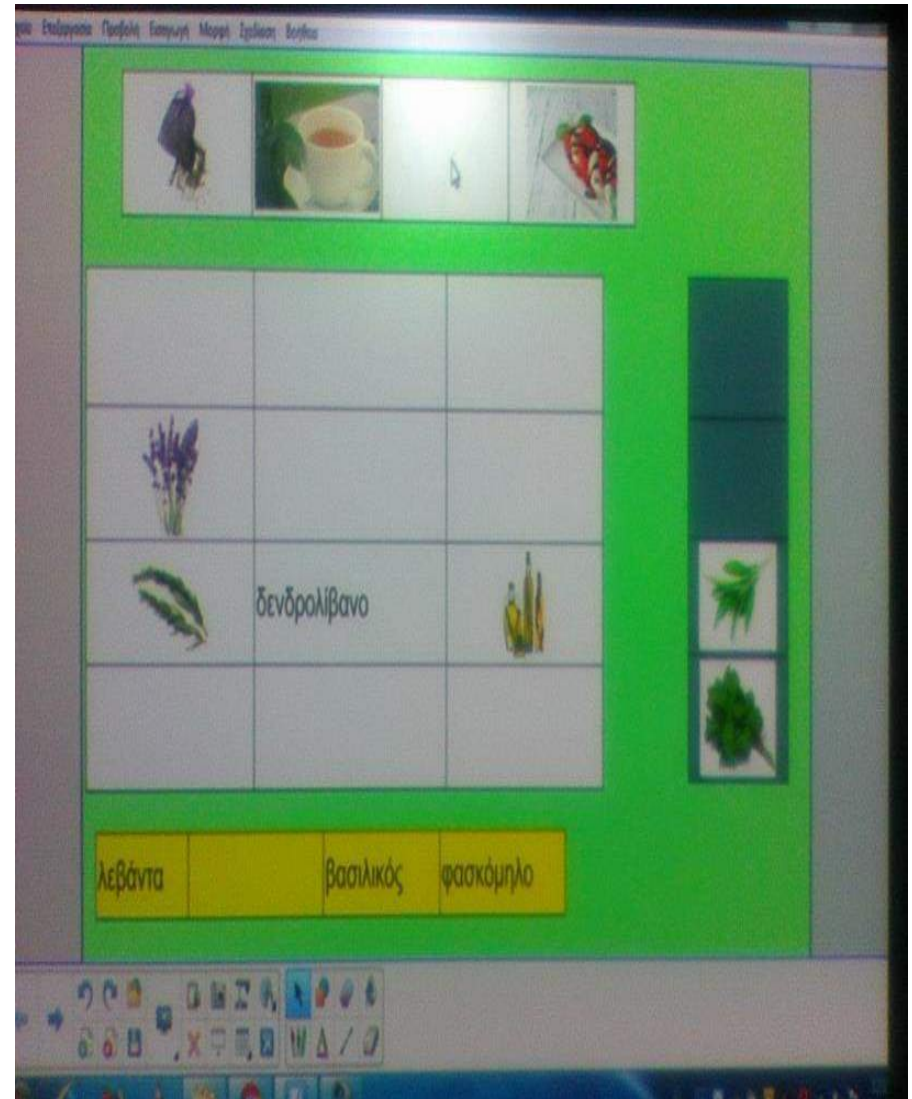
Τα αποξηραμένα φύλλα τα χρησιμοποιούμε στα αρωματικά φυτά, στην βιομηχανία τροφίμων και ποτών, στην κωνσερβοποιία, στη ζαχαροπλαστική και στη φαρμακοβιομηχανία. Στη μαγειρική τα χρησιμοποιούμε

ηγκά (Ελλάδα)

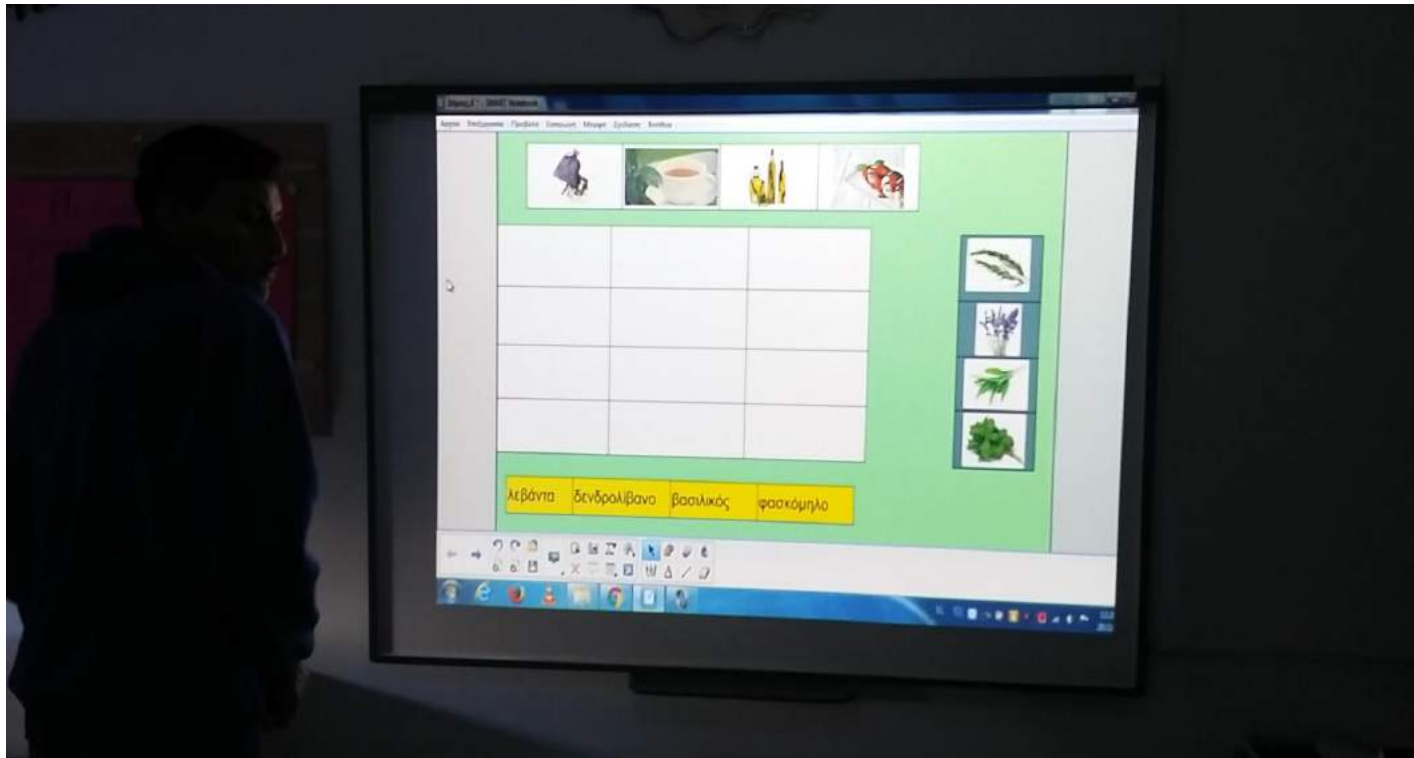
Video of students executing the exercise on interactive whiteboard



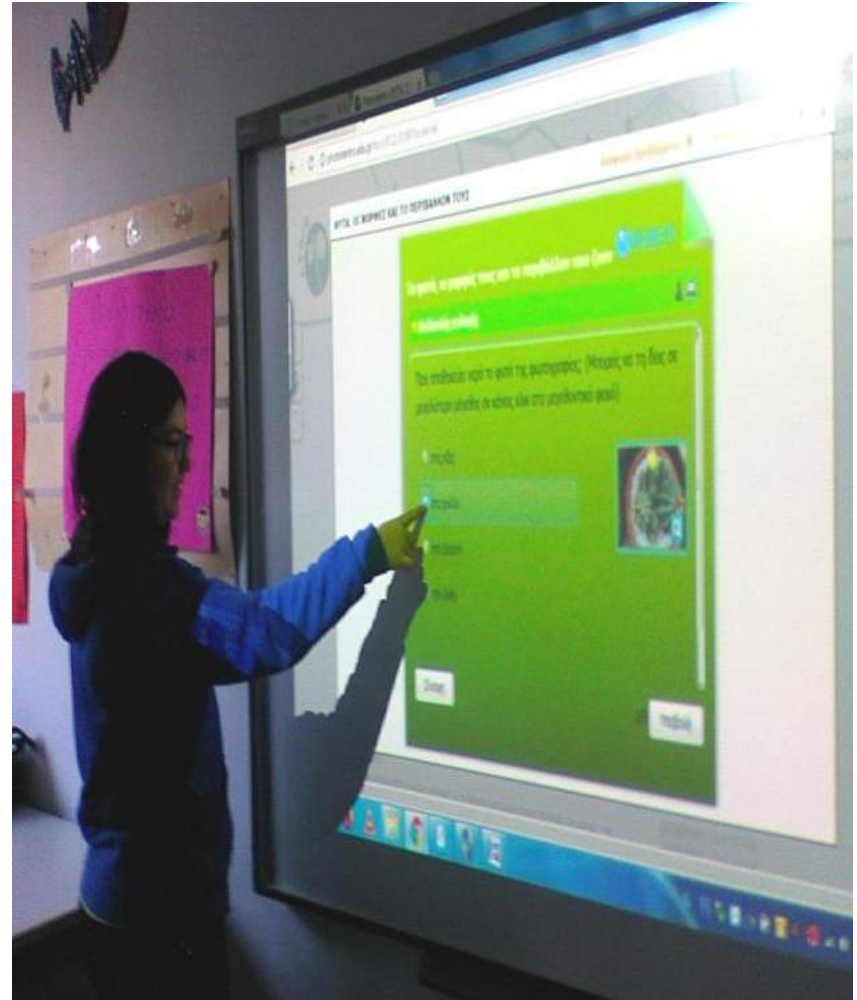
The second exercise contains pictures and name words. The students move the images and the words to central table, by identifying the aromatic plants (from group of pictures to the right side) and match them with their names (of the group of words at the bottom side) and their use (from group of images at the top side).



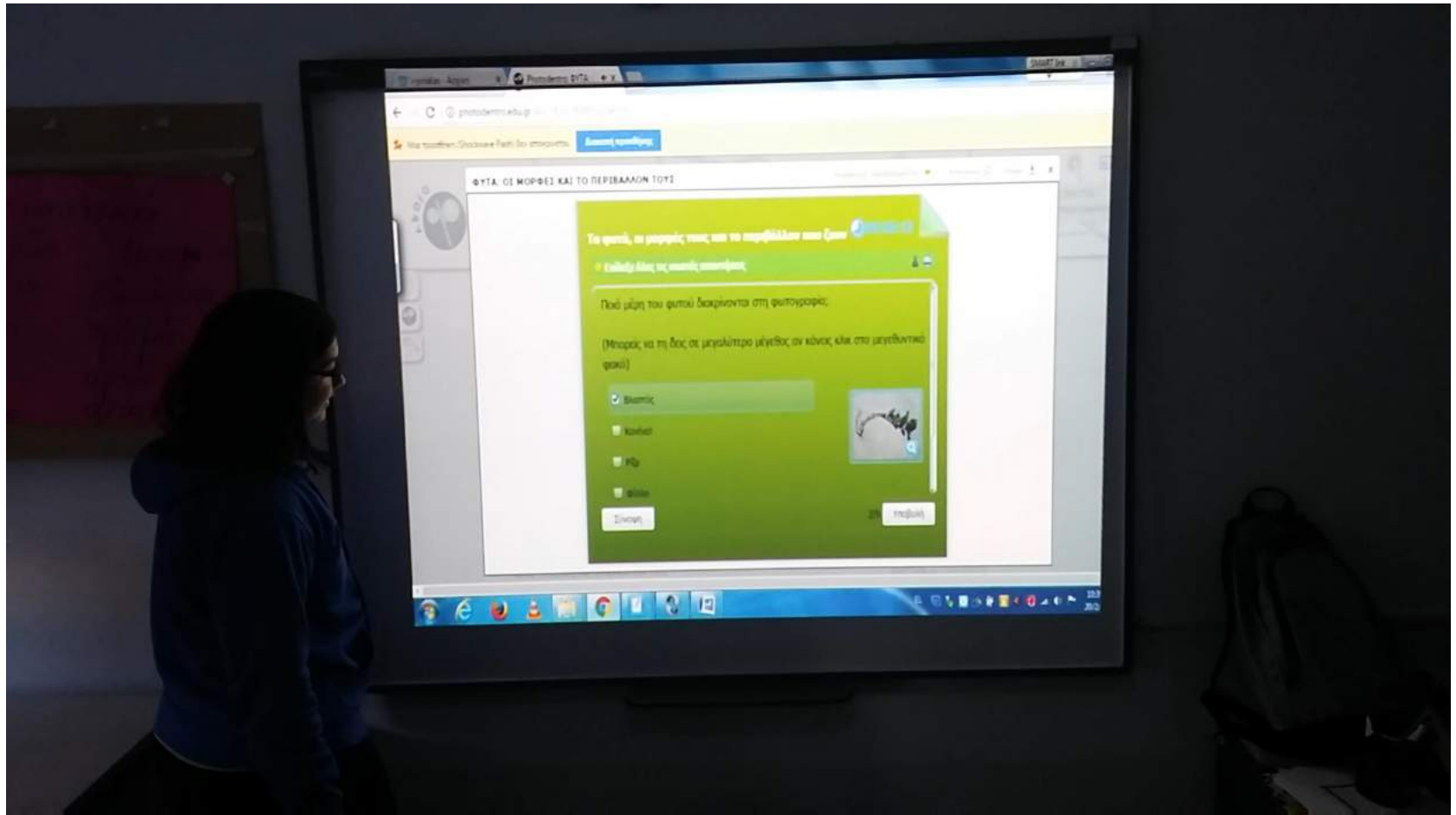
Video of students executing the exercise on interactive whiteboard



At the end, the students participate in the evaluation exercise with closed-ended questions (wrong or right) on plant morphology by using the software.



Video of students executing the exercise on interactive whiteboard



We are online !!!

- eek.xan.sch.gr (official webpage of school)
- <https://el-gr.facebook.com/EEEEK-Ξάνθης-482222118572847/> (Facebook page)

Thanks for your attention !!

