



Co-funded by the
Erasmus+ Programme
of the European Union



TELMS

Technology Enhanced Learning
Mentoring Support



TELMS @ Malignani College

TELMS Mentoring Process in Italy

CHRONO-DIARY

Output O1 - **Mentoring Programme** (Task 1 – 2 - 3) is going to complete:

- ✓ suitable **classes and topics in STEM area** for the pilot programme
- ✓ **more of 20 VET learners** for the assessment and evaluation of materials
- ✓ **ILT Pedagogy Mentoring Programme:**
 - ✓ **Mentor Federica** did demo lessons and team teach with Mentees
 - ✓ **Mentor Luciano** did demo lessons with both Mentees
 - ✓ Mentees are now working with their team teach lessons
- ✓ Mentors are **well advanced** with their development
- ✓ We think **O1 – T3** will be completed by the **first week of December 2017**

CHRONO-DIARY

Dissemination project outcomes:

- TELMS was presented in detail in **8 courses** for teachers on “Digital Innovation” (about 150 teachers from our area - September 2017)
- **web page** dedicated <http://www.malignani.ud.it/offerta-formativa/telms>
- **presentations, leaflets and a rollup** for “Malignani open days” (about 2000 people – December 2017/January 2018)
- **school meeting** open to all teachers of the school - planned for 2018
- **meeting** open to all teachers of the City and the local area - planned for spring 2018

DIGITAL TOOLS FOR TEACHING

- Nearpod
- Office365
- Padlet
- Kahoot
- LearningApps
- Moodle

only for a scaffolding of chronological activity and for sharing results and lessons performed

<http://moodle2.malignani.ud.it/moodle/course/view.php?id=393>

CLASSROOM SETTING

- ICT Labs
- Inadequate number of labs --> BYOD

Let's go inside the LAB!

<https://animoto.com/play/BZq6RcMK4YH5BCGkWPrUuw>

Mentees:

- **Maria Fontana**
 - **Silvia Liani**
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Mentor: Federica Tabacco

CONTEXT

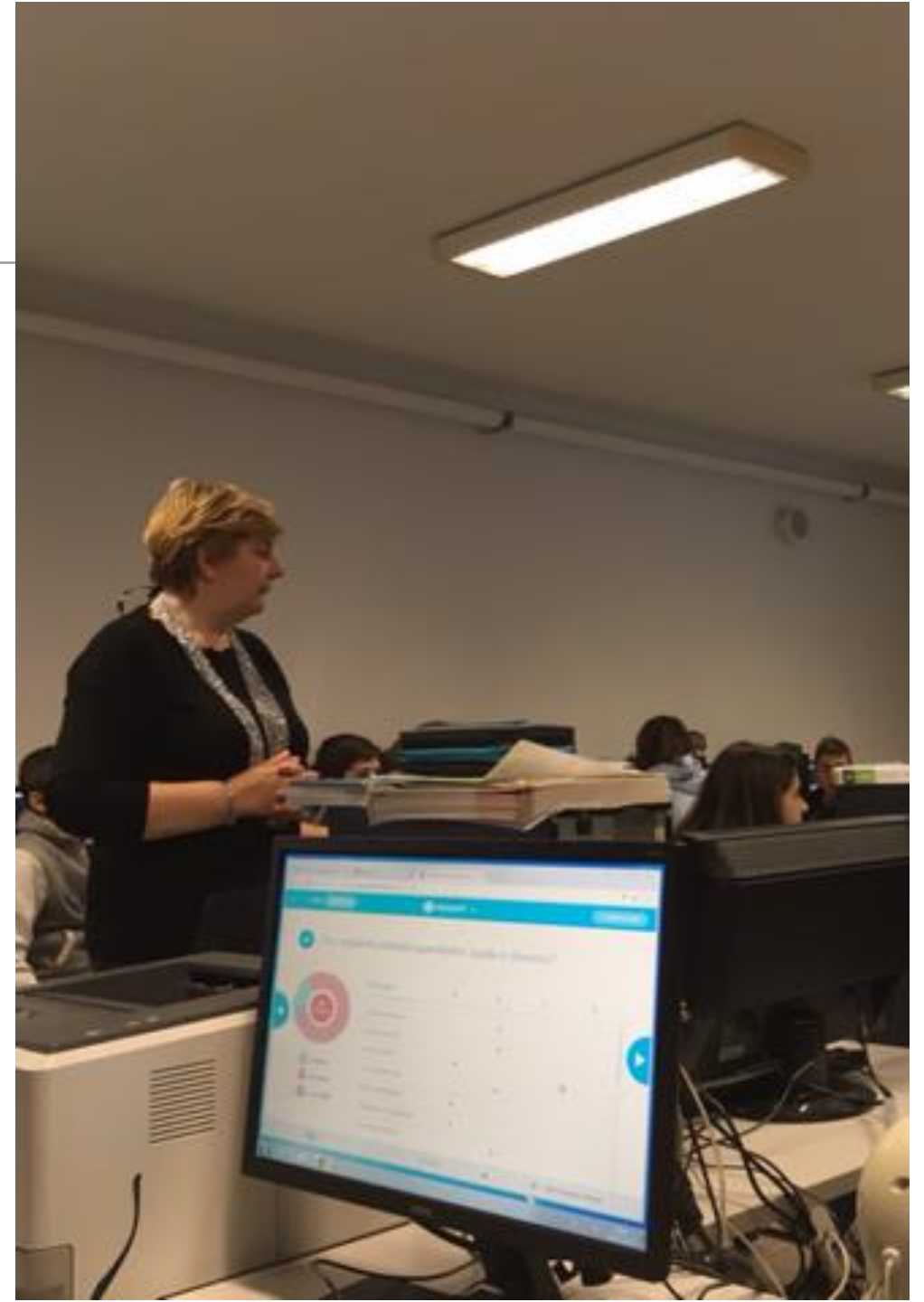
Subject: Maths

Students:

- Silvia, class 1 (level 9), specialization Electronic Engineering and Automation - number of students: 26
- Maria, class 1 (level 9), specialization Aeronautical Engineering - number of students: 28

Classroom:

ICT Lab – 30 seats/PC

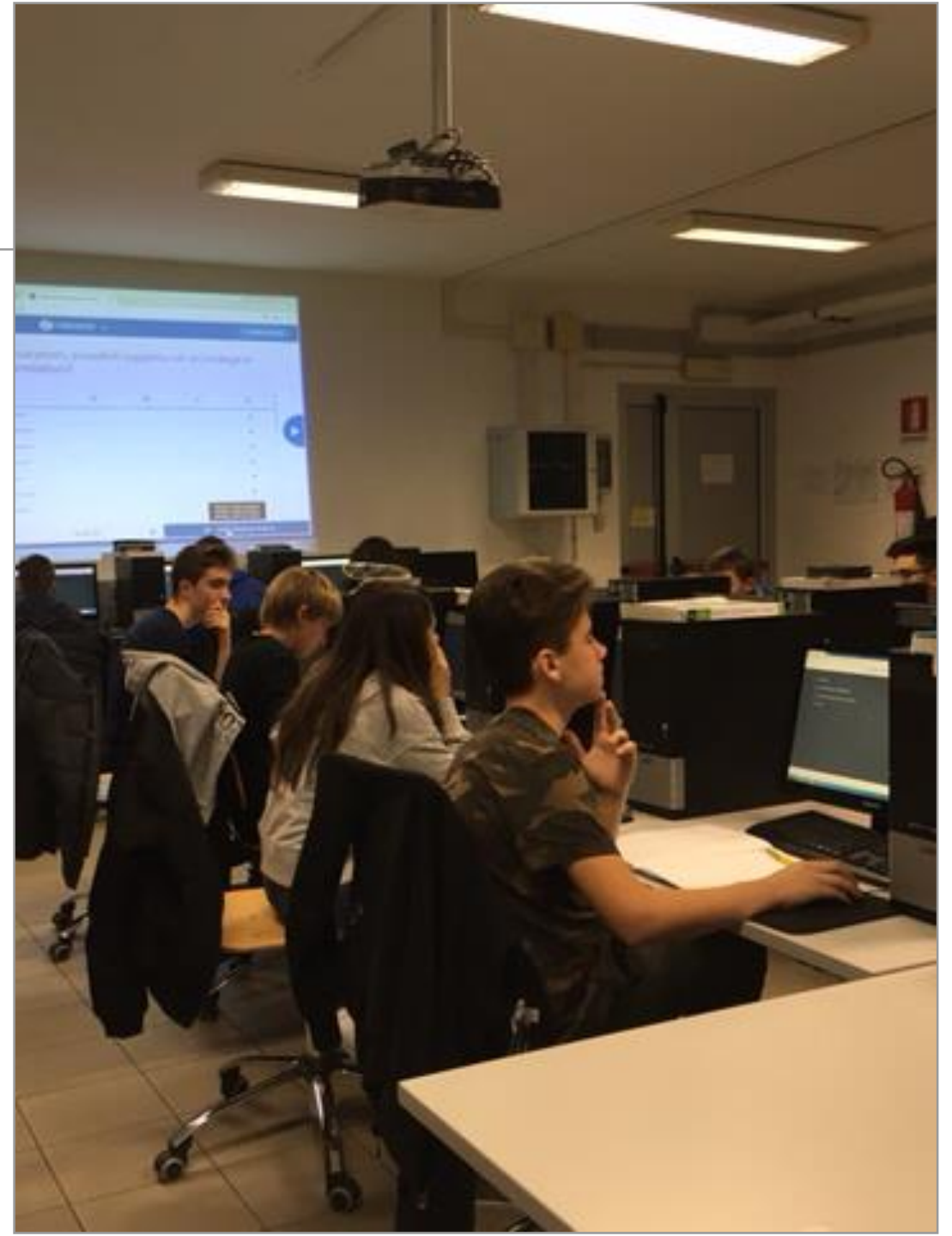


MAIN FEATURES

High number of students per class

- Multi-level classes
- Different performing times
- Some specific learning disorder cases (ADHD, Dyslexia, Dyscalculia and so on)

Students' execution time was longer than estimated



TRAINING SESSION

Mentees:

- always worked in **team** after receiving mentor's hints
- built together one **common lesson** in order to compare students' feedback
- lesson built according to «**Learning while Doing**» principle, grounded on **realia**
- lesson as a unit to be included in a **Statistics Module**, shared with all Maths Department teachers

STUDENTS' FEEDBACK



2. La parte della lezione che mi è piaciuta di più è stata l'ultima perchè...
 mi sono divertito molto a scrivere con il mouse e soprattutto a fare quei calcoli particolari

si perchè e molto utile per imparare nuove cose e sviluppare la mente e perchè ci si diverte imparando

si, perchè si impara più velocemente grazie agli esercizi interattivi

si, perchè è divertente e utile e NON noioso.

Si perchè è bello fare lezione in questo modo.

si perchè gli appunti sul computer erano molto sintetici e ci facevano capire meglio gli argomenti

Si, perchè e molto bello imparare con il computer.

si perchè ci fanno imparare di più

Si assolutamente perchè è bello ogni tanto lavorare anche sul computer per le lezioni di matematica.

si perchè sono molto interessanti queste

2. La parte della lezione che mi è piaciuta di più è stata la parte degli esercizi perchè...
 perchè sono molto coinvolgenti e ti aiutano a memorizzare gli argomenti. Inoltre si può confrontare con i compagni di classe.



La parte della lezione che mi è piaciuta di più sono stati gli esercizi che, con metodi innovativi e divertenti, ti permettono di affrontare la lezione in maniera diversa, più leggera e divertente.

$$1001_2 = 1 \times 2^0 + 0 \times 2^1 + 0 \times 2^2 + 1 \times 2^3$$

$$1 + 0 + 0 + 8 = 9_{10}$$

4. Vorresti che il tuo insegnante continuasse ad usare queste tecniche in altre lezioni? Se sì, perchè?
 Certo per divertirmi e imparare con grande facilità

3. Penso che la lezione mi sia stata non mi sia stata utile ad imparare perchè...
 mi sono divertito e ho capito quasi perfettamente tutti gli argomenti.

DEMO/TEAMTEACH FEEDBACK

Students' Feedback

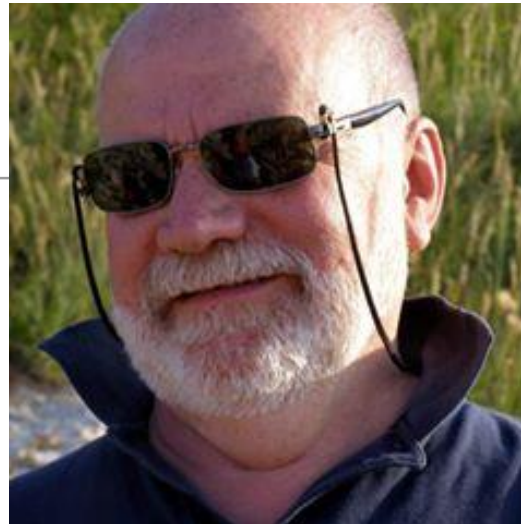
- use of technology makes lessons more dynamic and motivating
- learning actively students can immediately practice what they have just learned
- the lesson is felt as it were 1 to 1 with the teacher
- the lesson looks more clearly structured and learning objectives can be better focussed on

Teachers' feedback

- teachers get instant feedback from students
- students weak area or critical points can be immediately detected

Mentees:

- Lucio Tonutti
- Sara Vuano



Mentor: Luciano Dereani

CONTEXT

My old class

Science of Earth

2	class
15-16 years old	age
Building and Environment	specialization
18 students	

Lucio

The worse class

Chemistry

2	class
15-16 years old	age
Transport, Logistics & Aeronautics	specialization
20 students	

Sara

TRAINING & PREPARATION DEMO LESSON

- **Very Good relationship** with mentees (dedication, motivation, curiosity,...)
- **Difficult to start**
 - no competence in the subject to teach
- **Need for BYOD** (plan the lesson using smartphones & tablets, ICT labs not available during the year)

DEMO LESSON

- **Surprise** → very good feedback from students!
- **Longer time than expected**
 - ❖ too many individual activities
 - ❖ it is tiresome to recapture students' attention after cooperation activities
 - ❖ sometimes students devices do not work (poor or no connection, insufficient or no credit for connection)

Which was the part of the lesson I enjoyed the most? Why?

I found the **final test** and **presentation program beautiful and fun**; *I understand many things that in a "normal" lesson I would not understand right away* (for distraction or for other reasons); thanks to the graphs I managed to learn quickly; challenges (kahoot quizzes), images, video, and conceptual maps are the tool I prefer to study.

From students' feedback form

Chemistry

Would you like your tutor to continue to use these techniques in other lessons?

Yes! Because it's **beautiful, fun, engaging**, lessons are **more interesting, easier to understand**; they are richer in images and well structured, the key points are clearly arranged, we are allowed to interact with the devices, we paid more attention, the class gets more integrated, it is an alternative and innovative way of doing lesson.

From students' feedback form

Science of Earth

TRAINING FOR TEAM TEACH

Work in progress:

- Next week team teach with Sara (Chemistry)
- Next week training with Lucio (Science of Earth)