

PHYSICS WITH MOBILE DEVICES

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INVESTICE DO ROZVOJE VZDĚLÁVÁNÍ

EVİK (VÝUKA, INDIVIDUALIZACE, KOUČING, CZ 1.07/1.1.32/02.0132)

OVERVIEW

- Project eVIK
- Tablets, mobile phones and other mobile devices
- Apps
- Concepts and philosophy
- Technical support and background



KRALUPY NAD VLTAVOU



PROJEC

- eVIK - Teaching, individualization, coaching
- Classroom with tablets
- Classroom with notebooks

The logo for e-vik features a red Wi-Fi symbol above the text "e-vik" in a bold, black, sans-serif font. The "e" is lowercase, while "vik" is uppercase.

OUR SCHOOL

NOTEBOOKS

TRADITION
EDUCATION

WOLFRAM
MATHEMATICA

Tablets
Mobile Phones

LOGGER PRO
TRACKER

VERNIER PROBES

CAMERA
PINNACLE

EVIK TEAM

- Irena Fricova
- Andrej Plechacek
- Zora Knoppova
- Jana Vomackova
- Boris Kubicek
- Lucie Janderova
- Gabriela Turynska
- Eva Popova
- Sarka Hrusovska
- Michal Mara
- Radim Kusak

METHODS AND STRATEGIES IN ICT

- ITC technology is not working with old methods
- New technology call for “new methods and strategies”
- Different level of each teacher - IBL, ICT
- New technologies give us new possibilities



WIRELESS SCREEN MIRRORING

- Apple TV - for Apple devices
- Miracast - new standard for Wireless mirroring
- Based in Wi-Fi standard - Wi-Fi Direct, (All Share Cast...)

USAGE IN CLASSROOM

- Work with Information
- Camera usage - movie, picture
- Physics Apps
- Internal and external probes



WORK WITH INFORMATION

- Data mining
- Basic constants
- Formulas
- Realtime data, long term data



CAMERA USAGE

- Making movies
- Videoanalysis
- Videofeedback
- Microscope (high-resolution)
- Size measurement from picture



MAKING MOVIES

- Movie of the experiment

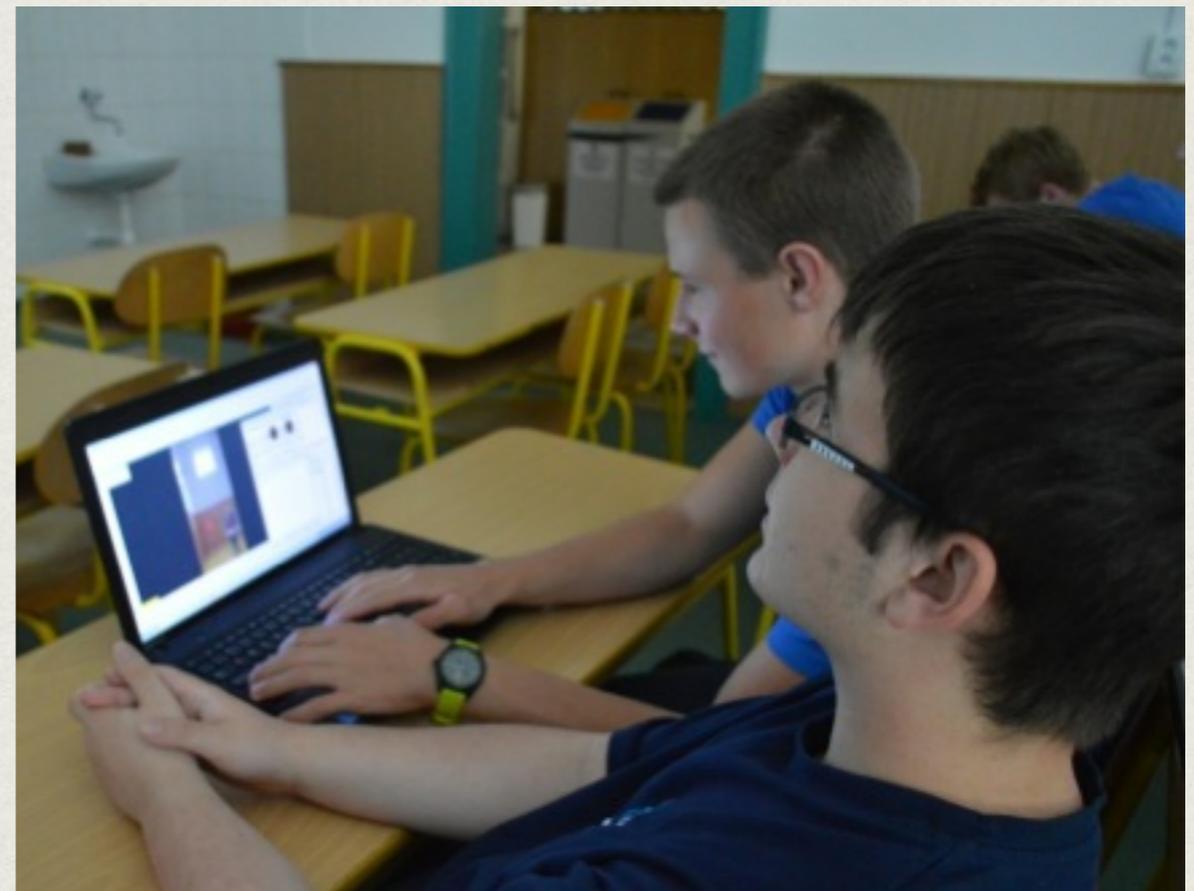
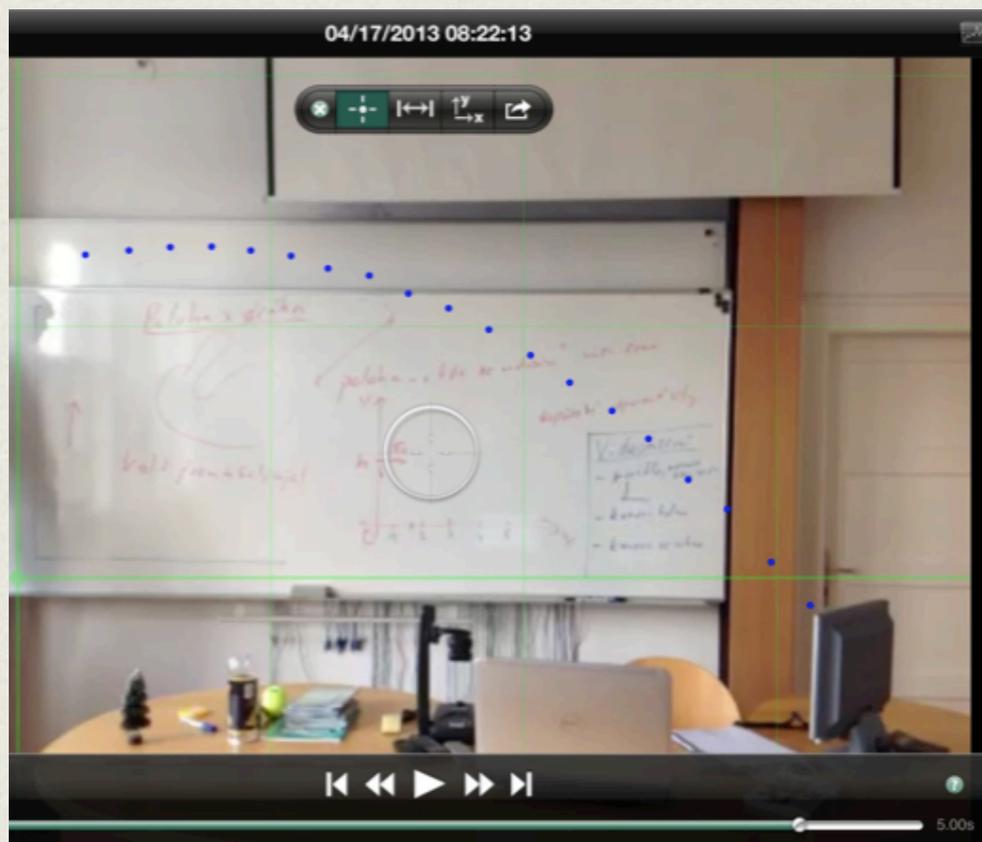


CHANGING STEP BY STEP

- Movie of the experiment and sharing via Google Drive
- Right terminology and physics explanation
- Background of the movie, angle, tripod, camera - FullHD,
- Movie with title and subtitles, background music
- General ability to create movies - biology, chemistry, language, self presentation

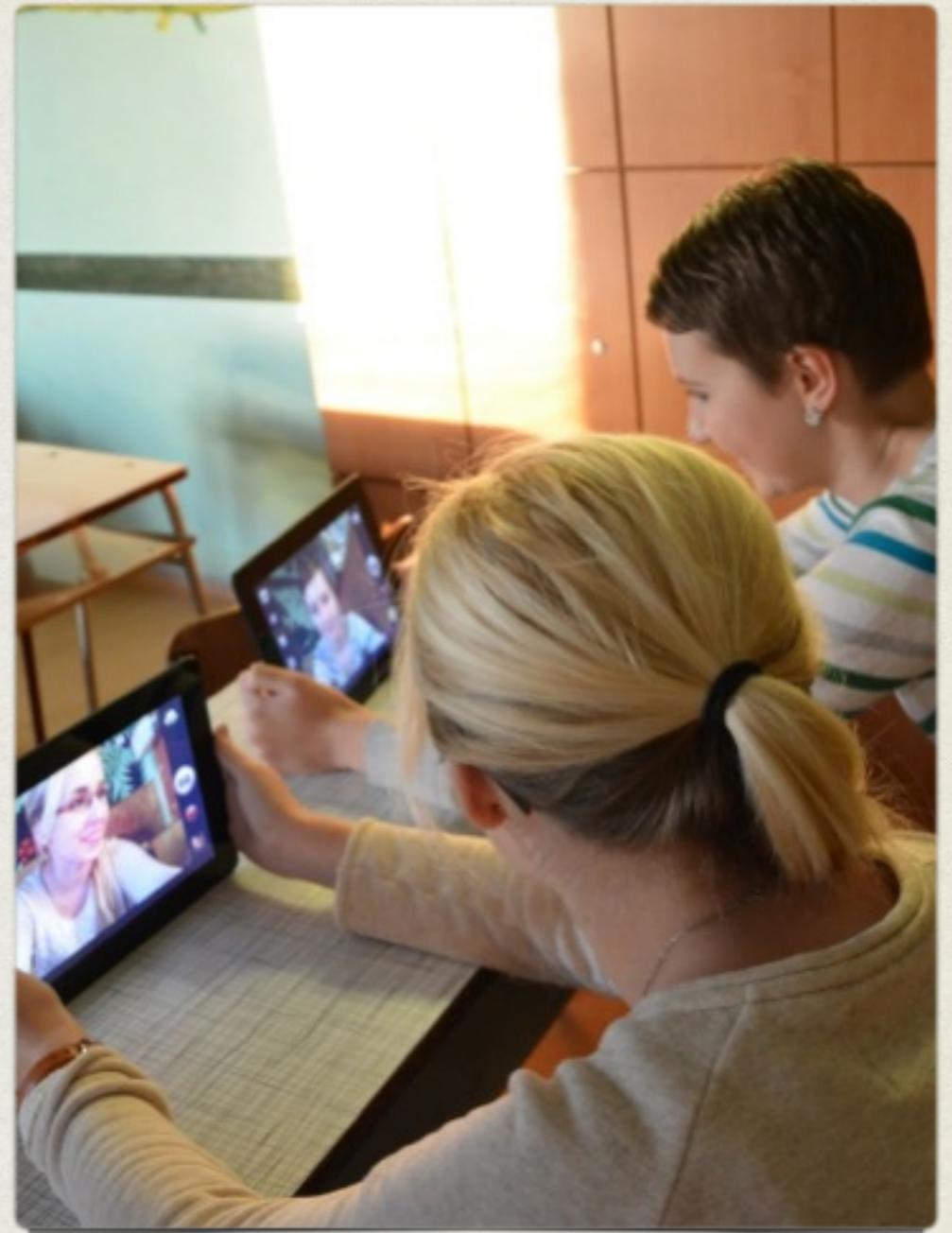
VIDEOANALYSIS

- Special App (IPad) - Vernier VideoAnalysis
- Analysis done in PC



VIDEOFEEDBACK

- What did you like in the lesson
- What did you dislike in the lesson
- What do you “take home” from lesson?
(not what did you learn)



APPS



INTERNAL AND EXTERNAL PROBES

- Accelerometer
- Vernier probes + LQ2
- Teslameter
- Pasco probes
- Luxmeter
- Bluetooth probes
- Battery - voltage, temperature
- Jack-in - Thermadoo

HELP EACH OTHER



TECHNICAL SUPPORT AND BACKGROUND

- School network and its stability
- School Wi-Fi, Hotspots
- Tablets management
- Apps installation



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THANK YOU

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