

Rich-media Innovative Technologies at Czech Secondary Schools

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Motivation, Problem Area

***Problem of the most universities and secondary schools
in the Czech Republic:***

Although the information technologies penetration reaches the world standard within the Czech population, **the exploitation of the new technologies** including the rich-media technologies in everyday teaching and learning **is far behind expectations.**

Motivation, Problem Area

*Problem of the most universities and secondary schools
in the Czech Republic:*

How to **keep and increase the learning process quality**, when the number of students and the popularity of the part-time and distance form of learning continually increases?

Motivation, Problem Area

Problem of the most universities and secondary schools in the Czech Republic:

It is clear that classic **textual study texts** (eventually with added multimedia components) **cannot fully compensate** straight forward or intermediary **interaction of the teacher with the student.**

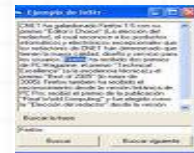
Motivation, Problem Area

Full **complex multimedia visualization**
of the educational process
accessible on-line or on-demand
is such the absolute necessity
in the present time.

Rich-Media Technology

Rich-media is synonymous
for broad range of
interactive multimedia
being used for the support of
synchronous and asynchronous
communication

Animations (Flash Player)
Stream video
Rich Internet Applications
Online games
...



**Rich Media
Systems**

Rich-Media Recorder



Rich-media Recording

PolyMedia
Technologies

EduArt

Swap Video and Slide Thumbnails Zoom Slide Zoom Video

Lexikální prvky programovacího jazyka Java
Floating Point Literal

- Literál typu *float*
 - IEEE 754 **32 bit** single precision floating point
 - Zápis literálu musí být **povinně zakončen** znakem 'F' nebo 'f'
- Literál typu *double*
 - IEEE 754 **64 bit** double precision floating point
 - Zápis literálu může být zakončen znakem 'D' nebo 'd'

Title Programovani III.
Presenter RNDr. Ivo Martinik PhD.
Date 3/1/2012 8:55:15 AM
Description A313



EduArt software od PolyMedia

PolyMedia
Technologies Vicedruhová média

PolyMedia
Technologies Vicedruhová média

MEDIA-rich Repository of LearnING Objects



www.merlingo.cz

Main Goals of MERLINGO Project

Setting up and manage the **central repository of learning objects** based on the **rich-media** technologies accessible on-line and on-demand within the national computer network **CESNET2**,

Main Goals of MERLINGO Project

Minimize the financial, personal and time costs joined with the creation and management of the rich-media learning objects (especially the costs of direction, cutting, organizing, archiving, computational and personal capacities, etc.),

Main Goals of MERLINGO Project

Support for the **eLearning** and **rich-media** technologies in the area of complex **multimedia vizualization** of the educational process and fundamentally enrich the learning process especially in its **part-time and distance** form,

Main Goals of MERLINGO Project

Radically improve the quality of **students with special needs learning**, establishment of “barrier-free” information access to records of presentations.

Support for the Students with Special Needs



Main Problem Areas of MERLINGO Project

Relatively **high purchase price** of individual recording systems and the necessity of annual payment for programming support to supplier,

Main Problem Areas of MERLINGO Project

Technical difficulties in realization of recording
in locations which are not equipped with a
necessary infrastructure (camera and
microphone systems, sound, mixing device, etc.),

Main Problem Areas of MERLINGO Project

Impossibility to outfit each teaching staff with
their own mobile recording that could be used
for preparation and publishing of a lecture,

Main Problem Areas of MERLINGO Project

Limited possibility of editing and modifications
(e.g. edition, post-production) of records of
lectures which could be done by teaching staff
without technical assistance and on a mobile
device,

Main Problem Areas of MERLINGO Project

Inaccessibility or difficult implementation of application programming interface providing interaction with learning management systems of virtual universities.



EduArt

EduArt



EduArt



Rich-media Technologies at Secondary Schools

Currently, one of the key tasks for the **MERLINGO** project investigators is a pilot implementation of rich-media technologies in the educational process at **six selected secondary schools** within the project

Clever helpers for teaching using ICT in a simple and creative way

Rich-media Technologies at Secondary Schools

Clever helpers for teaching using ICT in a simple and creative way

- Slavonic Grammar School in Olomouc,
- Grammar School Hello in Ostrava-Poruba,
- Olga Havlová Grammar School in Ostrava-Poruba,
- Information Technology High School in Frýdek-Místek,
- Secondary Vocational School of Třinec Steelworks,
- Secondary Technical School in Šumperk.

Main Goals of the Project

- Increasing the teaching process level at the **secondary schools,**

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- Support of **asynchronous communication** realization between teachers and students,

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- **Mobilization of students** in the teaching process,

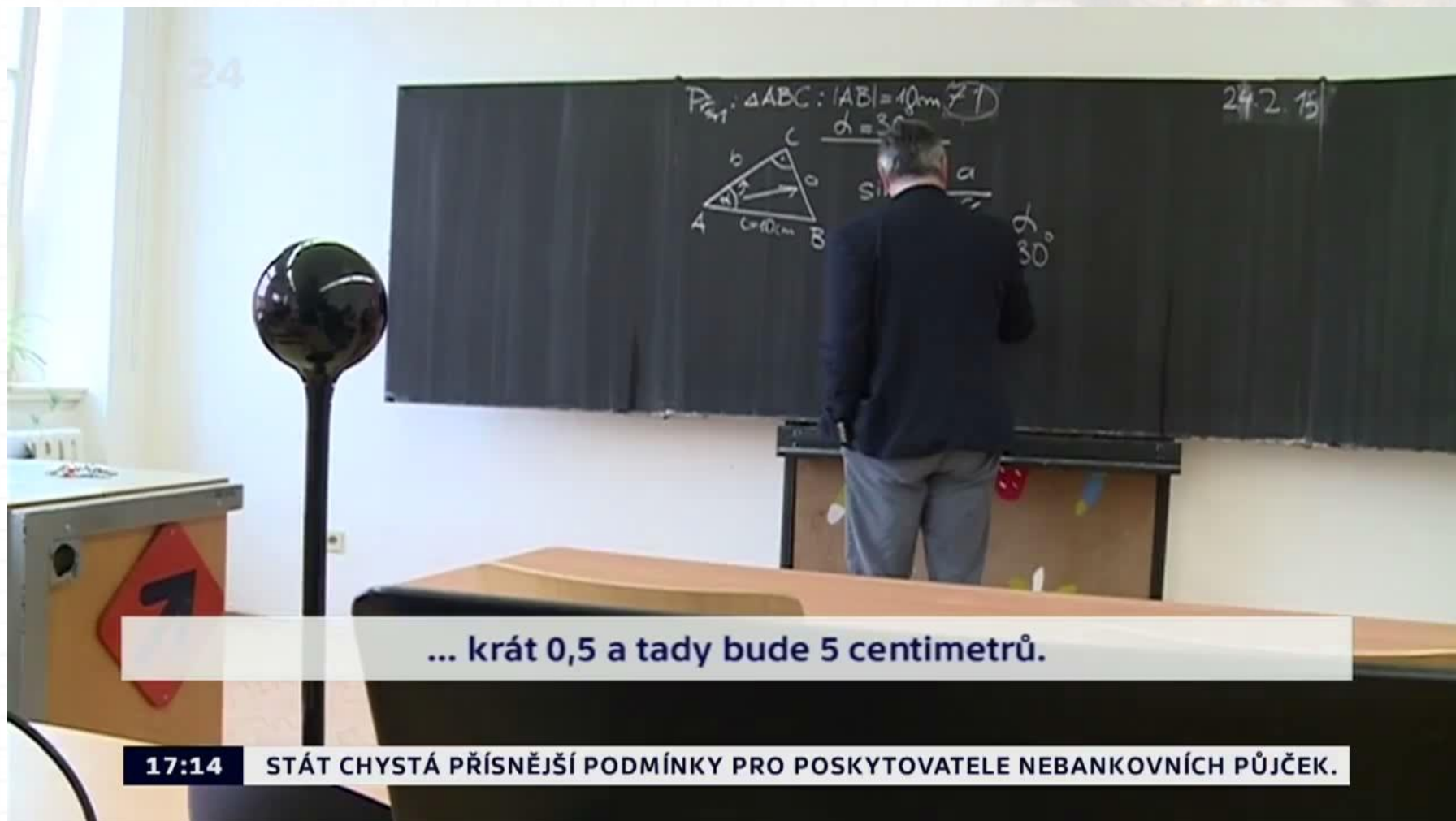
Main Goals of the Project

- Increasing the teaching process level at the **secondary schools**,
- Support of **asynchronous communication** realization between teachers and students,
- **Mobilization of students** in the teaching process,
- Support of **students with special needs**.

Rich-media Technologies at Secondary Schools



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Thank You for Your Attention

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