



EU2013.LT



MINISTRY
OF EDUCATION
AND SCIENCE
OF THE REPUBLIC OF LITHUANIA

Upgrading Vocational Teachers Technological Competencies

Raimondas Paškevičius

Director of Department of the
European Union Assistance
Coordination



EU2013.LT

Vocational teachers

2142 teachers in vocational training institutions in Lithuania, 2012:

- 71 - 25 years old
- 425 - from 25 to 39
- 977 - from 50 to 64
- 105 - older than 65



- 605 uncertified teachers (do not have 4 years teaching experience)
- 1537 certified teachers



EU2013.LT

Vocational teacher qualifications

Vocational teachers grouped according to their qualification categories:

- Teacher – 337
- Senior teacher – 934
- Teacher supervisor – 238
- Expert – 28

Vocational teacher qualification consists of:

Technological competence is an ability to perform technological processes

Didactical competence is an ability to train students

General competences: languages, mathematics, communication, and etc.

Teacher professional development should be based on the continuous upgrading of all competencies

Before the Project there was an opportunity to improve only pedagogical, psychological and general competencies



Why vocational teachers need to upgrade their technological competencies?



Picture by <http://www.quotesandpoem.blogspot.com/>

Gap between what teacher knows and is able to do and what is really happening in industry

Technology is permanently changing, so this gap is inevitable and can not never be reduced to zero

The maximum what we are able to do - to keep the gap as small as possible



EU2013.LT

What are the ways to keep the gap at the minimum?

To hire teachers from the industry

- Industry-based teachers have the technological knowledge and skills required in the workplace but they lack the instructional background to manage the classroom and inspire learning
- Lack of employees motivation to come to school

Skills upgrading in the enterprises

- Lack of linkages between teachers and enterprises
- Harmonization of teacher individual needs with the industry needs
- Enterprises are not highly motivated to talk with teachers
- Teachers are not highly motivated to go to the enterprises as students



EU2013.LT

Opportunities

Training centres might use the services of Sectoral practical training centres (SPTC)

SPTC - practical training base provided with the most modern technological equipment

Vocational teachers must learn how to work with the technological equipment installed there

I LEARN BY:

DOING ☒
READING ☐



The biggest benefit for vocational training in the Project is an opportunity **to improve the technological teachers competencies**

Technological competence development in a real (live) production or service environment

Aims of the Project “Upgrading Vocational Teachers Technological Competencies”

Objective – Provide vocational teachers with up-to-date technological competencies

Tasks:

- Create a model of the system for the upgrading teachers technological competencies
- Prepare and implement teacher training programs

Results:

- Model of the system
- 100 programs prepared + supporting learning materials
- 650 teachers trained



Model of the System for upgrading vocational teachers technological competencies

The system must ensure that:

- Teachers competencies development planning is a permanent process carried out nationwide, covering all industry sectors
- Competencies development plan meets teachers needs and also meets industry needs
- Teachers competencies upgrading is carried out by flexible, permanently updated tailored training programs through various forms of competency development
- Teachers competencies upgrading available for all teachers and conducted in a convenient time and in a convenient place
- Teachers receive detailed information about training programs



Designing teacher training programs

Program designing team

- Employees from companies and teachers from VET schools were involved on a parity bases

Employees understand modern technological processes at the workplace



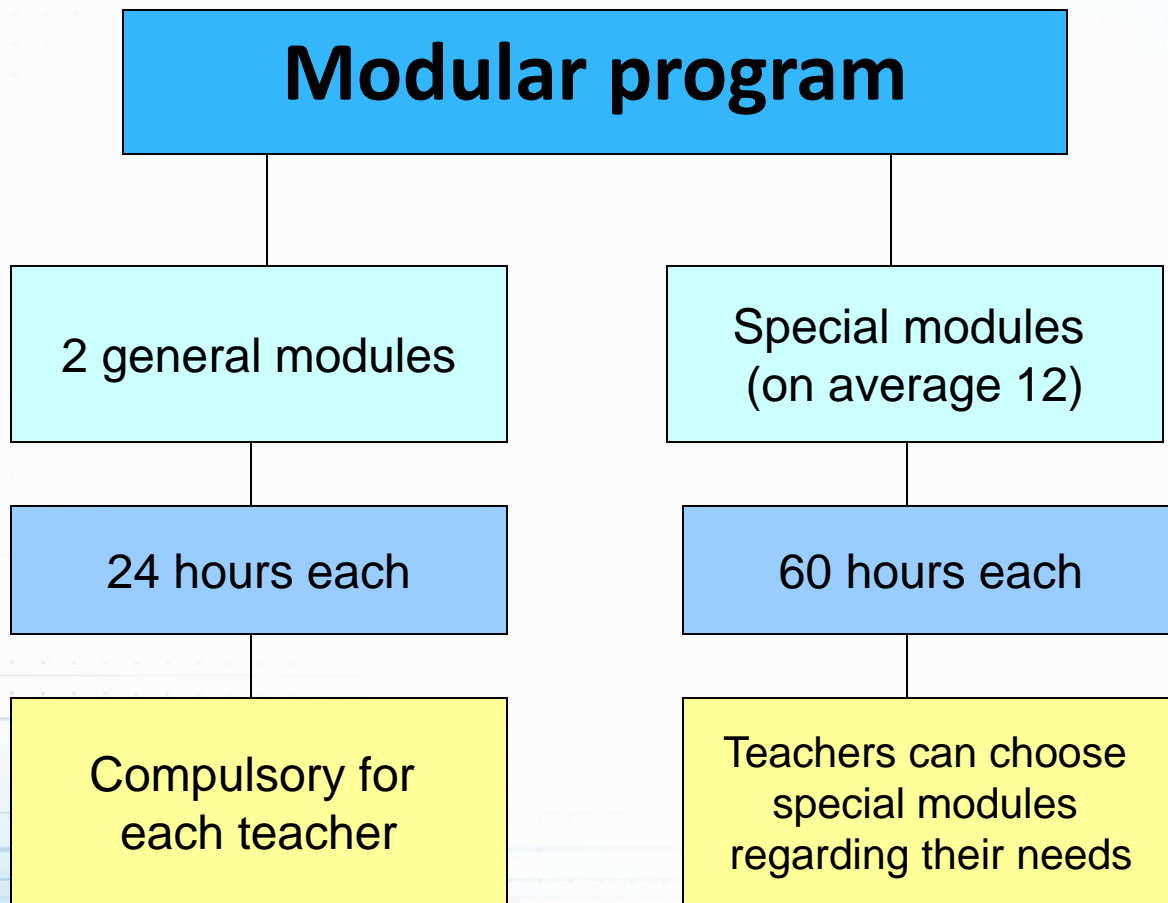
Teachers know their needs and have the experience how to put know how of employees to construct training program

Designing Teacher training programs

Modular approach

- Program for upgrading teacher technological competencies consists of **separate modules** each leading to the upgrading of certain technological competence
- The modular approach allows to meet individual teacher needs. Teacher can choose only those modules of the program that are necessary for his professional development and does not need to be involved in those that do not seem relevant for him

Modular training programs



Designing Teacher training programs

Types of modules

- Some modules are designed for teachers to spend a given period of time at the specific company and to get introduction into technological processes taken place at the company **(Externships – 50 companies)**
- Other modules designed to obtain knowledge what new developments of business take place in the certain industry, which new technologies are coming and what are recent scientific developments in the field **(Workshops)**
- Some modules are designed for teachers to obtain in-depth workplace experience practicing real tasks performed in the job **(Internships – 100 companies)**

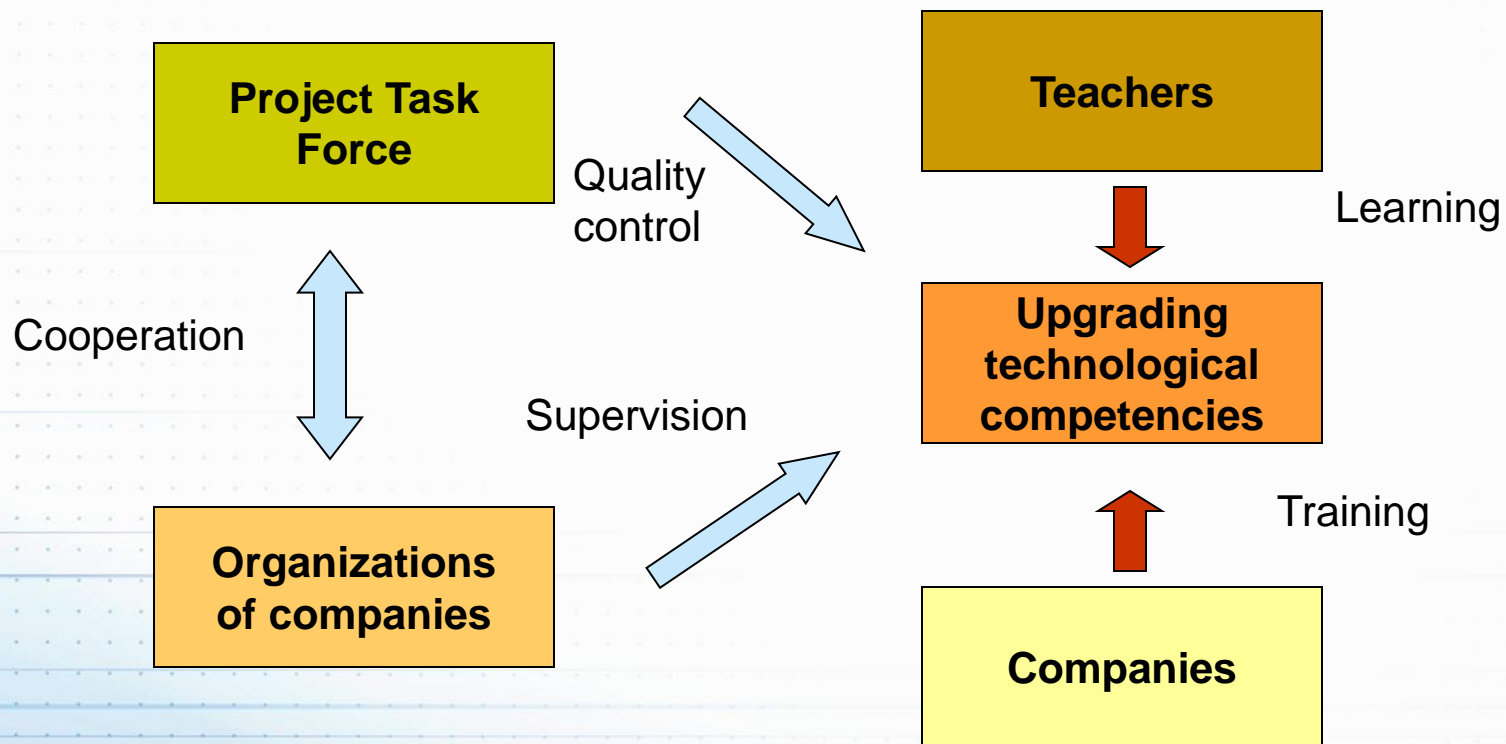


EU2013.LT

Implementation of the System

Establishing Linkages between Teachers and Enterprises

The final stage: teacher training



Cooperation with industry



**Lithuanian Confederation of Industrialists
Chamber of Commerce**

Confederation actively participated in a preparation of teacher training programs and organising training process

The Confederation is an umbrella organization joining together 35 associations of different industrial branches and 9 regional associations. The members are enterprises of various industries, most of which are large and private capital companies. Totally, over 2700 enterprises

Teachers already have developed their technological competencies in many well-known and prosperous Lithuanian enterprises



EU2013.LT

Training hosting companies

- UAB "Arginta"
- UAB "Selteka"
- AB "Vilniaus paukštynas"
- AB "Kaišiadorių paukštynas"
- UAB "DOJUS agro"
- UAB "Alkava"
- ŽŪKB "Krekenavos mėsa"
- UAB „BALTIC ORBIS“
- UAB "Baltec CNC Technologies"
- Restaurant "Žuvinė"
- Beauty salon "Bomond"
- Beauty salon "Boccolo"
- UAB „Atea"
- UAB „Elinta"
- AB "Panevėžio statybos trestas"
- UAB "Aletovis"
- UAB "Sodžiaus rytas"
- UAB „Floralita dizainas"
- AB „Joniškio grūdai"
- AB "Lietuvos geležinkeliai"
- AB "Utenos trikotažas"
- UAB "Vičiūnų restoranų grupė"

AG ARGINTA



Kaišiadorių
PAUKŠTYNAS

Alkava

BCT
BALTEC CNC TECHNOLOGIES



ELINTA

LIETUVOS
GELEŽINKELIAI



Utenos trikotažas

DOJUS
agro

Baltic
orbis

Joniškio grūdai

MAXIMA



Vilniaus
PAUKŠTYNAS

PST

floralita dizainas

VIČIŪNAI
GROUP

ATEA

100 programs in 12 sectors

- Engineering industry
- Energetics
- Wood technology and furniture production
- Building
- Transport and storage
- Repair of motor vehicles and motorbikes
- Textile industry
- Food and drinks
- Hotels and restaurants
- Agriculture
- Beauty services
- Wholesale and trade





EU2013.LT

Good Practice

The teachers of Visaginas VTC developed their technological competencies in UAB “Selteka”

UAB “Selteka” was awarded a prize of Innovative Company 2007

SELTEKA – one of the largest manufacturer of digital TV tuners in Baltic.





EU2013.LT

Good Practice

Teachers of Klaipėda VCT developed their technological competencies in two beauty salons „Bomond“ ir „Boccolo“





EU2013.LT

Good Practice

Teachers of Klaipėda Ship Repair and Building School developed their competencies relevant to engineering industry and energetic sectors in UAB “Arginta”



Alytus VTC – metal processing industry – UAB “Baltec CNC Technologies”



Vilnius VTC – robotics and IT - UAB ‘Baltic Orbis’





EU2013.LT

Benefits

Benefit of teacher:

- Linkages with companies
- Permanent upgrading of teacher technological knowledge and skills
- Increased awareness and knowledge of changing workplace competencies and attitudes
- Up-to-date perspective of the skills students will need to succeed in the workplace
- Information and materials to support the design of curriculum
- Background for recognition of higher level of qualification and monetary compensation associated with this recognition as well

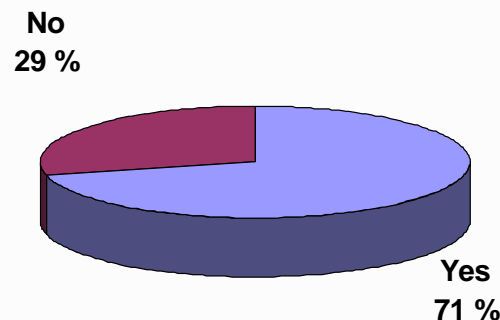


Benefit of companies:

Companies that participate in the System benefit by having VET schools and colleges focus directly on the skills and knowledge required by new employees

Motivation to continue

Question to teachers: would you like to continue upgrading your competencies in the future?



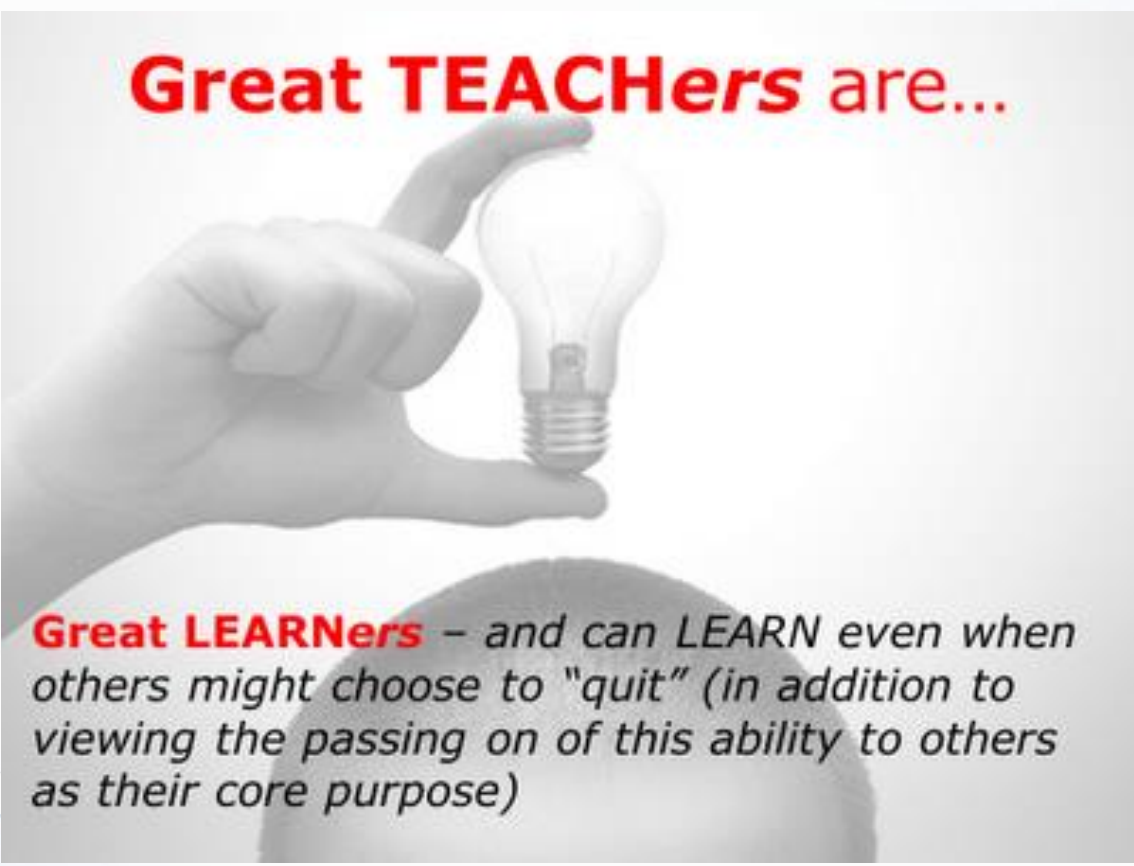
Question to enterprises: would you like to continue upgrading teachers competencies in the future?

Yes, 100%



EU2013.LT

Great TEACHERs are...

A grayscale image showing a hand holding a glowing lightbulb over a person's head. The lightbulb is illuminated, and its glow is reflected on the person's forehead. The background is a light blue gradient with a subtle dot pattern.

Great LEARNers – and can LEARN even when others might choose to "quit" (in addition to viewing the passing on of this ability to others as their core purpose)