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IMPLEMENTATION OF DUAL EDUCATION IN HIGHER EDUCATION OF SERBIA

DualEdu

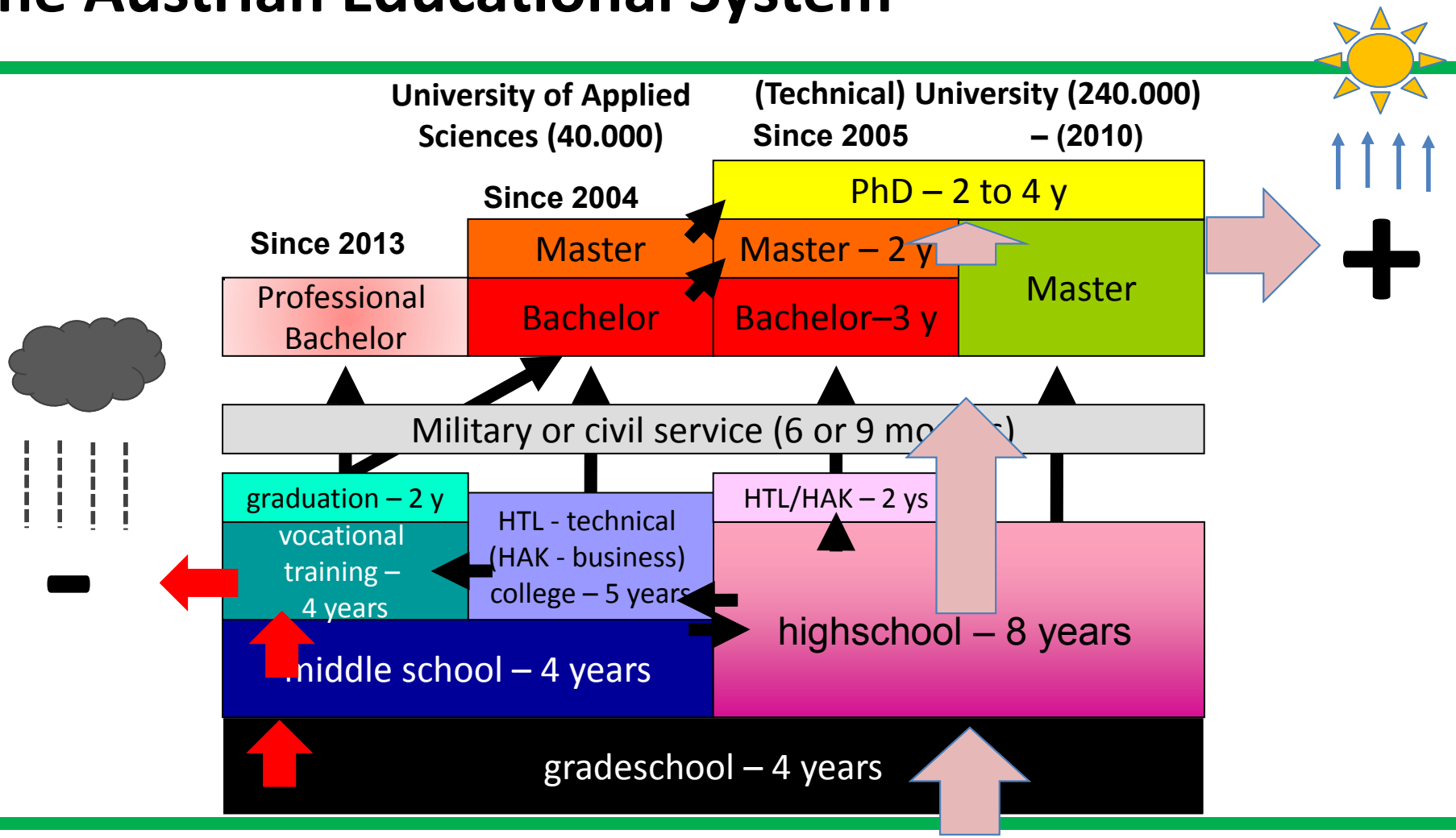
Dual Education at FH JOANNEUM in Graz, Austria

Contribution to the Kick-off Meeting in Belgrade

Dipl.-Ing. Johannes Haa
Dean of Engineering
FH JOANNEUM
University of Applied Scien



The Austrian Educational System



FH JOANNEUM University of Applied Sciences

FEDERAL GOVERNMENT
EUR 23.7 million

STYRIAN REGIONAL GOVERNMENT
17.8 Mio EUR

HOST MUNICIPALITIES BUILDING INFRASTRUCTURE
60,000 m²
NET FLOOR SPACE

INDUSTRIAL AND RESEARCH FUNDING
EUR 6.2 million

1626
FIRST-YEAR STUDENTS

46 DEGREE PROGRAMMES
4000
STUDENTS

578 STAFF
879 LECTURERS
CAPITAL INVESTMENTS
approx. EUR 2.6 million per year

OUR CORE BUSINESS

GRADUATES
1144

R&D SERVICES
464 PROJECTS

7 POSTGRADUATE COURSES AND **632** CONTINUING EDUCATION EVENTS

Departments and Degree Programmes

Departments	Bachelor Degree Programmes	Master Degree Programmes
Applied Computer Sciences	3	4
Engineering	5	4
Health Studies	7	1
Building, Energy & Society	3	4
Media & Design	3	4
Management	4	4
	25	**21**

- Automotive Engineering
- Aviation
- Applied Production Sciences
- Electronic Engineering

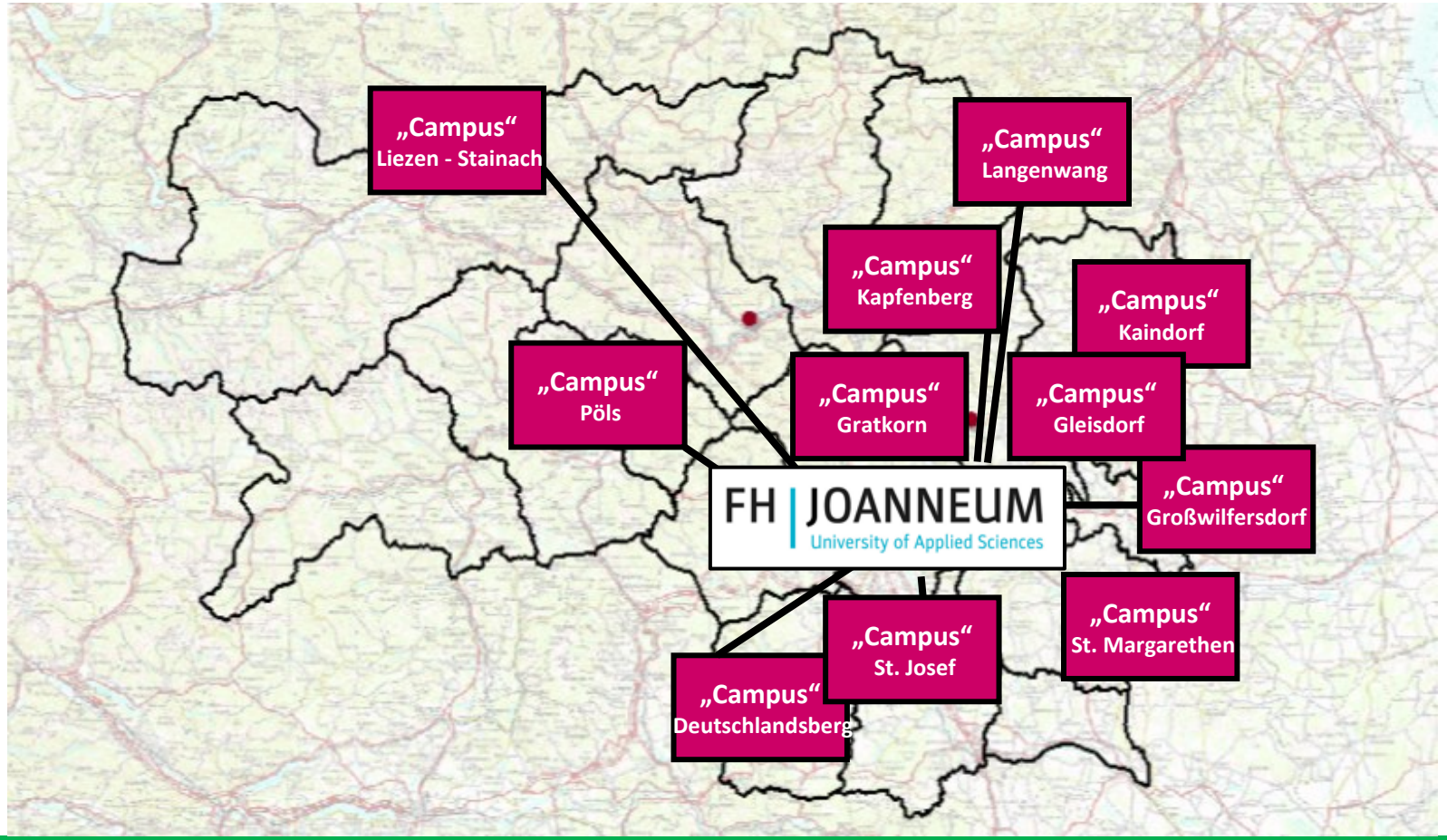
Production Technology and Organization (BA)

Sustainable Food Management (BA)

Engineering and Production Management (MA)

Food Product and Process Development (MA)

"Campus" Locations of a typical Dual Study Programme



Thank you for your attention! See you in Graz.







DualEdu

Work Package 5: Quality Plan

Contribution to the Kick-off Meeting in Belgrade

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Dean of Engineering
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Quality Plan: Main items

- Quality and evaluation strategy
- Interim evaluation report
- Final evaluation report

Quality Plan: Measuring „Output“

1. *Research report on current practice of Cooperative Education in the world with recommendations for CE model for Serbia.*
2. *Report on survey of company needs for Cooperative Education.*
3. *Report on interviews with management of companies interested for CE*
4. *The flexible and generic Cooperative Education model for Serbia (basic document).*
5. *Development of new curricula for pilot testing based on new CE model*
6. *Validation report on the CE model based on discussions with potential CE industrial partners*
7. *Pilot report of the results of the testing of several variants of the developed Cooperative Education model and reports on experience gained.*
8. *Amendments to the Low of Higher Education of Serbia (document).*
9. *Amendments to the Accreditation Standards (document).*
10. *Recommendations to HEIs in Serbia how to implement Cooperative Education (document).*
11. *Trainings of faculties and managers of HEIS, and mentors from partner companies for implementation of Cooperative Education.*
12. *How companies may benefits from Cooperative Education (seminars in five cities)?*
13. *Proceedings of the final dissemination conference*

Quality Plan: Measuring „Objectives“

- Identify and analyse existing coop models in different countries (EU, Canada, USA) and experience and achieved results in these countries;
- Identify needs of companies in several industrial sectors (IT first) in Serbia of Collaborative Education;
- develop a flexible generic Cooperative Education model so that its variants, as derivatives, can satisfy different needs and collaboration scenarios of CE students, HEIs and companies in Serbia;
- prepare and propose changes of the existing HE legislation, accreditation standards; and
- test different variants of the developed CE model and verify their effectiveness and implementation issues;

Quality Plan: Measuring „Benefits“

Students profit because

1. the **interaction between learning and working** ensures a **flexible transition** from the school bank to the job market for them,
2. they come to **better understand the work situation** and the relationship between what is learnt and what is needed and
3. they come to appreciate that learning past the initial phase of education is of the utmost importance and that **continuing education is both necessary and normal**.

Higher Education Institutions (EIS) profit because

4. intensive contact with business ensures a direct **feedback from those businesses** to the institution which leads to a permanent **quality control of the curricula** and because
5. intensive contact with businesses gives them **extra chances for giving courses, advising businesses and for doing practical research**.

Businesses profit because

6. employers are presented with **young potential workers** as trainees,
7. **recruitment costs are reduced** and security about the **quality of recruits are raised**.

Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG 2015)

Key Challenge within ESG 2015

Universities should **CONTINUE** to enable flexible learning paths, offer a variety of teaching methods and include external expertise.

Universities should create a **NEW** quality culture that involves students and future employers to include well structured „learning by doing“.

Distinct Features of Cooperative and Work Integrated Education

(1) Education

- Education is the key priority of the programme
- Application of curricular tools: faculty qualification, competency orientation, workload calculation, modularization, assessment
- Enterprise redefines itself as a learning and teaching environment
- Formal entrance requirements and final degree / possible job description

(2) Cooperation

- Partnership between educational institution and enterprises „at eye level“
- Defined tasks for partners with defined participation of the other
- Comparable supporting structures in both learning environments
- Open information on and clear allocation of cost elements

(3) Integration

- Creation of a distinctive educational culture with elements of work and study
- Facilitation of constant reflection in action / on doing
- Attempt to transcend all experience of students with the quality of work & study

Dual Education: What is fundamentally different?

1. Industry / companies are (should be?) stakeholders AND educators.
2. We create many and very diverse interfaces / transfer points in a degree programme.
3. Respective strengths, weaknesses, opportunities and threads of the joint effort become immediately visible.
4. **Students are (should be?) process owners of a 100 % individual path to graduation.**

QUALITY = COOPERATION + INTEGRATION + REFLECTION

Recommendation from FH JOANNEUM experience

