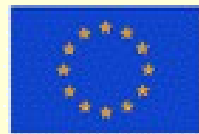


# PILE UP

Process Industry LEarning Unit Project

Leonardo da Vinci – Transfer of Innovation

Project application 2011



Education and Culture DG

Lifelong Learning Programme

# AIM OF THE PROJECT

To implement units of learning outcomes in VET to upgrade the skills of workers, by:

1. transferring a method for the development of learning units (from Germany)
2. innovating existing profiles for Process Operator and Maintenance Operator
3. testing these learning units/profiles in VET and sector (enough units/amount of time necessary to assess unit/possible accumulation)

# Existing Qualifications

2 Dutch qualifications

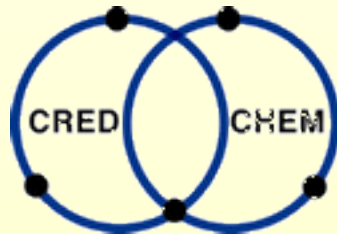
A. Process Operator

B. Maintenance Technician

# Transfer of Innovation

- The CREDCHEM approach –

[www.credchem.eu](http://www.credchem.eu)

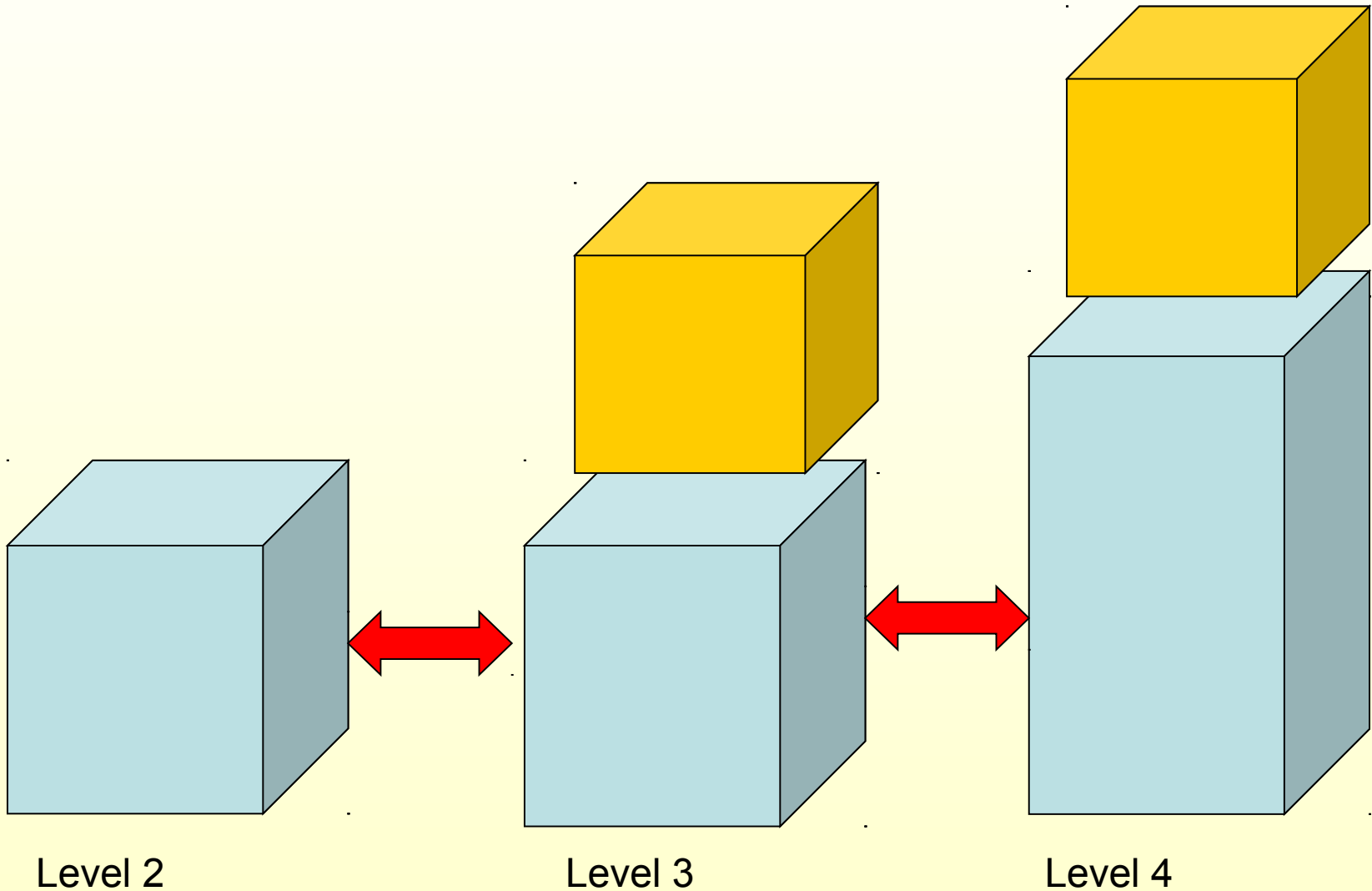


# New outcomes of qualifications

- Learning outcomes

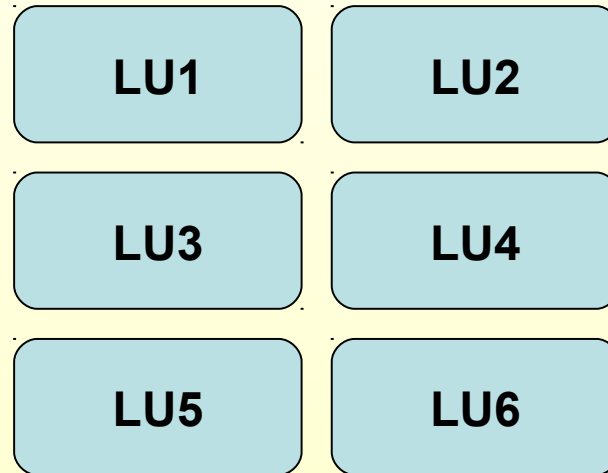
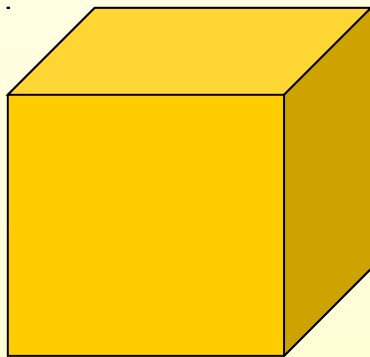
<b>Unit of Learning Outcomes 1: Mixing and separating of materials</b>		
<i>Competence</i>	<i>Skills</i>	<i>Knowledge</i>
<b>Competence level 1: Carrying out of action according to work instruction</b> - Trennt und mischt Stoffe nach den gängigen Verfahren und passt diese je nach Bedingungen an (wählt je nach Eigenschaften der Stoffe Verfahren aus)	- Nimmt Aufträge entgegen und plant eigene Arbeitsschritte - Baut Apparatur auf, geht dabei exakt, sorgfältig, routiniert mit Labortechnik um - Berechnet Mengen	- kennt Strukturmerkmale, die für Verhalten/ Eigenschaften eines Stoffes verantwortlich sind - Stoffkenntnisse (Eigenschaften, Struktur, R- und S-Sätze) - kennt Trenn-/ Mischprinzipien und entsprechende Verfahren (kennt Handlungsschritte)
<b>Competence level 2: Problem-oriented carrying out</b> - geht mit für verfahrenstypischen Problemen um	- Problemlösefähigkeit - Anwenden von Fachwissen - Reflexionsfähigkeit	- kennt Löslichkeiten der Stoffe (bei unterschiedlichen Temperaturen) - kennt Neutralisationsreaktion
<b>Competence level 3: Optimising of methods / procedures</b> - ...	- ...	- ...
<i>Work tasks</i>	<i>Competence level</i>	
Extraktion von $\text{CuSO}_4$		
Filtration von Calciumcarbonat bei Unterdruck		
Herstellung einer Natriumhydroxid-Maßlösung		
Umkristallisieren von Sulfanilsäure		
Wasserdampfdestillation von Toluol		

# Overlap of learning outcomes



# The creation of learning units (LU)

- Modular learning
- Flexible learning pathways
- Flexible creation of working teams



# Implementation of results

- What is the impact for VET?
- What is the impact for the sector?
- Who will be affected by the results?  
(skilled workers, teachers, HRM, etc)
- How will results be accessible?



# Set up of project

- Project period: September 2011 – August 2013

WP	Name	Who	Active
WP1	Project Management (SG)	All partners	Sept. 2011 - August 2013
WP2	Learning outcomes of existing profiles	VET & Sector & Centres of Expertise	Sept. 2011 - April 2012
WP3	Learning units and modular learning system	VET & Centres of Expertise	April 2012 - December 2012
WP4	Pilot/Test & Adaptations	Sector & VET	January 2012 - August 2013
WP5	Monitoring & Evaluation	EU sector representative?	Sept. 2011 - August 2013
WP6	Valorisation & Dissemination (recognition and publications)	Knowledge centres and sector platforms	Sept. 2011 - August 2013

# WP1: Project Management

Project Management has the following aims: [1] Appointing the WG members; [2] Elaboration and realisation of the definitive strategies on a Quality Management Plan (QMP); [3] Guaranteeing communication & valorisation; [4] Continuous monitoring & evaluation (in close cooperation with WP5); [5] Overall project management (administration, financial follow-up).

To realize all these aims, the following activities will be carried out:

1. Kick-off meeting with all partners;
2. Working out a detailed action plan/working document, including the plans for:
  - a. Quality Management Plan (QMP);
  - b. Monitoring & Evaluation plan;
  - c. Valorisation plan
3. Development of a project website for exchange of knowledge and information about and between partners;
4. Periodical communication with Leonardo da Vinci (LdV) Agency;
5. Continuous project management, administration and controlling;
6. Periodical delivery of obligatory LdV interim reports and the final report.

**Responsible project partner: ROC West Brabant**



# WP2: Learning outcomes

	Activities	Products
1		
2		
3		
4		

**Responsible project partner:**

# WP3: Learning units

	Activities	Products
1		
2		
3		
4		

**Responsible project partner:**

# WP4: Pilot/Test

	Activities	Products
1	Organizing and executing a pilot in VET & Industry for teachers/trainers/instructors and skilled workers to test and validate learning units	15 teachers/trainers and 50 skilled workers used and tested the learning units
2	Evaluate (in close cooperation with WP5) the pilot and adapt, if applicable, the learning units	Evaluation strategy, evaluation report and adapted learning units
3		
4		

**Responsible project partner:**

# WP5: Monitoring & Evaluation

	Activities	Products
1	Drawing up a monitoring & evaluation plan	Monitoring & evaluation plan
2	Providing forms & methods for monitoring and evaluation	Applicable monitoring & evaluation forms and methods
3	Carrying out continuous internal monitoring & evaluation	Intermediate monitoring & evaluation reports on project process, progress and context; Monitoring report & advice on tested products and applicable adaptations; Final monitoring & evaluation report on project process, progress and context
4	Periodical advice (reports) to Steering Group on project process, progress and context	Periodical management reports

**Responsible project partner:**

# WP6: Valorisation & Dissemination

	Activities	Products
1	Organizing seminars/information rounds on national and European level	Seminar/information round per country with stakeholders; 1 joint final event; project gadget as hand out
2	Network development between countries & stakeholders	Stakeholder analyses; distributed project results within the concerned sectors, and to other sectors and stakeholders within the EU by taking part in fairs, exhibitions, seminars, conferences regarding the subject
3	Provide periodical publications (newsletters, reports, etc.) on project progress and results to stakeholders	2 periodical publications on project progress and results per partner in newsletters, sector magazines; project flyer and project poster in the national languages of the partnership
4	Keeping project website / portal up-to-date	Up-to-date project website/portal; project logo

**Responsible project partner:**

# European Value



- Sector faces common problems (which ones?)
- VET faces common problems (which ones?)



# Who is interested?

## The Netherlands:

- ROC West-Brabant (applicant organization)
- Maintenance Education Consortium
- Kenteq

## Belgium:

- ACTA (training provider)
- BEMAS

## Germany:

- BIBB
- Vocational Bund

## Bulgaria:

- Chamber of Commerce of the Chemical Industry

## Poland:

- ITeE-PIB

## Possible Advisory Board

PMLF

EFNMS

Voka (Flemish chamber of commerce)

