

Niederrhein Institute for Regional and Structural Research

# Recruiting and Binding (Graduated) Higher Educated Students to the Region

**Dual study Programs – Good Practice from Niederrhein, Germany** 



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**European Union** 



### **Structure of Presentation**

- 1. Introduction Hochschule Niederrhein, University of Applied Sciences
- 2. Dual Study Programs
  - a) Concept
  - b) Fields of Studies
  - c) Cooperating (regional) firms
  - d) Facts and Figures
- 3. Possible Regional Effects



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# with the "Krefelder Modell"

### at the Hochschule Niederrhein

## "Closer to the practice – Dual Study Program"



### **Corporate video of the Hochschule Niederrhein**

http://www.youtube.com/watch?v=b6zRTbiKhgM&feature=youtu.be



**Hochschule Niederrhein, University of Applied Sciences** 

12.000 Students



More than 100 foreign partner universities



### **Hochschule Niederrhein, University of Applied Sciences**

### **Faculties/Departments**

Krefeld:

- Chemistry
- Design
- Electrical Engineering and Computer Science
- Mechanical and Process Engineering
- Industrial Engineering
- Health Care

Mönchengladbach:

- Food, Nutrition and Hospitality Sciences
- Applied Social Sciences
- Textile and Clothing Technology
- Business Administration and Economics



### **Dual Programs – Concept and its origins**

### **Origins:**

- "Krefelder Modell" (1982)
- Our university (in cooperation with Chamber of Industry and Commerce) is the inventor of this type of study programs – we are proud of that!

### **Concept:**

- Combination of 23 apprenticeships and 12 Bachelor degree programs
- Dual qualification within the shortest time (fully-fledged apprenticeship accredited by the Chamber of Industry and Commerce and fully-fledged Bachelor degree).

### **Dual Programs – Concept and its origins**

### **Structure of the studies:**

- Parallel apprenticeship and study courses
- Study courses replace the vocational school
- Part-time studies (studies with integrated apprenticeship)

### **Duration:**

- Apprenticeship: usually 2 years
- Duration of study: usually 4 years



### **Development of dual studies in Germany**

- In 2011 930 dual programs existed according to the Federal Institute for Vocational Education and Training (Bundesinstitut für Berufsausbildung).
- One year before it was 20 % less.
- Not all fields of studies are suited for such programs.
- Research intensive study courses like natural science (maths, physics, chemistry) are less often offered.
- Instead dual programs cover fields like Engineering Sciences, Business Administration and Social Work.
- It is supposed that health care might become a future field of dual programs.



### **Dual Programs – Concept and its origins**

# The initial model of the Hochschule Niederrhein and the IHK Mittlerer Niederrhein ("Krefelder Modell" for KIA)

8. Semester	Praxis- oder Auslandsmodul	Bachelorarbeit (meist in Zusammenarbeit mit den Unternehmen)
7. Semester	Hochschule Vollzeitstudium/Teilzeitstudium	
6. Semester		
5. Semester		
Berufsabschluss	Facharbeiterprüfung vor der IHK	
4. Semester		
3. Semester	3 Tage/Woche Praktische Ausbildung	Studium
2. Semester	Unternehmen	Hochschule 2 Tage/Woche
1. Semester		

**Hinweis:** Das Modell stellt ein grobes Schema des dualen Studiums an der Hochschule Niederrhein dar. Die Ausbildungsdauer variiert von Fachbereich zu Fachbereich und reicht von 2 Jahren bis zu 3,5 Jahren (Fachbereich Chemie). Ebenso sind im Hauptstudium verschiedene Modelle möglich von einer Vollzeit-Lösung über eine Betriebsassistenten-Zeit bis hin zu einem komplett berufsbegleitenden Studium im Fachbereich Wirtschaftswissenschaften.

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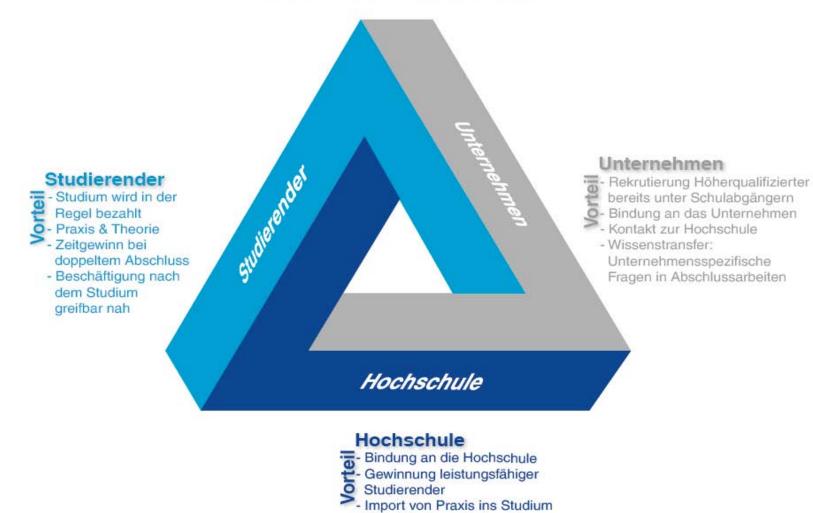
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### **Example: Bachelor of business administration**

- Dual alternative to the existing full-time bachelor program of our faculty.
- Students of dual programs are integrated into existing groups of full-time students.
- **Schedule of studies:** 
  - In the first two academic years:
    - 2 days at the university
    - 3 days in the company
  - Starting with the 5<sup>th</sup> semester the studies are extraoccupational.

### **Dual Programs – Concept and its origins**

### Vorteilsdreieck des Dualen Studiums



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### **Dual Programs – Fields of Studies**

- Chemical Engineering (1982)
- Chemistry and Biotechnology (2003)
- Electrical Engineering (2008)
- Mechanical Engineering (1982)
- Mechatronics (1982)
- Process Engineering (1989)
- Textile and Clothing Technology (2004)
- Business Administration (2011)
- Business Informatics (2011)
- Taxation and Auditing (2011)
- Industrial Engineering (2012)
- Health Care Management (2010)
- Therapy Science (2013)



### **Dual Programs – Cooperating (regional) firms**



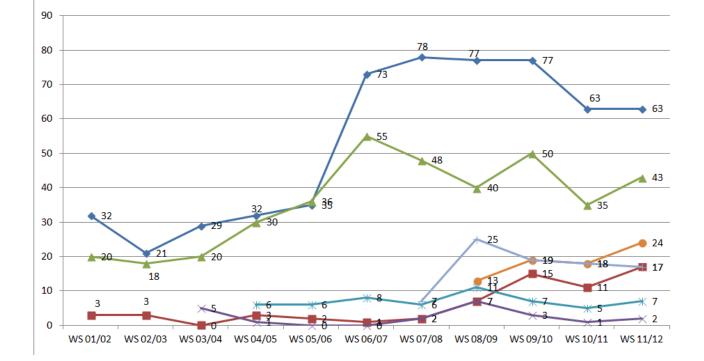


### **Dual Programs – Some facts and figures**

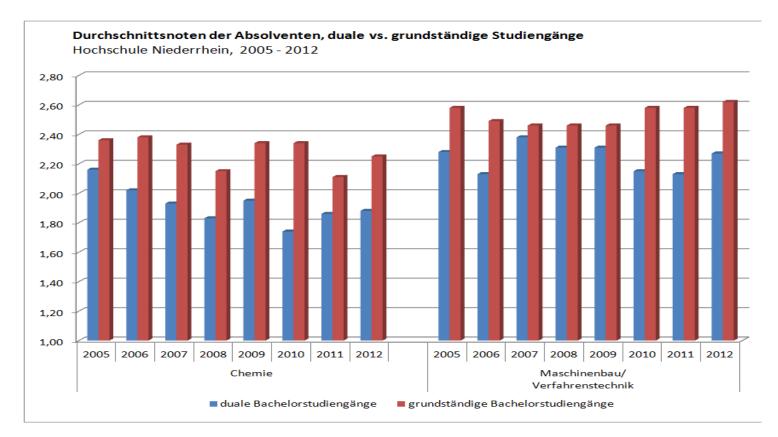
- HSNR invented Dual Studies (duales Studium).
- Nowadays this type of program nationwide is very popular.
- Attractive for firms: They get into a first contact with students, have the chance to test someone, can influence education.
- Attractive for students: In most cases they earn some money, get practical experience and come into contact with firms.
- Can or could be seen (or used) as a key instrument to keep the students in the region.
- 6,6% of all HSNR-students in 2012 and 7,7% in 2012/2013 are studying dual programs.

### **Development- Enrolement in Dual Studies**

Studienanfängerzahlen duale Studiengänge Hochschule Niederrhein. WS 01/02 bis WS 11/12



### **Average Grades- Dual Student vs. Ordinary Student**



# • Hints that dual Students have better grades! Explanation?



### Which Students study faster?

#### Quote "Absolventen in Regelstudienzeit (RSZ) : Absolventen gesamt" Hochschule Niederrhein Berichtsjahr: 2011 100,0% 80,0% 60.0% 40,0% 20,0% 0,0% BA **BA KIA** BA **BA KIA** BA **BA KIA** Maschine Maschine Verfahren Verfahren Chemie-Chemien-bau s-technik s-technik ingenieur ingenieur n-bau wesen wesen Quote: 35,7% 93,3% 28,3% 67,3% 50,0% 62,5% Absolventen in RSZ Quote: 56,3% 57,1% 93,3% 36,7% 90,9% 100,0% Absolventen in RSZ+1

### Students in dual programs get their graduates earlier.



### **Possible Regional Effects**

- Regional firms cooperating with us in the field of dual programs have the possibility to find qualified graduates.
- Lower brain drain compared to ordinary graduates because the firms often take on the graduates.



### **Thank you for listening!**



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