



AERES
HOGESCHOOL

EFFICIENT KNOWLEDGE TRANSFER IN DAIRY PRODUCTION IN THE NETHERLANDS

Jeroen Nolles

Head team Livestock & Entrepreneurship

Aeres University of Applied Sciences

Focus on recent developments

1. **Organisation Dutch Education system**
 - **Focus Applied University**
 - **Study program – competence based learning**
2. **Golden Triangle (in Dutch: “OVO Drieluik”)**
3. **How to organize ‘knowledge transfer in the future?’**
 - **‘Where to start’?**



1. Organisation Dutch Education System

Different levels -> introduction BaMa-structure

Study program for Applied Bachelor

- Competence Based Learning
- Competence = Knowledge x Skills x Attitude

Structure:

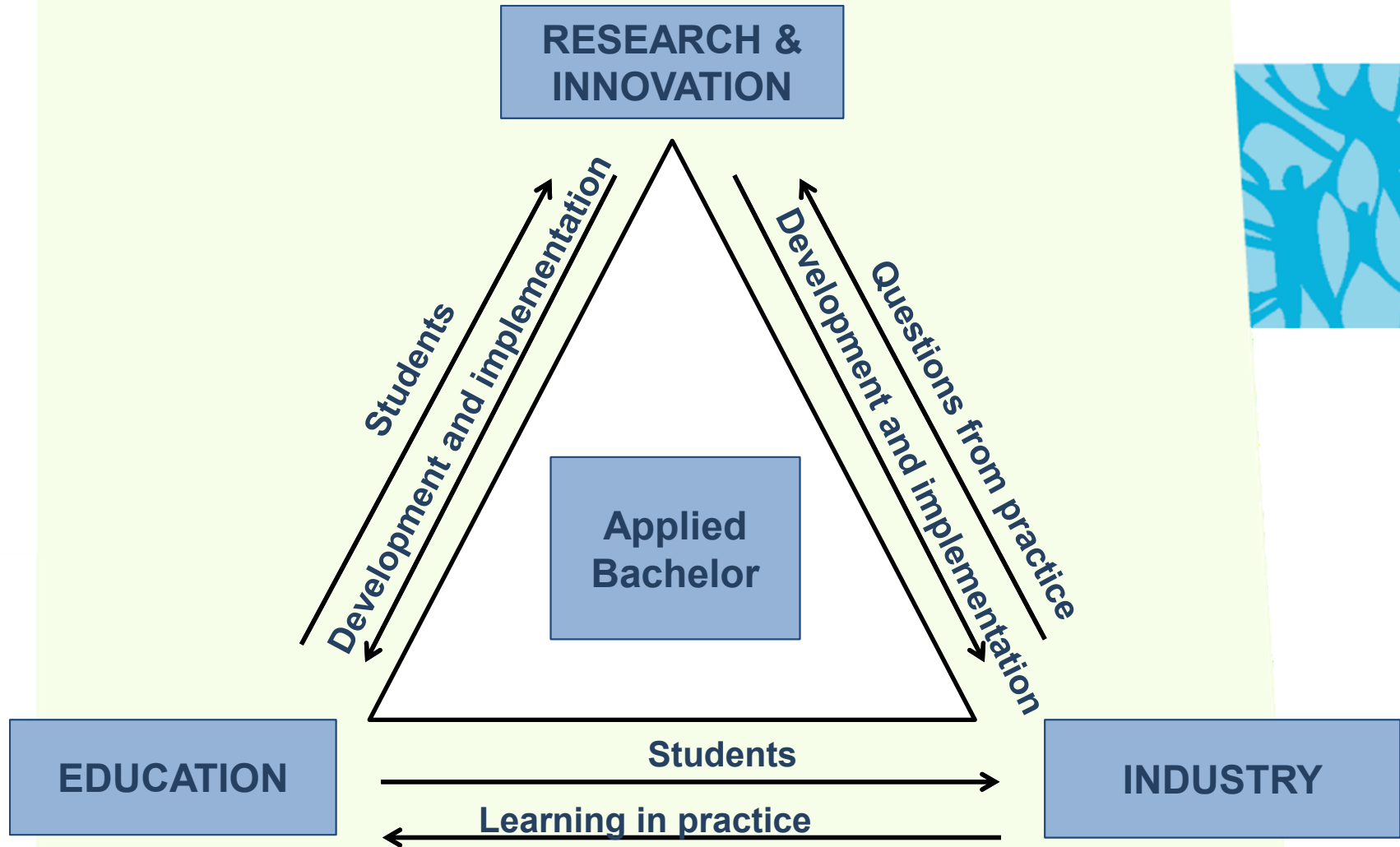
Job Task = learning in practice!

- Farm Analysis for Dairy Farmer
- Applied Research for Feed Company
- Farm successor report for student and family

Different classes, training etc about this task and context



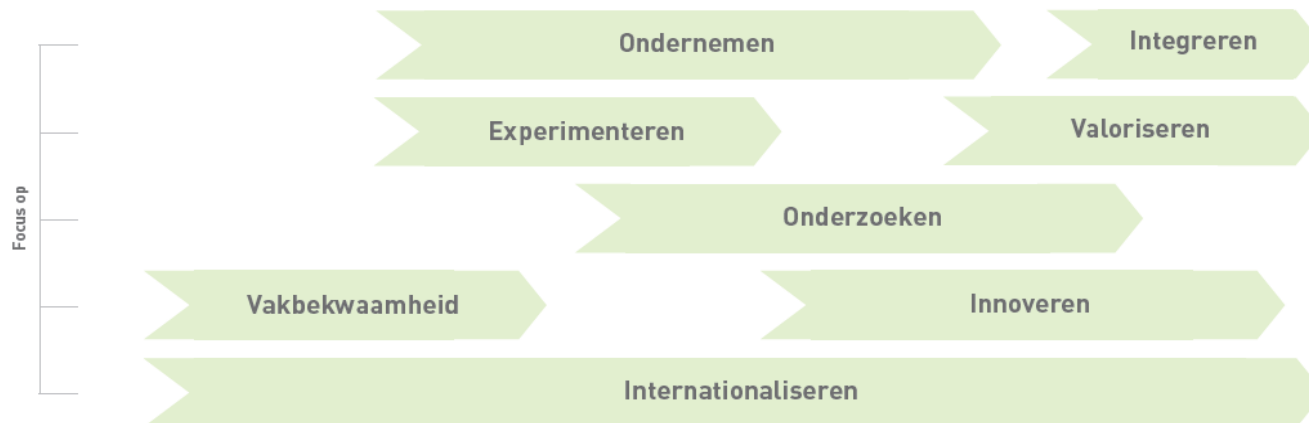
2. Knowledge circulation in 'Golden Triangle'



Step by step “learning in practice” program

PRAKTIJKLEREN AAN CAH VILENTUM

van praktijk naar beroep



Competenties	Niveau 1	Niveau 2	Niveau 2	Niveau 3	Niveau 4
Onderzoeksleerlijn	Niveau 1	Niveau 1/2	Niveau 2	Niveau 3	Niveau 3/4
Ondernemerschapsleerlijn	Vak	Management	Management/ ondernemerschap	Ondernemerschap	Business-development
Faciliteiten	Lab's, APC + kas, bedrijven (stages)	APC/kas ism bedrijven	Bedrijven, projecten, duale trajecten	Bedrijven, projecten, duale trajecten	Bedrijven, duale trajecten
Curriculum	Leertaken	Leertaken/ (bedrijfs)opdrachten	Leertaken/ bedrijfsopdrachten	Leer-werkplekken	Leer-werkplekken
Betrokkenheid bedrijven	Publiek				Privaat
	-				+

LEERJAAR

1

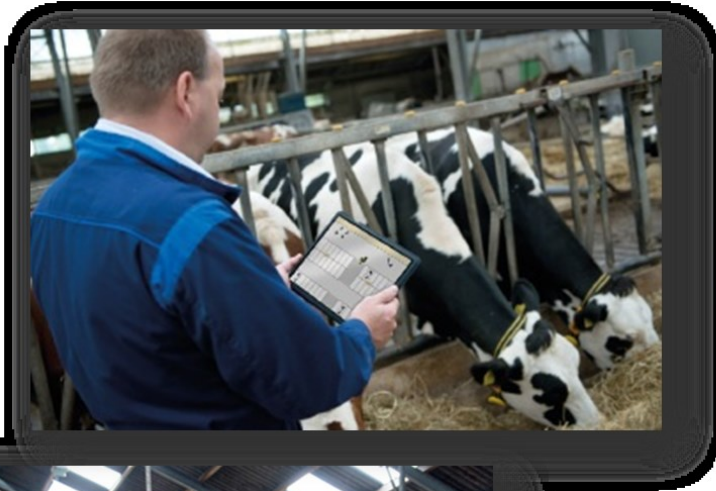
2

3

4

5

More applied research on Applied Universities (HBO) – Centre of Expertise



3. How to organise 'knowledge transfer in the future'?

GOAL: Future Focused Dairy Education

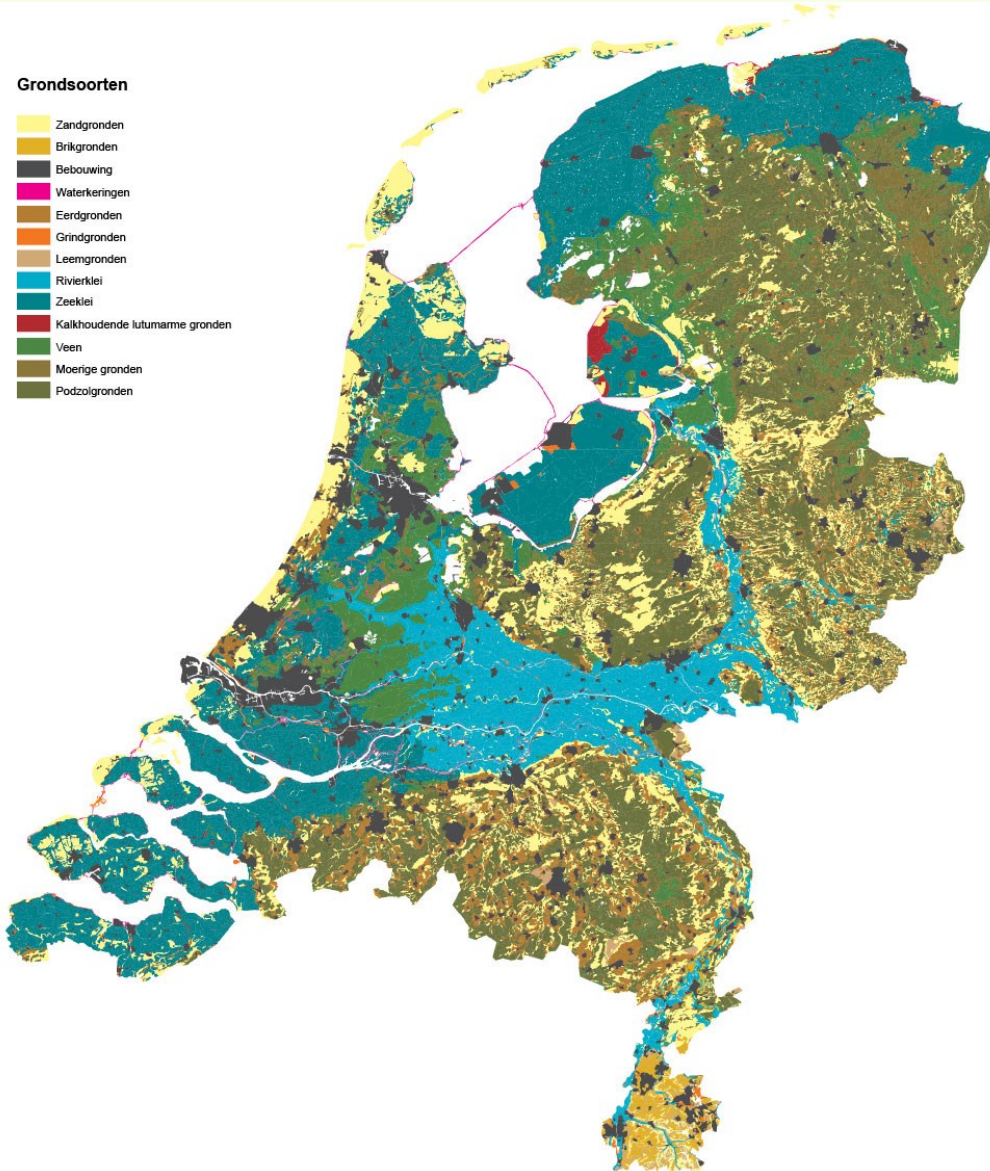
1. Start in the future -> + 8 years from now
2. Soil based knowledge
3. Learning from diversity



Soil type is the basis for a dairy farm

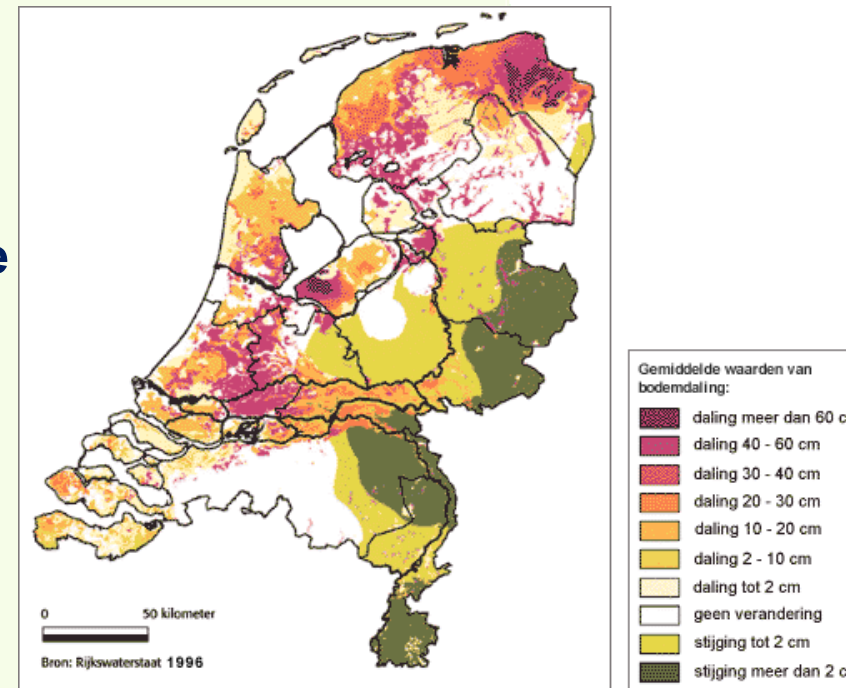
Grondsoorten

- Zandgronden
- Brikgronden
- Bebouwing
- Waterkeringen
- Eerdgronden
- Grindgronden
- Leemgronden
- Rivierklei
- Zeeklei
- Kalkhoudende lutumarme gronden
- Veen
- Moerige gronden
- Podzolgronden



Classification determines type of soil -> huge diversity of effects on farm level

- Clay, silt, sand and organic matter
 - Basis for possibilities with this soil
 - Type of crops (and competition in market)
 - Grazing
 - Basis for 'challenges'
 - Leaching, rewetting, drought
 - Subsidence ->
 - ... regulation
 - Basis Nutrient management cycle
- Basis for Farm Management
 - Unique solutions
 - Regional knowledge valuable

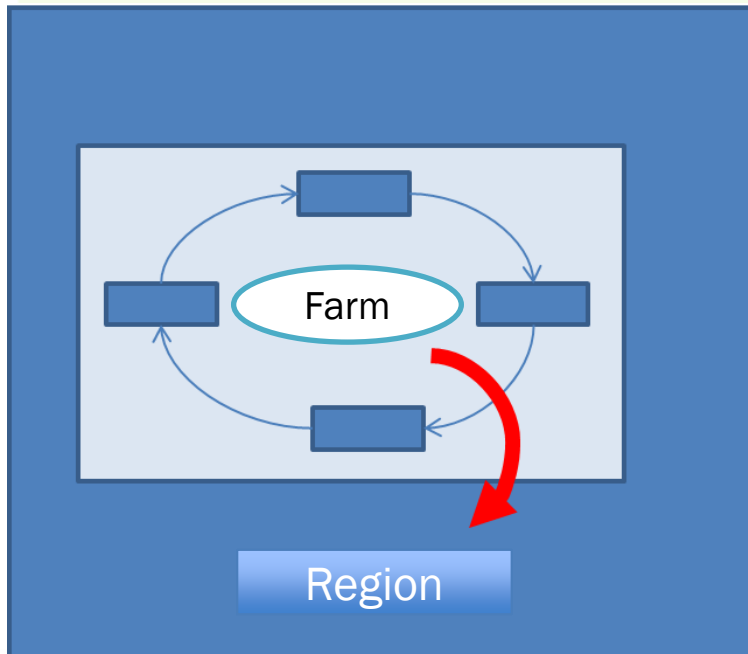


Learning from diversity in Education Farm!

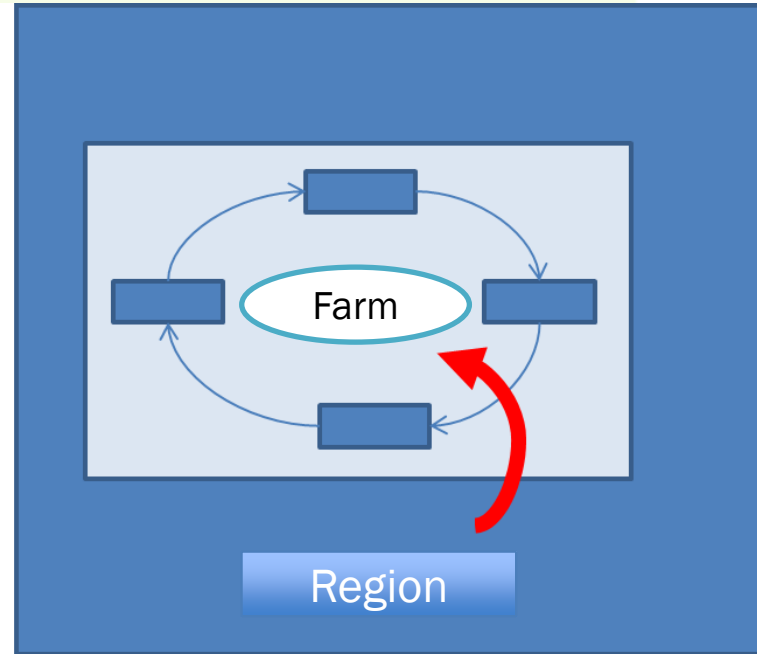
- Three farm types – different regions and soil types
- University farm needs diversity (!) – 4 x focus:
 - Feeding
 - Automatization
 - Grazing
 - Organic Dynamic
- Students are the farmers



Synthesis: Defenition of new starting point is necessary!



A



B

Conclusions

Move from efficient to effective knowledge transfer

Defenition of new starting point for applied education and research is necessary – less efficient, more effective for practice



Thank you!



AERES
HOGESCHOOL

