

**Making innovative use of
mobile learning to impart skills**

What is learning, what is knowledge? voortalent.nu

- Cognition: everything in your head that enables you to act (humming and cycling)
- Knowledge: everything that we can put into words (an account of a conversation, a handbook).

Cognition



Informal knowledge



Formal knowledge



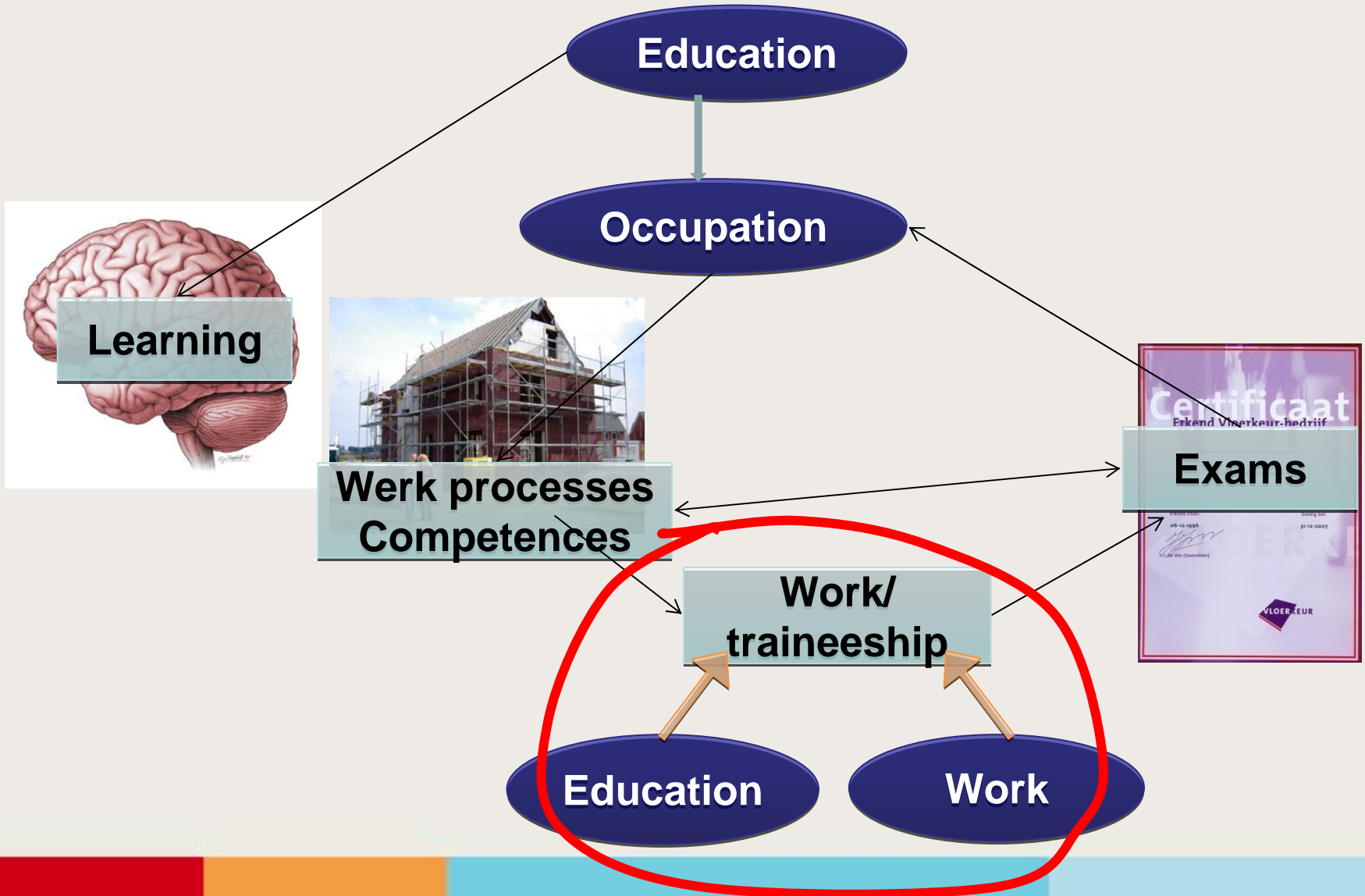
Concrete learning from and through a professional

Virtual learning from an organization

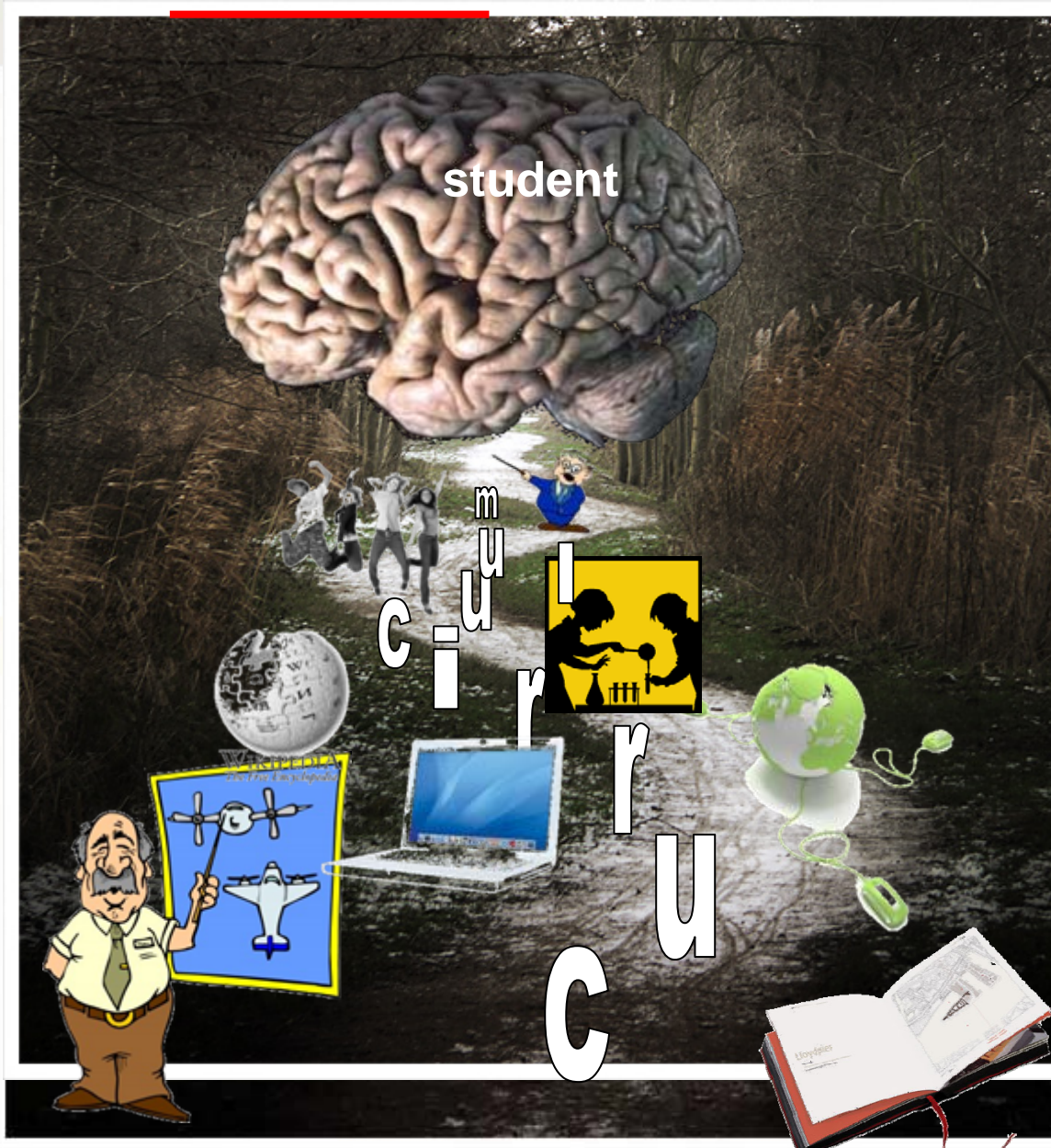
Teacher ↔ pupil, Hyves, Wikis, tacit knowledge management, post-relational databases, community learning, related knowledge

Encyclopedism, knowledge management, printing, academic approach, relational databases, indexed knowledge

Vocational education in the Netherlands [ortalent.nu](http://www.portalent.nu)



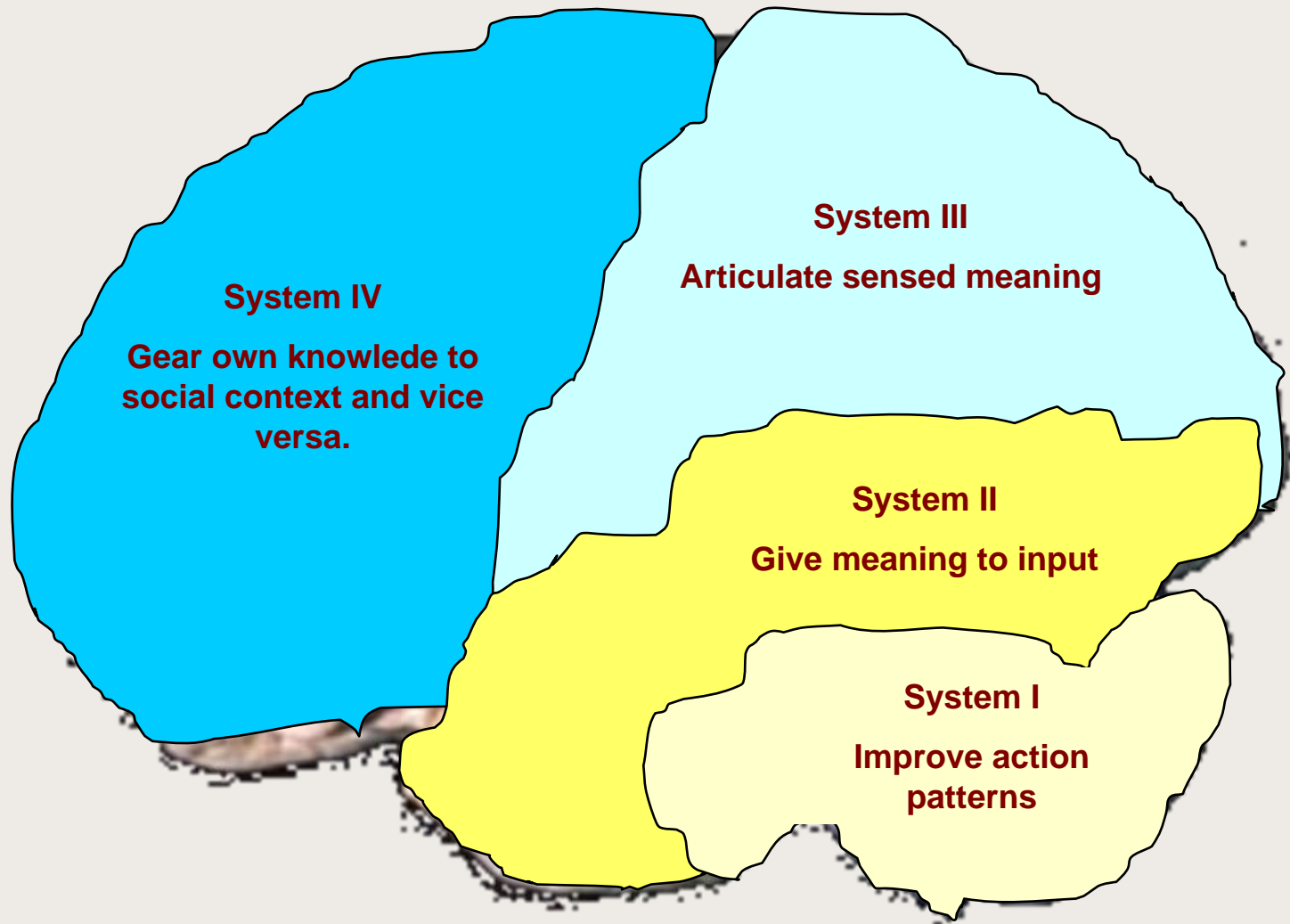
Purpose of primary process



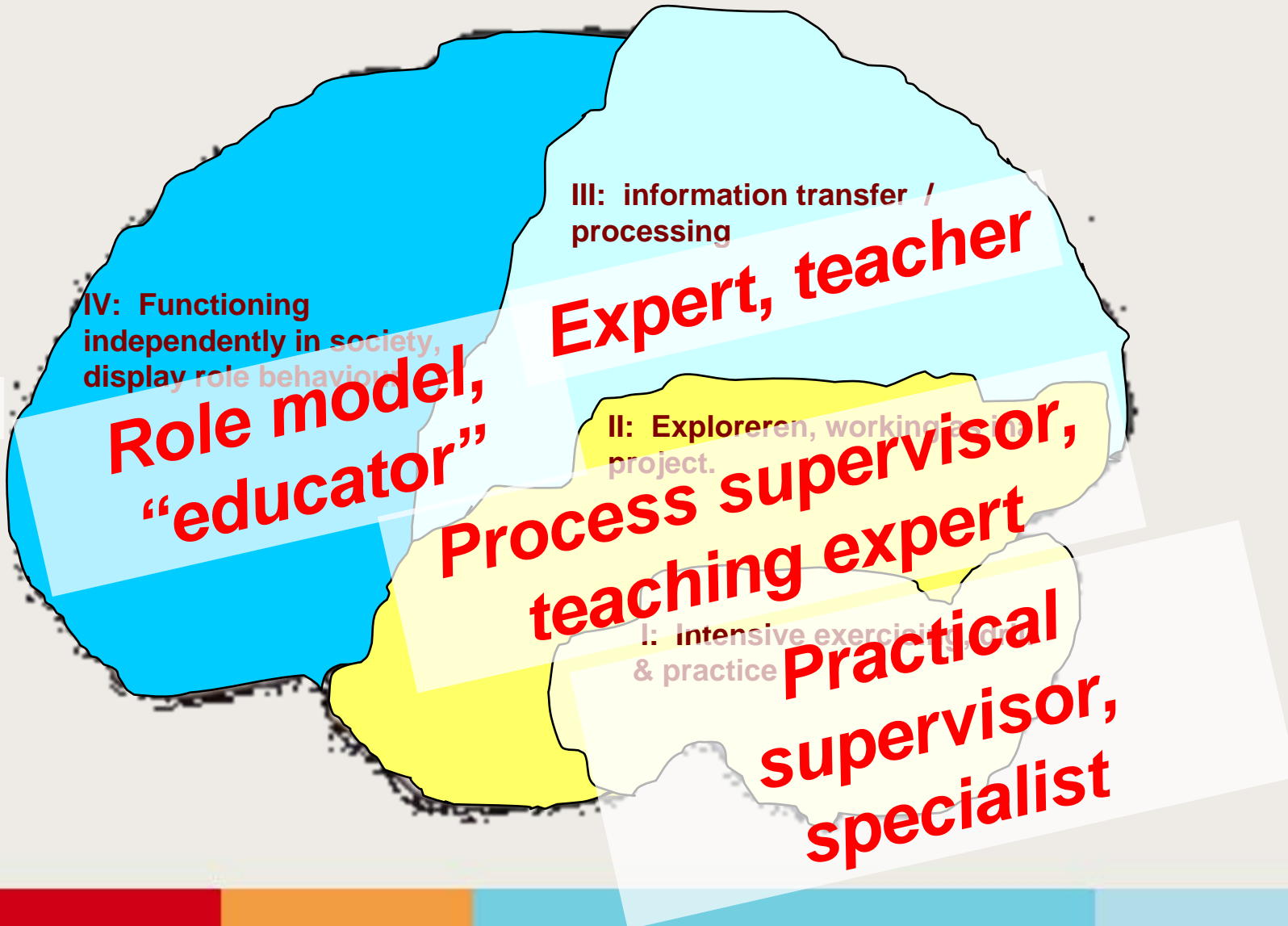
Our approach to teaching

There are four knowledge systems for teaching.
Use these four systems to teach.
Step into the student's world.

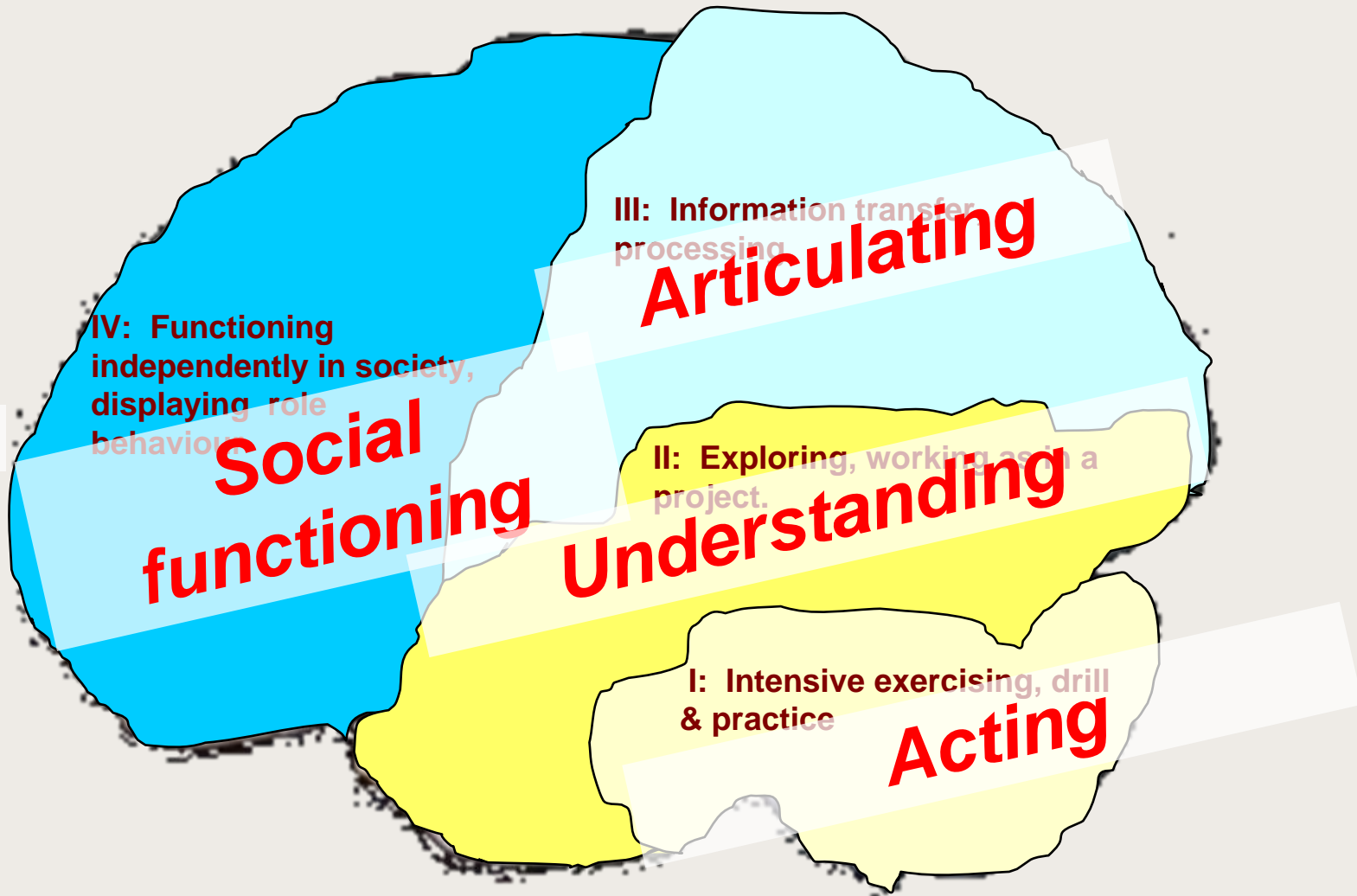
Student's four knowledge chains Tijdvoortalent.nu



Four requirements teachers must meet



Four types of competences



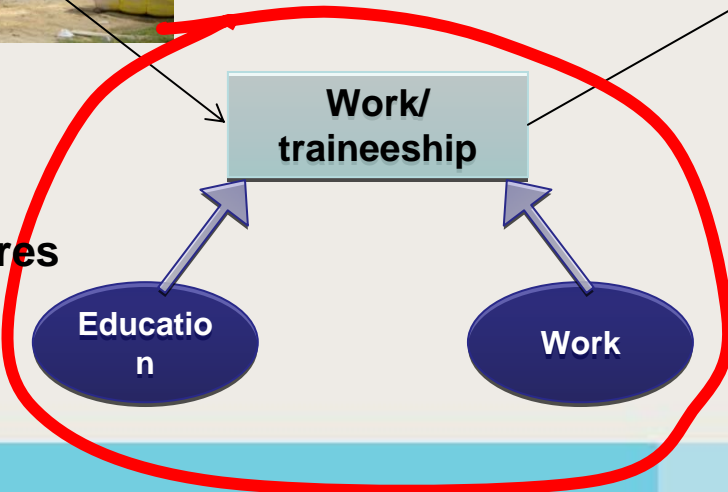
The bodywork occupational project

- There are lots of career opportunities in the vehicle bodywork business
- Students don't know this line of business and are more likely to choose a job in car business
- By introducing vocational education students to this line of work may increase the number of people who join the bodywork business
- The way this is done must not be too complex and must be in tune with student's world

What does the education look like?

Vocational education mobility

Occupation: panel beater, bodywork mechanic



Functions as employee in mobility sector

Assists in performing technical work

Cooperate and consult
Use materials and tools
Follow instructions and procedures

Work process:

Assists in performing work

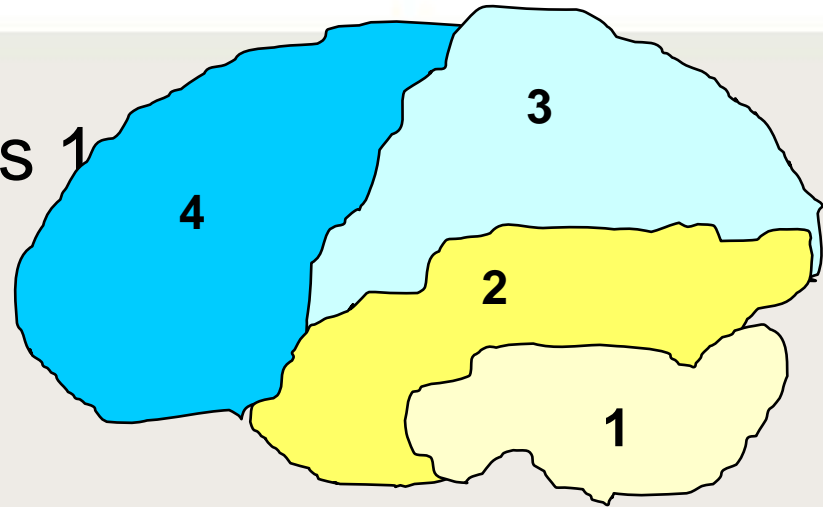
1. Prepares the work
2. Carries out the work
3. Completes the work
4. Reflects on the learning process

The bodywork case

Learning goals of work process 1

Assists in performing work

- The student makes a work plan
SYSTEM 1: ACT
- The student knows which tools and materials are necessary
SYSTEM 2: ARTICULATE
- The student discusses his planning with the teacher
SYSTEM 3: UNDERSTAND
- The student understands why his preparation was correct/not correct
SYSTEM 4: SOCIAL FUNCTIONING



Six tasks have been developed. In the tasks:

- the student is introduced to the work performed in the vehicle bodywork business
- the work process and competences are the central considerations
- the playstation portable (PSP) is used to impart theory, multimedia and knowledge (instead of a book!)
- the PSP is used to display the work process and the result

So how does it work?

- Teaching material was found for each task
 - A semacode printed on a sticker was affixed to the material
- The student uses the PSP to read the semacodes



A semacode

Education and the Sony playstation tijdvoortalent.nu

- Students get a Sony PSP (playstation portable)
- 'Stickers' can be found at a number of places in the workshop
- By pointing the PSP at the sticker you are shown something on the screen. This might be a film that explains what the bodywork business has to offer. Or an explanation of a task or a question....
- Students use this information to set to work on their own
- Students film themselves while performing the work and this is part of the end-product.

Sony Playstation reads semacodes tijdvoortalent.nu



= www.kpcgroep.nl



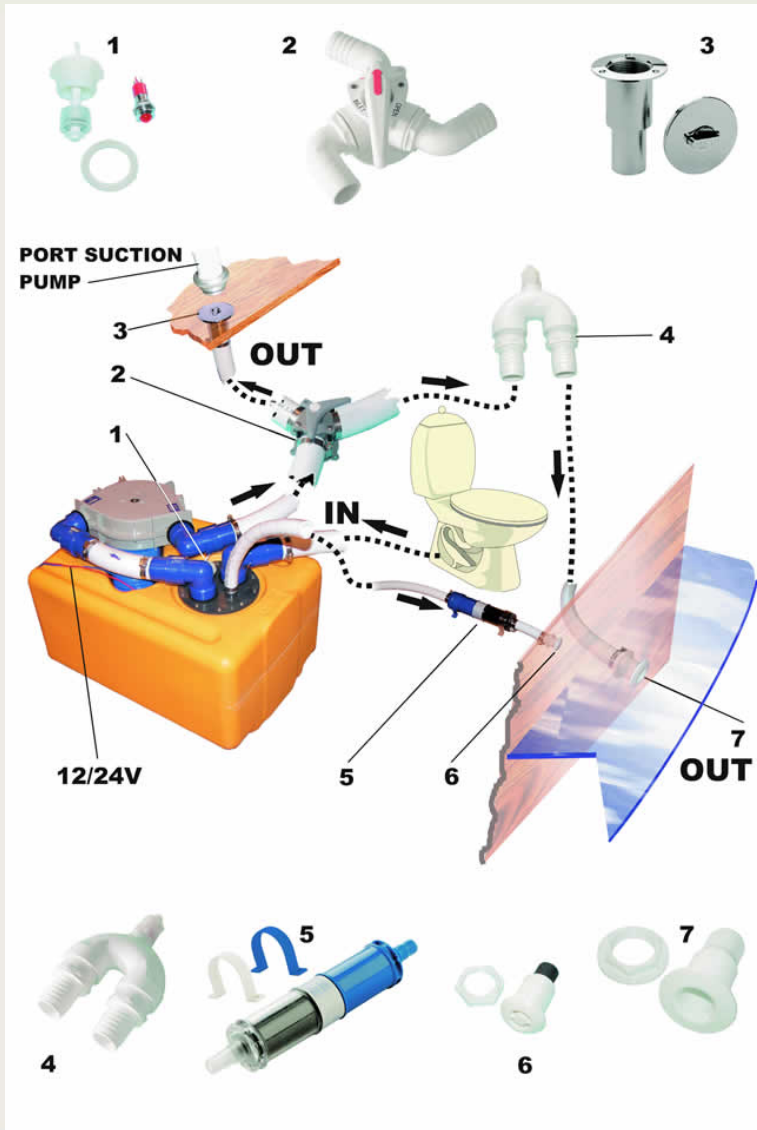
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Semacodes can be placed anywhere



- April-May: teachers carry out the tasks at their own school
- Late May: latest version of the tasks and the required tools will be ready
- June: semacodes will be worked out and linked to films and multimedia fragments
- August: complete package will be ready
- September/October: first training at new schools
- Juli 2010: evaluation and if necessary fine-tuning



Interested?

m.boonstra@kpcgroepl.nl