

Verbindend leren via authentieke taken

Hans Hummel

CHE PABO, 21 maart 2011

Presentatie

- Introductie
- Gildemodel voor verbindend leren
- Verbindend leren via authentieke taken: richtlijnen + illustraties
- Kenniscreatie via communities of practice: richtlijnen + illustratie
- Discussie en toepassing in routes

Opdracht + vragen (OK- en JK-route)

- Focus opdracht verschoven
(kenniscreatie → authentieke taken; ICT instrumenteel)
- Hoe zien rijke (werkplek)leeromgevingen eruit?
- Wat is rol feedback bij authentieke taken?
- Hoe kun je contextueel leren modelleren?
- Hoe kun je collaboratief leren realiseren?
- Geef concrete voorbeelden
- Waar lopen jullie tegenaan?



Voordelen gilden



- Maatwerk (context)
- Samenwerking (collaboratie)
- Oefening
- Motivatie

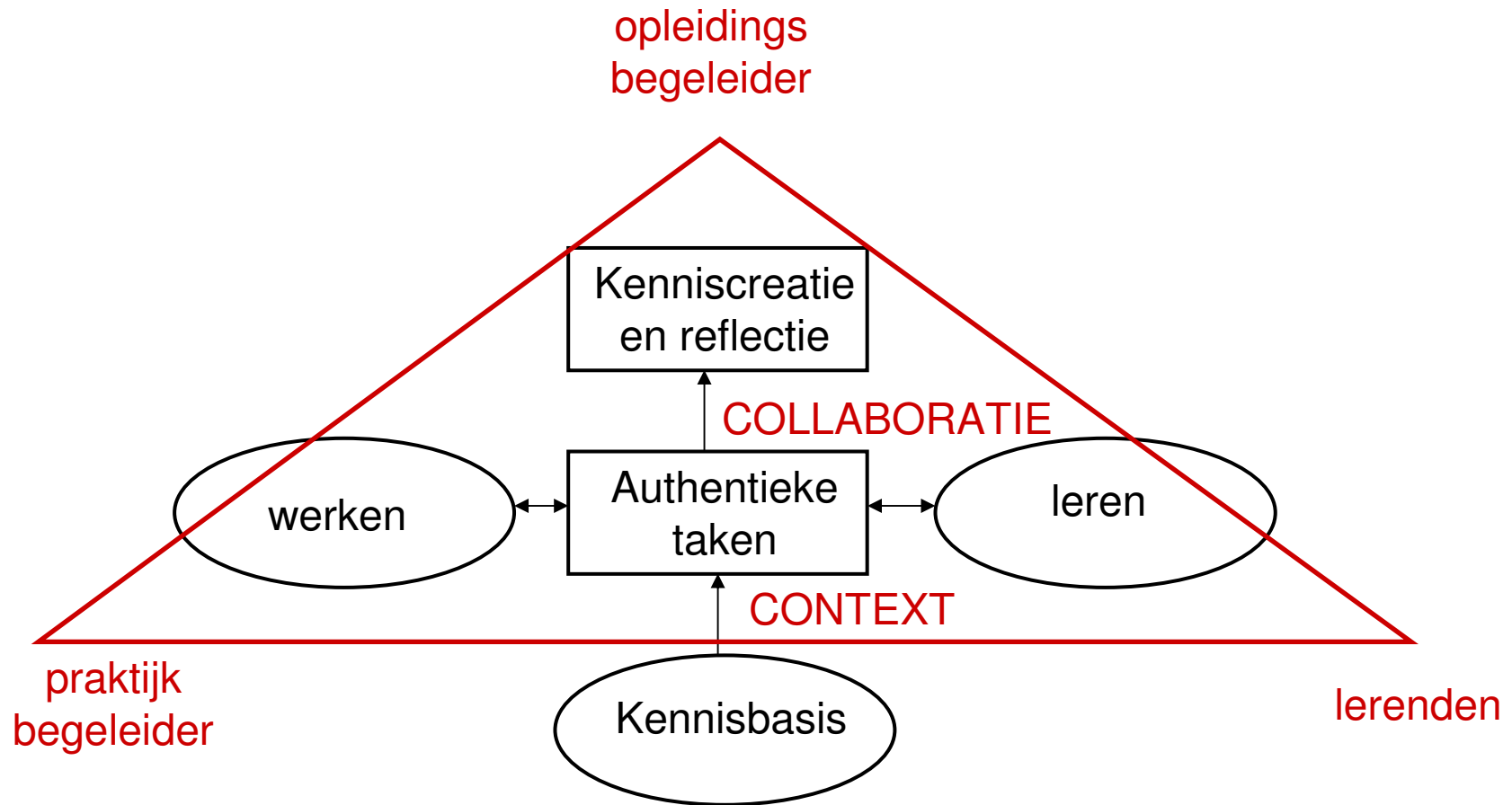
Voorwaarden



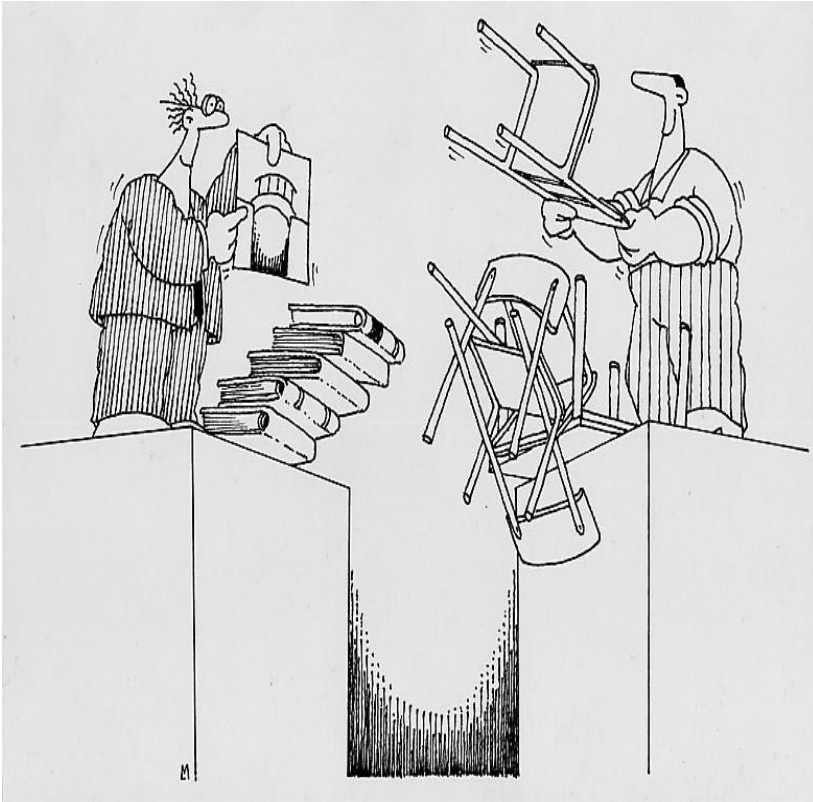
- Identiteit altijd bekend
- Gelijkheid in rollen
- Vraag gestuurd aanbod
- Alles zichtbaar
- Taakuitvoering in context
- Uitwisselbare taken
- Samenwerking en FB
- Flexibele Communicatie
- Ervaring → Onderwijs
- Betrokken bij toetsing
- Blijvende toegang

Kernprocessen werkplekleren

(Hummel, 2010)



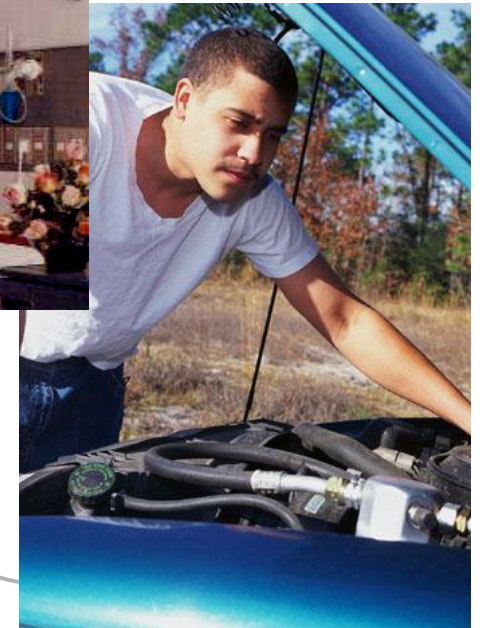
Verbindend leren via authentieke taken in context



- Transfer
- Context
- Competentie
- CHE: dialogisch leren

Authentieke taken en scenarios

Realistische en levensechte probleem situaties, waarin lerenden als actor op de werkplek participeren en worden geconfronteerd met de gevolgen van hun handelen

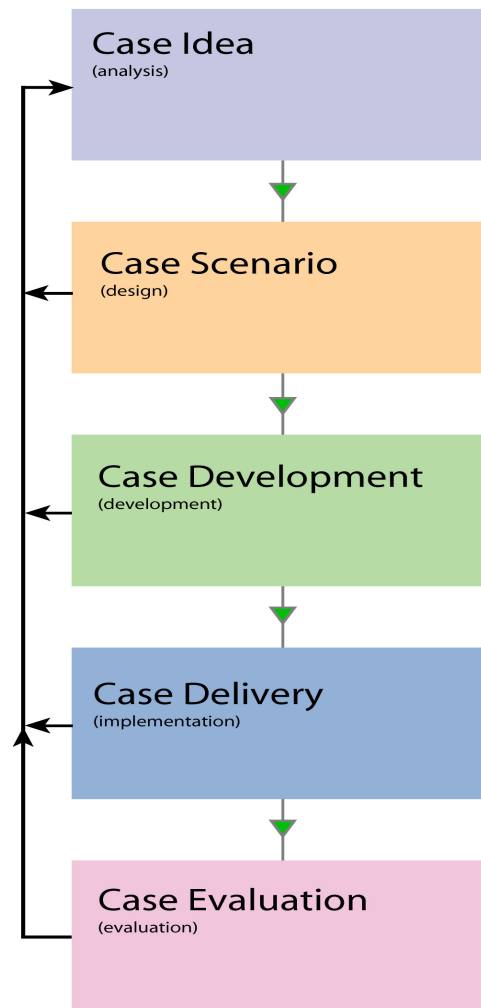


Kenmerken authenticiteit

(Herrington, Oliver & Reeves, 2003)

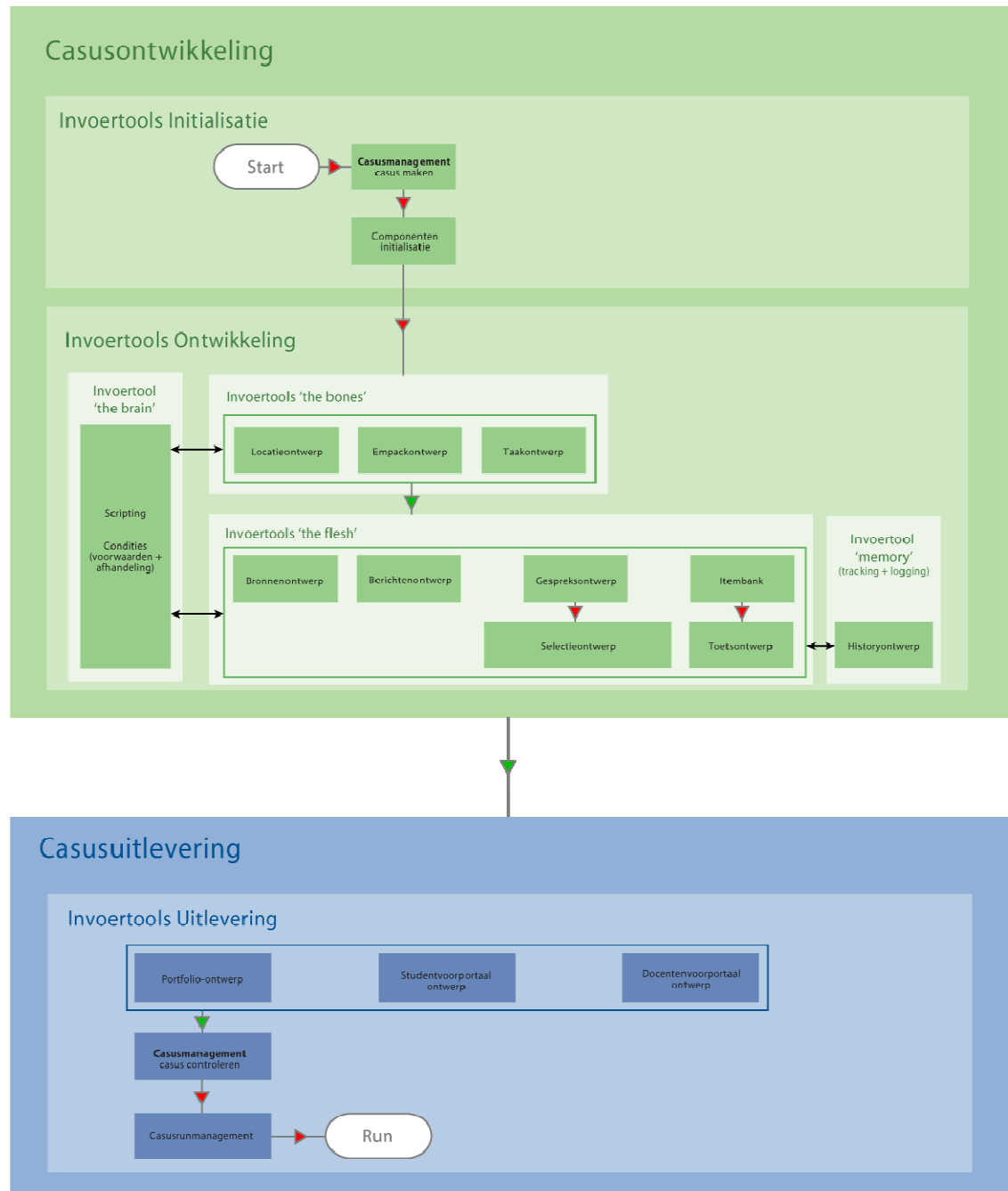
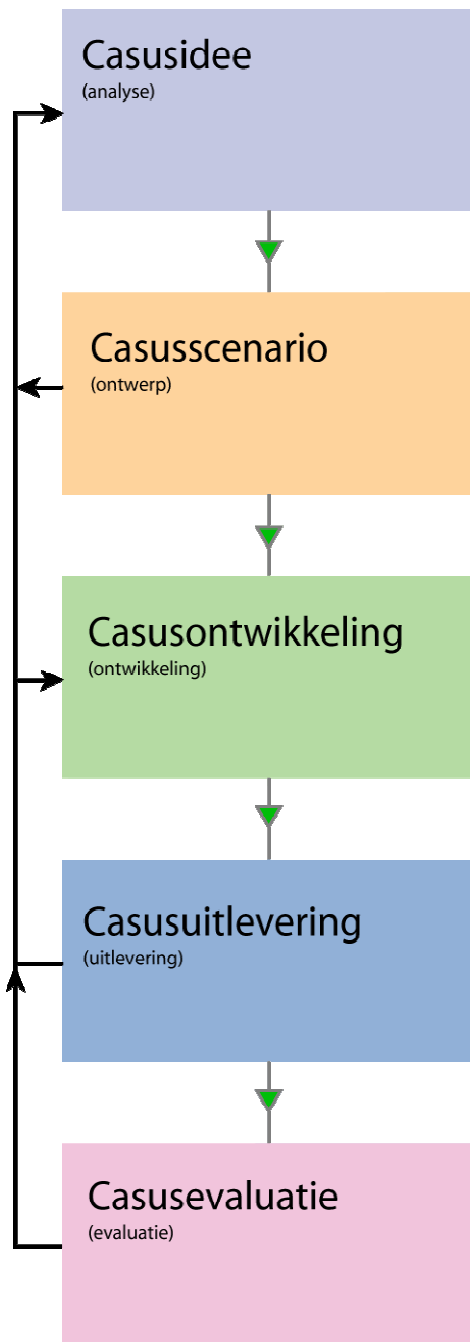
- beroepsrelevantie (real-world relevance);
- zelfwerkzaamheid bij taakuitvoering (ill-defined tasks, learners define subtasks themselves);
- complexiteit van taakuitvoering (complex tasks, time consuming);
- meerdere perspectieven (different perspectives, variety of resources);
- mogelijkheden tot samenwerking (opportunity to collaborate);
- mogelijkheden tot reflectie (opportunity to reflect);
- multi-disciplinariteit (integrating different subject areas, beyond domain-specific outcomes);
- authentieke toetsing (real-world assessment);
- dilemma's en meerdere oplossingen (competingsolutions, diversity of outcomes);
- bruikbare oplossingen (polished products)

Ontwikkelen authentieke taken



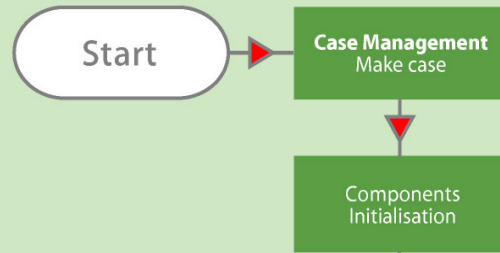
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Subject	Questions
Case embedding	For which courses, curricula and institutions will it be used?
	Is it a stand-alone item or used with other instructional materials?
	What study load and time interval is expected?
	How many credit points earn students by successfully completing it?
Case content	What is the main complex cognitive skill?
	Do other complex cognitive (sub) skills need to be acquired?
	What subject matter domain(s) are involved?
	What prior knowledge and skills are expected for enrolled students?
	What is central to the case (for example: patient, equipment, process)?
	What are physical locations in the case? (try to map them to virtual spaces)
	What case characters are relevant?
	Do students need to proceed via a stepwise procedure?
	What kind of activities do students need to perform for acquiring the main complex cognitive skill?
	Is there a strict order for the compulsory tasks?
	Are there compulsory tasks, non-compulsory tasks and what determines this?
	Is redundant information provided, or is everything strictly needed?
	How realistic and authentic is the case?
	If students can redo a case: will this be the same case or a variant?
	Can students undo former decisions?
	Are different learning routes and tasks for different students offered?
	What kind of cooperation is needed by students?
	Do students have different case characters?
	Do students have active roles?
	Do teachers have active roles?
	What aspects induce and sustain interest and motivation?
	What unforeseen circumstances are incorporated?
	Is competition incorporated? How do students get rewarded for excellent performance or behaviour?
Students' progress	How do students discover not yet having acquired the main complex cognitive skill?
	How can students monitor their progress?
	How is it checked if students have acquired the main complex cognitive skill?
	Is summative assessment included and are its results used in formative assessment?
	Which students' progress figures are to be used by teachers during run time?
Contact with peers	Should contact between students be encouraged?
	Should students see if peers are on line, when they have been on line?
	Can students compare their progress with peers?
Using media	Will existing material be used, is new material needed?
	What media genres are used (e.g., interviews, docudrama, movie, animations)?
	What media assets are needed and what are their costs?
Case delivery	Is the number of students within one run restricted?
	When can students enrol for a run?
	Is it possible to change the case after starting a run?
(embedded) Support	How will technical support be provided?

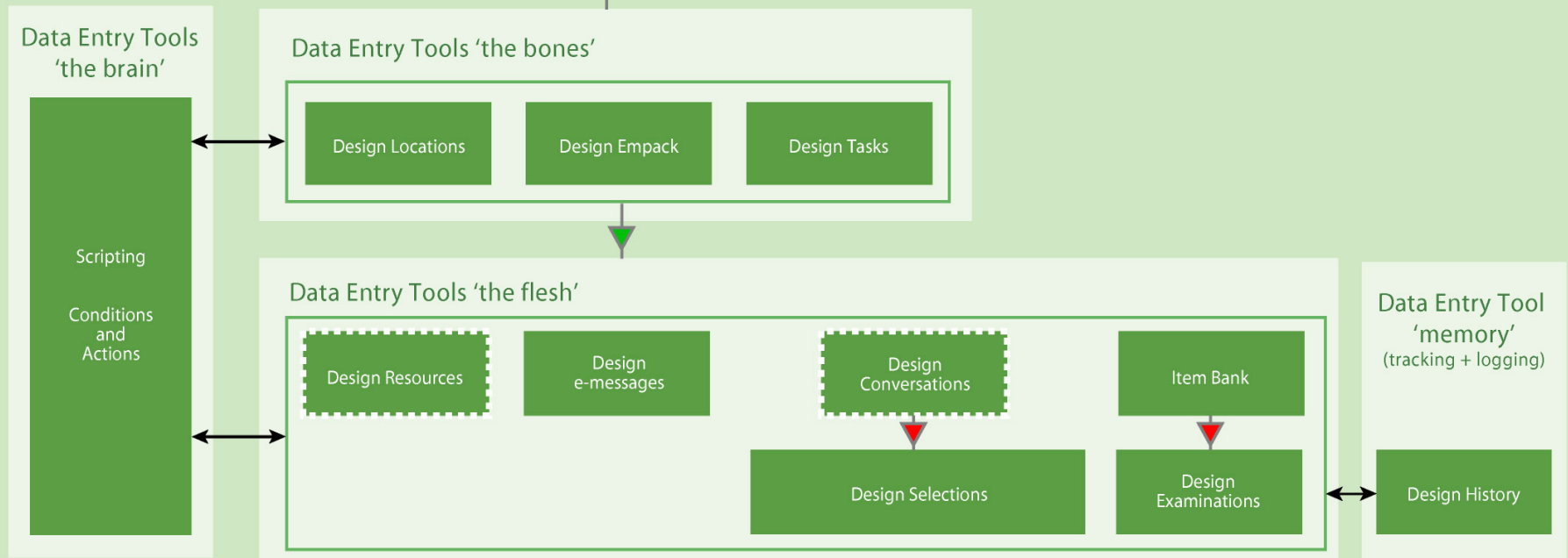


Case Development

Data Entry Tools Initialisation



Data Entry Tools Development



Voorbeeld: Casus Zorgstructuur

e-mail

Mail tekst

Van: stagebegeleider
stageopdracht

Beste student,

Zoals ik je al heb verteld, is jouw stageopdracht het onderzoeken van de zorgstructuur van onze school. Doe dat aan de hand van de volgende punten:

1. visie van de school op het gebied van leerlingenzorg
2. overlegvormen binnen de school
3. taken van de interne begeleider
4. taken van de groepsleerkracht
5. taken van de directeur
6. rol van andere personen en instellingen die bij de leerlingenzorg betrokken zijn
7. toetsing/dossiervorming
8. samenvatting en conclusie

Vertrekkend vanuit de hoofdvraag 'Hoe ziet de zorgstructuur van De Waterwilg eruit?', maak je in je tutorgroep richtvragen; dit zijn vragen die je allemaal moet beantwoorden om de hoofdvraag te beantwoorden. Als je deze vragen hebt geformuleerd, ga je ze beantwoorden met de informatie die je via mijn collega's hebt verkregen aangevuld met informatie van het Internet/Sherpa Pro of andere literatuur. Tevens ga je op de donderdag, je vaste stagedag, de informatie van de waterwilg vergelijken met de situatie op jouw stageschool. Heb je de vragen beantwoord, en de situaties vergeleken, dan weet je genoeg voor de rapportage op vrijdag in de tutorgroep.

ok

PDA



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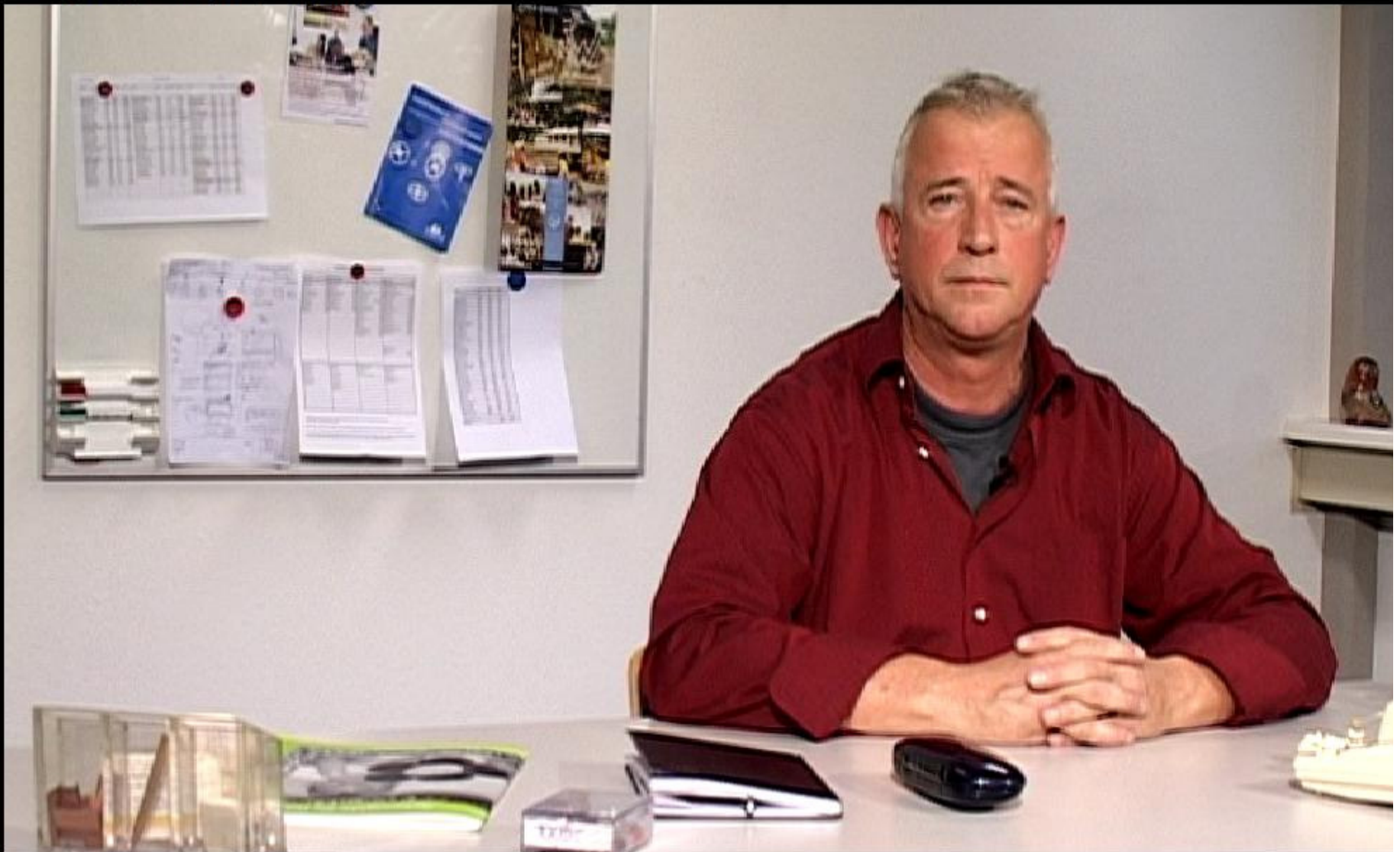


sluit

klemblok



stage begeleider (Zorgstructuur)



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kladblok



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Kunt u mij aangeven hoe ik de opdracht aan moet pakken?
Kunt u mij zeggen wat ik moet verstaan onder zorgstructuur?
Wat bedoelt u precies met het in kaart brengen van de zorgstructuur?
Kunt u iets meer vertellen over de school?
Wat mag ik van u verwachten?
Hoeveel tijd krijg ik voor de opdracht?






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Notitie: consultatieve leerlingbegeleiding

Student kan op elk moment (tijdens een gesprek, een demonstratie, een klasseregistratie, etc.) aantekeningen maken. Daarvoor gebruikt hij of zij het klasblok. De aantekeningen worden automatisch overgezet naar het logboek en daar geordend.

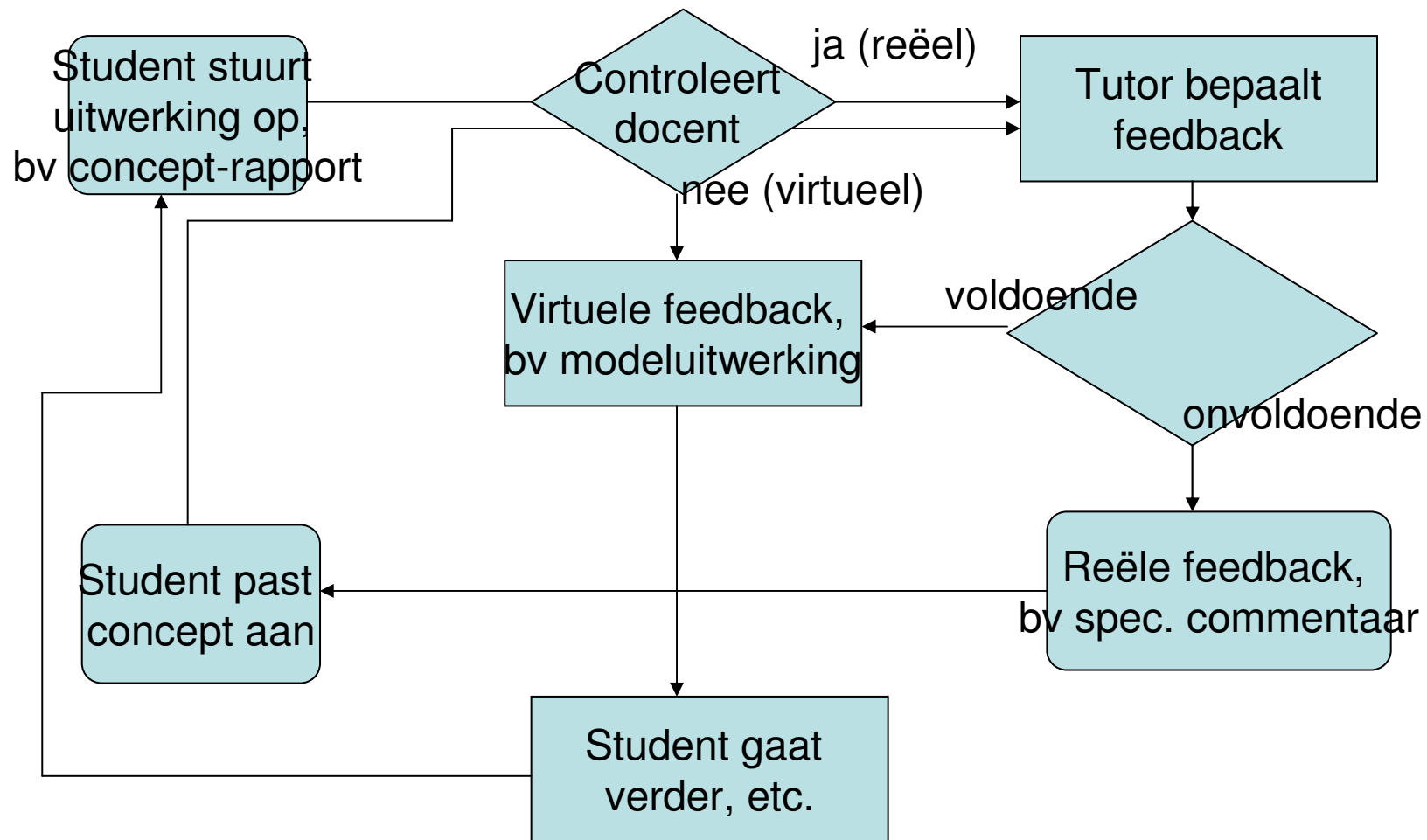
kladblok



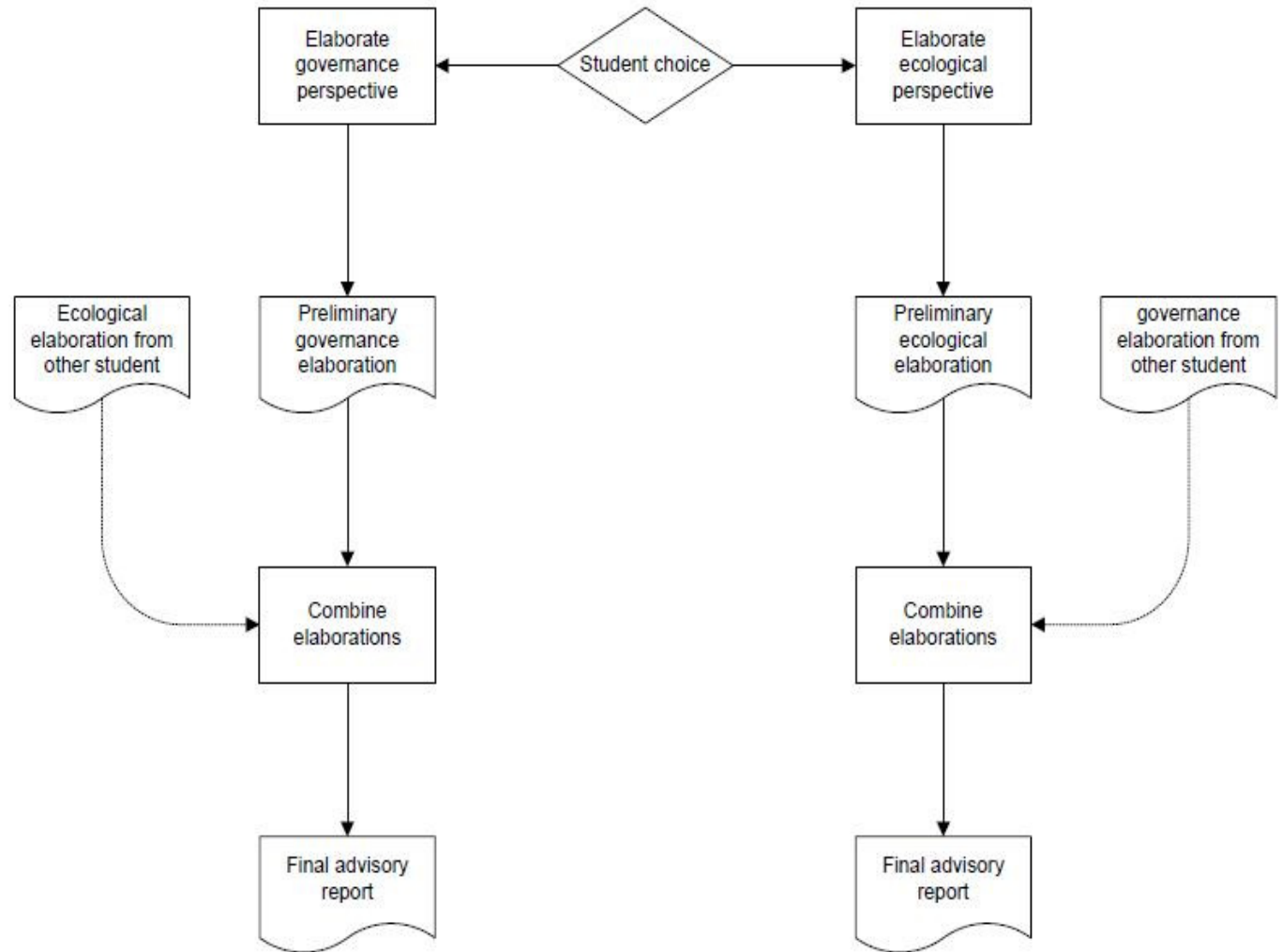
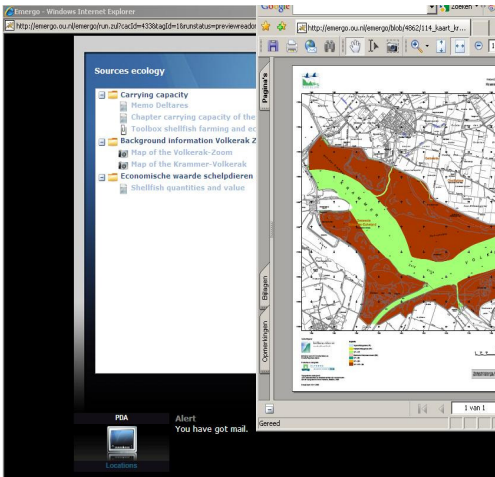
Voorbeeld casus 'Virtualisatie'

- Begin http://emergo.ou.nl/emergo/run.zul?cacld=745&tagld=1&runstatus=previewreadonly&rgald=1620&rutld=&lang_lang
- introductie coach [http://emergo.ou.nl/emergo/run.zul?cacld=745&tagld=1&runstatus=previewreadonly&rgald=1578&rutld=&lang_lang=](http://emergo.ou.nl/emergo/run.zul?cacld=745&tagld=1&runstatus=previewreadonly&rgald=1578&rutld=&lang_lang)
- verslag sturen [http://emergo.ou.nl/emergo/run.zul?cacld=745&tagld=1&runstatus=previewreadonly&rgald=1611&rutld=&lang_lang=](http://emergo.ou.nl/emergo/run.zul?cacld=745&tagld=1&runstatus=previewreadonly&rgald=1611&rutld=&lang_lang)
- tutor-mail [http://emergo.ou.nl/emergo/run.zul?cacld=745&tagld=1&runstatus=previewreadonly&rgald=2148&rutld=&lang_lang=](http://emergo.ou.nl/emergo/run.zul?cacld=745&tagld=1&runstatus=previewreadonly&rgald=2148&rutld=&lang_lang)

Virtuele / reële feedback flow



Voorbeeld collaboration flow



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Voorbeeld begeleiding van het expliciteren van schoolkennis en werkplekkennis

(Mazereeuw & Boersma, 2010)

- oriëntatie op de werkplek en de deelnemers vanuit een comfortabel vertrekpunt
- oriëntatie op de doelen van de praktijk (stap 1, 2, 3, 4)
- expliciteren relatie van doelen, werkzaamheden en het te leren onderwerp (stap 1,2,3,4,5)
- perspectief op de werkplek ontwikkelen (stap 6 en 9)
- werkplekjargon expliciteren en ontwikkelen (stap 7 en 8)
- schooljargon expliciteren via casus (stap 10 en 11)
- expliciteren schooljargon via eindopdracht (9, 11 en 12)
- verbinden van werkplekjargon en schooljargon (13)

	Op de werkplek	Op de school	Feedback & effect
Stap 1	Rondleiding i.r.t. leerdoel		
2	Bekende handelingen bespreken & uitvoeren	Reflectie op handelingen, eerste opdrachten	Koppelen leerdoel en activiteit & kennis aan bedrijfsdoel → erkennen praktisch belang kennis
3			
4		Overzicht handelingen, introductie nieuwe termen	
5	Nieuwe handelingen <i>benoemen</i> & uitvoeren		Koppelen doelen aan handelingen → meer behoefte handeling bekwaamheid
6			
7	Uitgevoerde handelingen <i>beschrijven</i> , overzichtshandeling uitvoeren		
8		Overzichtshandeling bespreken en koppelen aan leerdoel	Termen en handelings volgorde controleren → ervaren structuur & perspectief werkplek
9			
10	Uitgevoerde handelingen <i>verantwoorden</i> , en casus uitwerken		Vakjargon uitbreiden, met schoolse termen verantwoorden → expliciete werkplekkennis
11		Bespreken en verklaren van de handelingen	
12			
13		Schoolse termen en vakjargon met elkaar verbinden	Gebruik schoolse termen en vakjargon voor logisch <i>verklaren</i> → bewust gebruik in context

Stap 1
2
3
4
5
6
7
8
9
10
11
12
13

Op de werkplek

Op de school

Feedback & effect

Rondleiding i.r.t. leerdoel

Bekende handelingen bespreken & uitvoeren

Nieuwe handelingen *benoemen* & uitvoeren

Uitgevoerde handelingen *beschrijven*, overzichtshandeling uitvoeren

Uitgevoerde handelingen *verantwoorden*, en casus uitwerken

Bijvoorbeeld melkproductie en voortplanting op het veebedrijf

Overzicht handelingen, introductie nieuwe termen

i.h.g.v. voortplanting b.v. tochtig zien, insemineren, drachtcontrole

Overzichtshandeling bespreken en koppelen

i.h.g.v. veehouderij b.v. een koekalender invullen voor drie koeien

i.h.g.v. veehouderij b.v. embryotransplantatie, naderende geboorte

Schoolse termen en vakjargon met elkaar verbinden

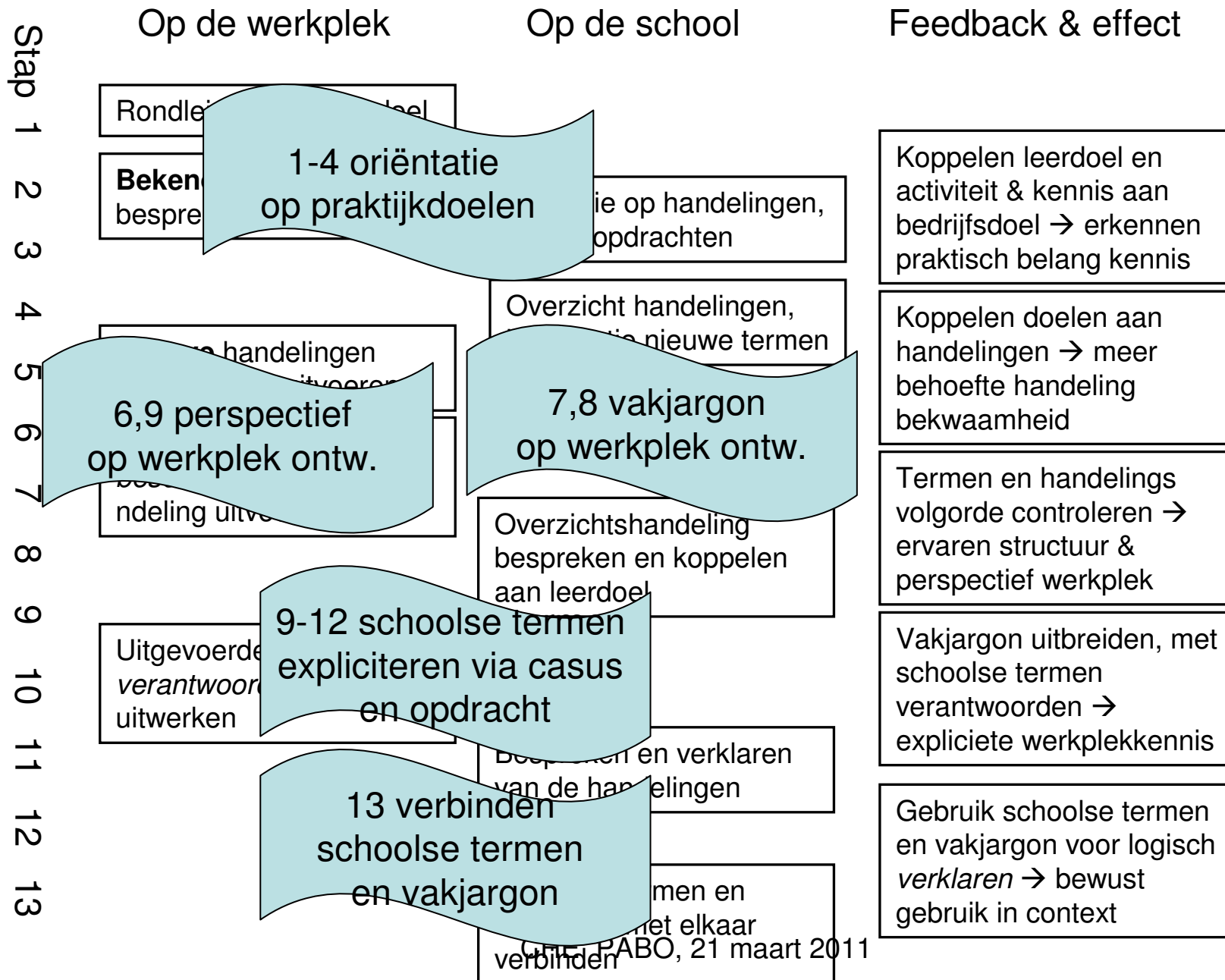
Koppelen leerdoel en activiteit & kennis aan bedrijfsdoel → erkennen praktisch belang kennis

Koppelen doelen aan Bijvoorbeeld tussenkalftijd, vruchtbaarheidscyclus

Termen en handlingsvolgorde controleren → ervaren structuur & perspectief werkplek

Vakjargon uitbreiden, met schoolse termen verantwoorden → expliciete werkplekkennis

Gebruik schoolse termen en vakjargon voor logisch *verklaren* → bewust gebruik in context



DEMO 2

salon (Student 1 Demonstrator)

X



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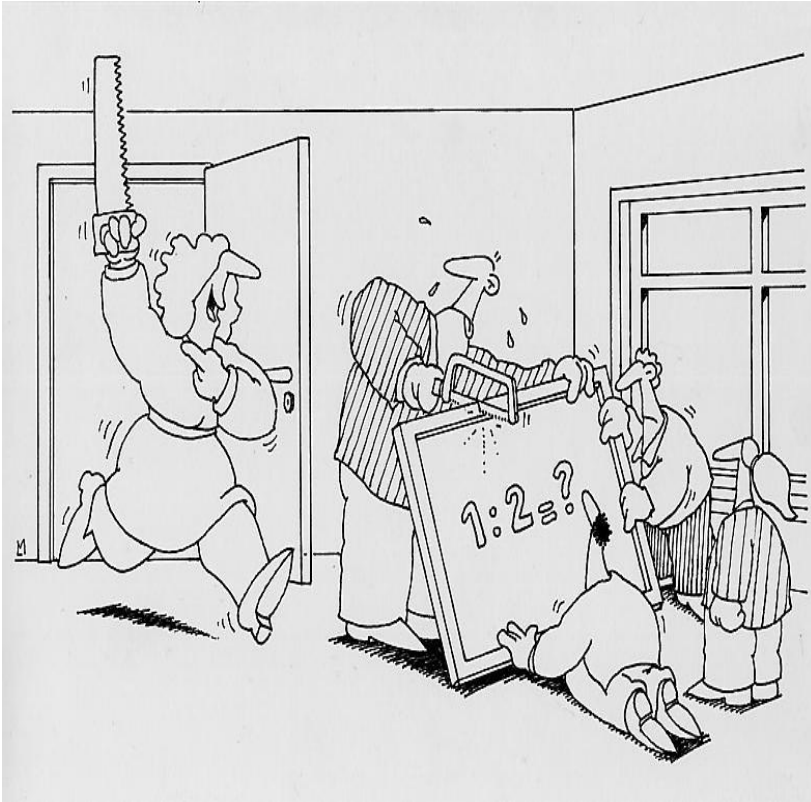
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Kenniscreatie via collaboratie binnen Communities of Practice



- Socialisatie
- Ervaringsgericht leren
- Kenniscreatie en reflectie
- CHE: triologisch leren

Principles to cultivate CoP

(Wenger, 1998)

1. Design for evolution.
2. Open a dialogue between inside and outside perspectives.
3. Invite different levels of participation.
4. Develop both public and private community spaces.
5. Focus on value.
6. Combine familiarity and excitement.
7. Create a rhythm for the community

Succescriteria CoP

(Blunt, 2001)

- Common purpose: Gedeelde doelstelling, fundamentele rede van bestaan
- Shared space: plek die mensen bij elkaar brengt
- Group identity: grenzen wie tot de community hoort en wie niet
- Membership profiles: deelnameprofielen
- Cultuur van bereidheid tot kennisdeling
- Gedragscode
- Regelmatige feedback momenten
- Technologie is een middel

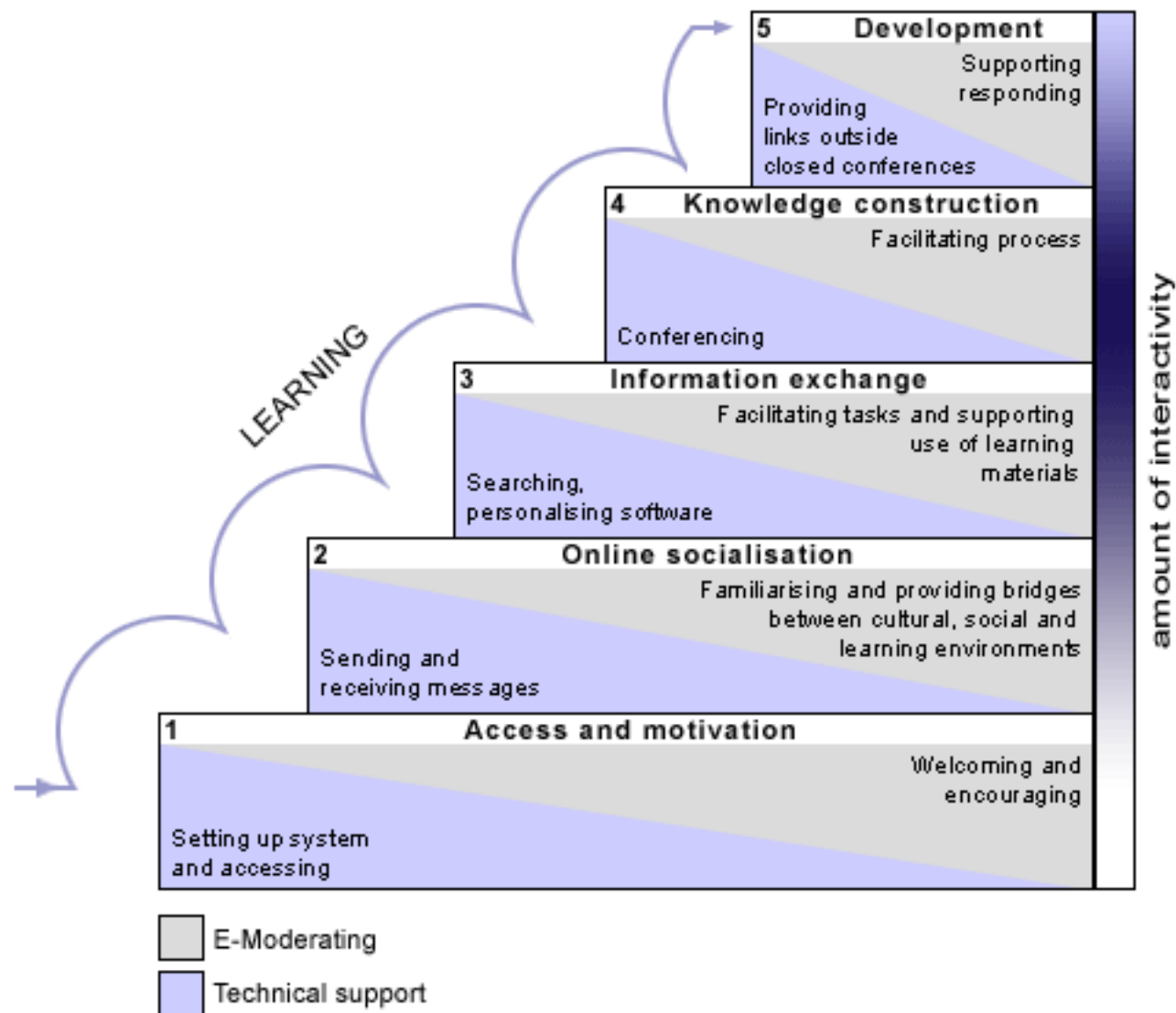
Start(I)ing points

(Wetterling, 2010)

- Heeft iedereen wel dezelfde **verwachtingen** van sociale netwerken en het gedrag daarbinnen? In hoeverre moeten deelnemers CoP meerwaarde (h)erkennen?
- Wie bepaalt de 'wetten' voor kennisdeling in een CoP? En wie handhaaft die wetten? **Monitoring**
- **Motivering**: hoe krijg je bijv. docenten actief binnen een CoP? En hoe houd je ze actief? en nog belangrijker: hoe krijgt men het gevoel iets nuttigs te doen?
- **Validering**: in hoeverre bepaalt de 'naam' van iemand binnen de CoP wat waar is en wat er gebeurt?
- Aansluiten bij tools die deelnemers al kennen/gebruiken
- Grootte v.d. CoP. Is er een minimum / maximum aantal deelnemers?
- Concrete resultaten: wat, wanneer, hoe?

Five stages

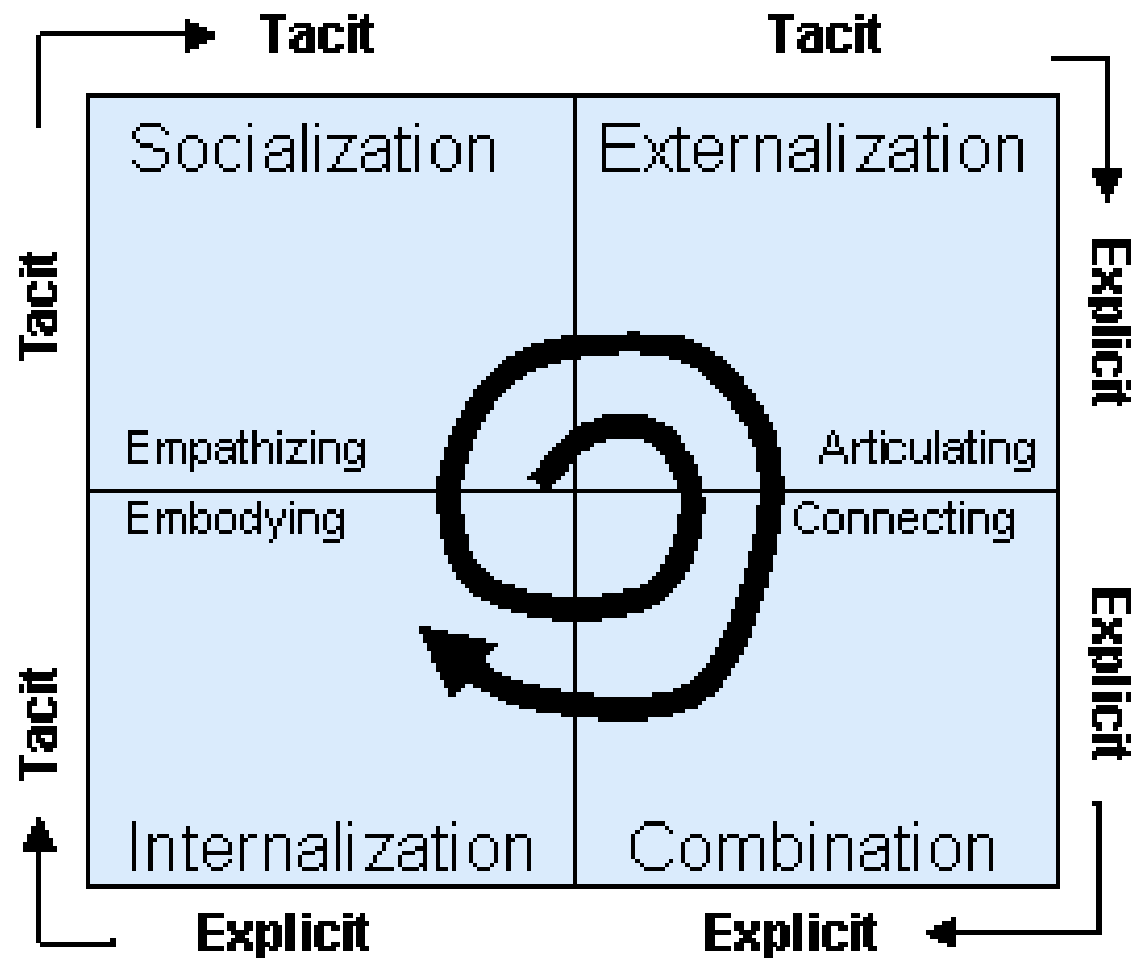
(Salmon, 2000)



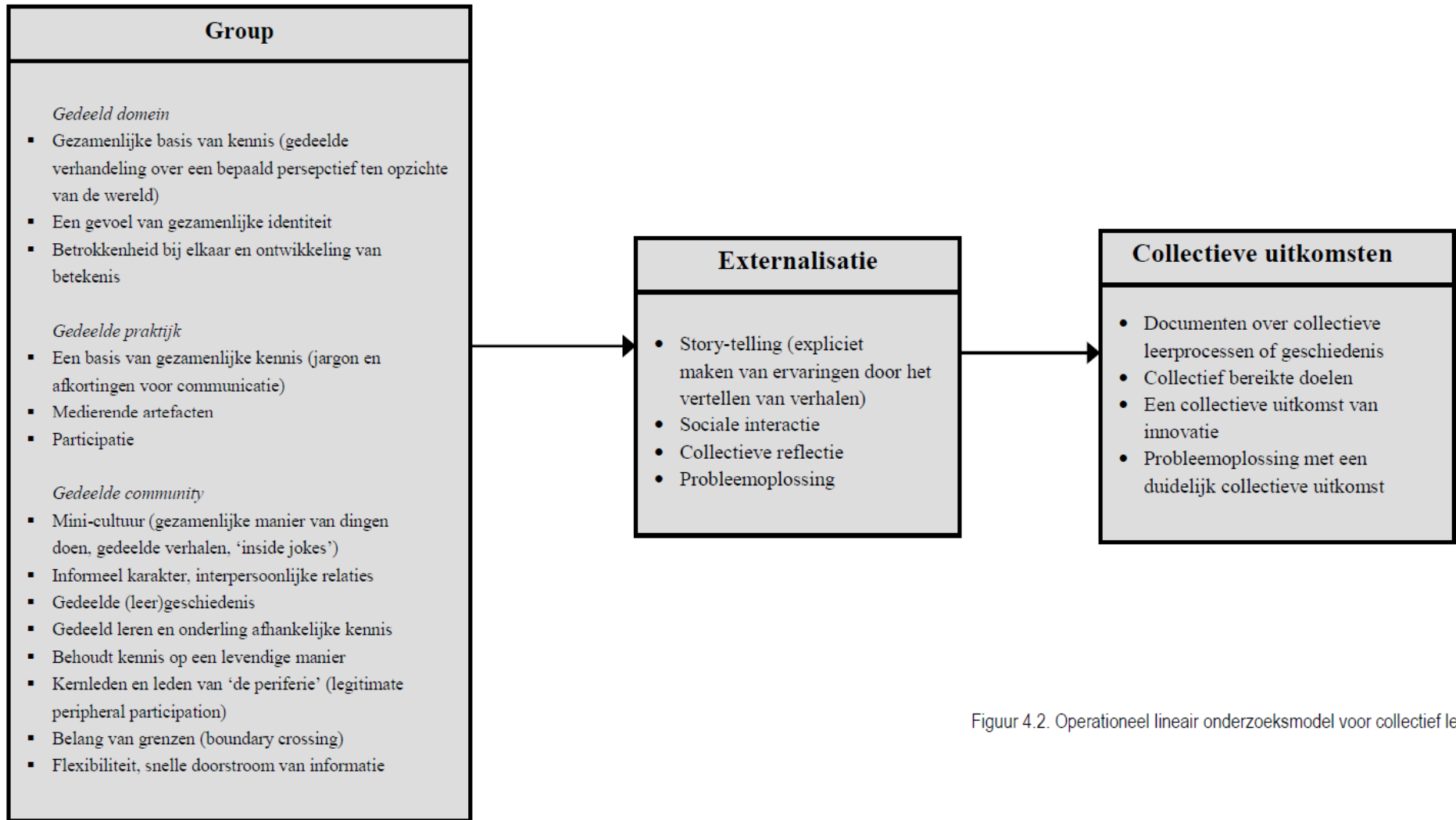
schema: gewenste functionaliteiten van een digitale werkomgeving

ontwikkelstadia innovatieve CoP's		gewenste functionaliteiten digitale werkomgeving	fasering innovatieve CoP's		
kennis ontwikkelen	kennis delen	ervaringen uitwisselen	nieuws & agendarubriek	communityvorming kick-off &	functioneren als community
			duidelijke indeling in mappen		
			document upload		
			discussie forum		
			reageermogelijkheid op documentniveau		
			kenniskaarten deelnemers		
			fullscreen-/printfunctie		
			e-mailnotificatie		
		categorisering op metadata/trefwoorden	zoekfunctie: op metadata, titel, samenvatting, fulltext	communityontwikkeling	
		mogelijkheid om onderdelen af te schermen			
		versiebeheer			
		toegang/autorisatie externen door CoP deelnemers			

The SECI model (Nonaka and Takeuchi)



Belang SM voor externalisatie

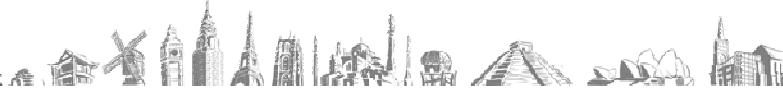


Figuur 4.2. Operationeel lineair onderzoeksmodel voor collectief leren.


Voorbeeld CoP: MySchoolsNetwork:

Worldwide online educational community

www.myschoolsnetwork.com

MYSchoolsNetwork 

HOME MY PROFILE MY SCHOOL ALL SCHOOLS EVENTS LOGOFF

 **NHL Hogeschool (The Netherlands)**


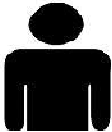
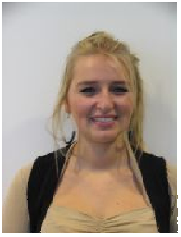
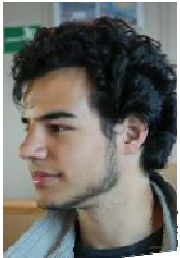


With approximately 10,000 students, NHL University is a medium sized university of applied sciences, offering higher professional education programmes which prepare you for particular professions. Universities of applied sciences are more practically oriented than research universities. Students who successfully complete the programmes are awarded a Bachelor's degree, and for some programmes there is an option to continue studying and obtain a Master's Degree.




The different institutes
The NHL offers a wide range of study programmes in a variety of fields. The NHL has four institutes: the Institute of Healthcare and Welfare, the Institute of Technology, the Institute of Education and Communication and the Institute for Business and Management Studies. Together the institutes offer about 50 Bachelor's Degree programmes. For exchange students there's a great variety of courses to choose from.

Key unific campus
At the moment, NHL University is building a new campus in Leeuwarden. In academic year 2009/2010 all the institutes of the university are scheduled to be combined at one location on the new campus. By concentrating on one location, the NHL is creating a new, modern and dynamic learning environment for students and employees. It will have state-of-the-art equipment like wireless internet (wifi), modern study areas, a café, a great canteen for food and drinks, a theatre, an internet lounge, a big parking lot and much more!

[Edit your school profile](#)

Pupils and teachers of this school

lisaanne de jong   **katja hoekstra** 

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Peer consultation scenario

- Group of trainee teachers have weekly sessions
- Each student proposes a classroom dilemma
- One dilemma is chosen by the group
- Group asks short factual questions
- When dilemma and circumstances are clear student first formulate an analysis of the dilemma
- Then they formulate their advice
- The owner of the dilemma gives his reaction
- The session ends with a discussion about possible transfer of analysis and advice

Students upload their workplace dilemmas and vote for the most interesting....

15/02/10 - Submitted by **Ismael Ismail**




Dilemma Internship During the first week of my internship I came across students who found my skin-colour rather fascinating. I found out that I wa..

[Click here to view t](#)


29.17%

15/02/10 - Submitted by **lisanne de jong**



You, as a teacher, are walking in the classroom to supervise during a test. When students have finished, they're allowed to do something else, such as...

Submitted by **Patrick Barendregt**



A student comes in the class and directly starts to shout about a fight she was in, and what she's going to do to the girl she was in a fight with. ...

[Click here](#)

0%


15/02/10 - Submitted by **Annelot Vaatstra**



In class, one student didn't bring his books, while I already started he was constantly talking to other students and therefore he disturbed the other...

[Click here to view the complete contribution](#)

15/02/10 - Submitted by **Gerda van Mierlo**



The students have to practice their oral exams. Some of the students are obviously messing about. (Hitting each other with paper etc.) The teacher te...

[Click here to view the complete contribution](#)

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15/02/10 - Submitted by **kim kootstra**




A trainee at my school was given a lesson and she walked around the classroom giving attention to her students. When she was standing i of h...

[Click here to view the complete co](#)

33.33%


15/02/10 - Submitted by **kimberley piek**



Classroom Dilemma During the lesson one student was allowed to wright his answer on the white board. Soon or later more volunteers wanted to wrih...

[Click here to view the complete contribution](#)

4.17%



speaking exercise with a cla: I needed a volunteer and picked a boy in the back of t classroom. He was one of th 'cool k...

[Click here to view the complete contribution](#)

16.67%


Students discuss with each other and ask questions....



While I'm teaching a crying girl after putting to them to work. I reasoned that he knows more to talk to. So he is trying to happen. Then, at once, I hear a girl hitting her severely. She can't make her way to this student because my coach is holding her back. Still she manages to grab a book and she throws it towards another female student. She is absolutely outrageous. My coach almost has to drag her outside, leaving me with an ... excited class.

This is a contribution by [Alex de Jong](#) for the event [Classroom dilemma for trainee teachers](#) and has been submitted on 22/03/10.



Alex de Jong 



Ismael Ismail 
29/03/10 12:02

My advice would be:

Obviously she is angry about something... It is up to you to find out why, as it happened during YOUR lesson. Please do give the students time to talk about it as it otherwise may interrupt the rest of your class.

So two things:

1. find out what happened with her
2. try to talk to the students about it.



Priscilla Strijdhartig 
29/03/10 11:48

Obviously this girl was having problems with another student. My question is: have you even noticed some bickering between the two or maybe overheard something about why these students were fighting? I think it is important to know what was going on. I understand that you wanted the teacher to talk to the student because you think he knows her better, but I don't know if that was the right thing to do. It's also important for you to know what's going on in with your students in your class (and even outside your class). What could have been the reason that this girl was crying and eventually tried to attack the other student? Maybe it had something to do with a situation at home, but I think might have something to do with "boys" or jealousy. When you don't talk about it you will not find out.

Students analyze and give advice..

Event winner

14/03/10 - Submitted by **Olaf Meems**



Extreme behaviour such as this is even more upsetting when it can...

[Click here to view the complete contribution](#)

15/03/10 - Submitted by **Alex de Jong**



Analysis - This boy de... issues. Whatever the... behaviour like this is... inexcusable. Still the q... Why would...

[Click here to view the complete contribution](#)

20.83%

15/03/10 - Submitted by **Priscilla Strijdhartig**



Analysis of the situation: What made this boy act the way he did? I think that this was not something he just decided to do on the spot. And I don't ...

[Click here to view the complete contribution](#)

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15/03/10 - Submitted by **Karim el Bazi**



This is indeed an alarming situation, I'm sorry to say that I didn't get clarification who this "act" was done to, whether it was the trainee teacher ...

[Click here to view the complete contribution](#)

0%

15/03/10 - Submitted by **Gerda van Mierlo**



Analysis: The student, in my opinion, does not know how to deal with you. Also, he obviously has some problems of his own. Why is it that this boy th...

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