Skills Labs - Deliverable 2.2.a: Casusidee Water Governance: Perkpolder

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Skills Labs

Hoogwaardige e-practica Water Management met EMERGO

Deliverable 2.2.a

Casusidee Water Governance: Perkpolder

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1. Inleiding

Met de in het Surf-project EMERGO ontwikkelde deliverable 1.4.b kunnen de casusontwikkelaars bij Skills Labs vertrouwd raken met de EMERGO-methodiek (zie Figuur 1). Daarnaast worden er vanuit WP 3 een aantal workshops georganiseerd waarin casusontwikkelaars worden begeleid in het toepassen van de EMERGO-methodiek. De basisgedachte is dat via de workshops casusontwikkeling efficiënter en effectiever verloopt. Daarnaast zullen casusontwikkelaars – in het kader van de disseminatie-activiteiten tijdens het Skills Labs project - ook als ambassadeurs binnen hun instelling optreden ('zegt het voort'). Dit is de tweede functie van de workshops. Last, but not least, via workshops kan de teamvorming binnen Skills Labs mede worden vormgegeven.

De deliverables bij de casussen voor Skills Labs zijn achtereenvolgens casusidee, casusframework, testversie casus, en evaluatieversie casus. Bij het doorlopen van de EMERGO-methodiek en het gebruik van de EMERGO-toolkit worden als tussenproducten onderscheiden: casusidee (fase analysis), casusframework (fase design) , casusingrediëntenverhaal (fase design) , casusdetailscenario (fase design), testversie casus (fase development), en evaluatieversie casus (fases implementation en evaluation). Zoals blijkt is bij Skills Labs niet elk mogelijk tussenproduct als deliverable gedefinieerd.
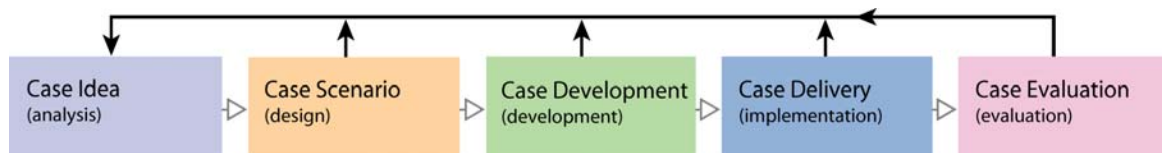
Figuur 1. Methodiek voor casusontwikkeling: van casusidee tot casusevaluatie
De open pijlen geven een geadviseerde volgorde van doorlopen aan. De fasen kunnen bovendien iteratief (gesloten pijlen) worden doorlopen.

Deze eerste deliverable bij de casus *Water Governance:Perkpolder* betreft het casusidee.
We beschrijven eerst kort wat een casusidee is en hoe we binnen Skills Labs de uitwerking van het casusidee *Water Governance:Perkpolder* ter hand hebben genomen.

Casusidee
Voordat de casusontwikkelaars beginnen met het concrete ontwerp- en ontwikkelwerk, is vanuit WP3 gevraagd aan hen om na te denken over uiteenlopende zaken die direct en indirect verband houden met de te ontwikkelen casus. Daarbij gaat het om zaken als:
- opleidingscontext van de casus
- inhoud van de casus
- voortgang in de casus
- studentcontact en studenteninformatie in de casus
- mediagebruik in de casus
- uitleverproces van de casus
- ondersteuning van de casus
- exploitatiekosten van de casus
- rechten en intellectueel eigendom met betrekking tot de casus.

Door diverse malen met elkaar te spreken over deze zaken aan de hand van concrete vragen wordt het projectteam zich nadrukkelijker bewust van het voor wie, wat, waarom en hoe van de casus

(context). Een en ander leidt al vroeg in het ontwikkeltraject tot een realistisch(er) beeld van de mogelijkheden en beperkingen waarmee het team rekening te houden heeft. Mede aan de hand van de antwoorden op deze vragen kan het team een *globale beschrijving* van de casus maken: het casusidee.

In Appendix 1 is een leeg casusidee opgenomen dat als richtsnoer/checklist een opsomming van concrete vragen bevat. Het is dus niet zo dat altijd alle vragen in gelijke mate beantwoord moeten worden. Daarnaast heeft het casusontwikkelteam een uitgewerkt voorbeeld van een in het EMERGO-project ontwikkelde casus (de Waddenzee) gekregen en is een light versie van de checklist als tussenstap gebruikt om tot een definitieve versie van het casusidee te komen. Overigens, het casusidee kan – gegeven de iteratieslagen in de EMERGO-methodiek – bij nadere uitwerking nog tot op zekere hoogte bijgesteld worden. Deze flexibiliteit is nodig om op veranderende contextuele aspecten te kunnen inspelen (bijvoorbeeld: curriculumwijziging, (on)beschikbaarheid van bronnenmaterialen, expertconsultatie).

2. Casusidee Water Governance:Perkpolder

Hieronder volgt de uitwerking van het casusidee voor de casus *Water Governance:Perkpolder.*
Bij de vervolgstappen van de casusuitwerking zal steeds meer "letterlijke" inhoud van de uit te leveren casus in de casusuitwerking aanwezig zijn. Omdat de casus in het Engels aan studenten zal worden uitgeleverd, is besloten de casusontwikkeling eveneens in het Engels te doen. Het casusidee is dus in het Engels uitgewerkt.

Subject	Questions & Answers
Case embedding	Q1: For which courses, curricula and institutions will it be used? A1: This case will be one of four cases within the Skills Labs Water Management project. Each of the four cases covers other parts of the field Delta Water Management. These parts together will cover the "water management" competence (exploration > investigation > 'setting the course'/intervention) (ref: rapport Beroepenveldconsultatie). In each casus selective subdomains of the domain Delta Water Management and selective parts of the water management competence will be trained. The four cases in total will cover the diverse aspects of this competence. The four cases to be developed within this SURF Skills Labs project are: 'The Scheldt – Estuarine Systems'; 'Water Governance – Perkpolder'; 'Aquaculture'; and 'Building with Nature'. The Water Governance case "Perkpolder" will be embedded within the OUNL's Short Academic Programme (KHO Kort Hoger Onderwijs) "Water governance" of 60 EC that will be developed in the coming 1,5 year. One of the three modules of the KHO will be "An introduction to water governance". The module has a study load of 20 EC and the case will be embedded in this module. The case will likely be used in other water management study programs as well, for example the Master (MSc) Delta Water Management (Hogeschool Zeeland). Other institutes might use the case as well, possibly in a f2f-setting where groups of students work together on the case, in an atmosphere open for discussion and reflection.
	Q2: Is it a stand-alone item or used with other instructional materials? A2: The case material will build on and apply more theoretical knowledge offered in the literature. Exact material still has to be decided upon but will be dealing with sustainable water management, analysing and designing policies, anticipating on intended decision-making and scientific literature on Public-Private Partnership (PPP). The study task this case is part of can be used in several relevant courses on water management.
	Q3: What study load and time interval is expected? A3: We expect that studying this case takes about 20 hours. Studying the accompanying literature (theoretical knowledge) and applying the relevant skills will take also about 20 hours. Depending on individual time available, a time interval of four weeks should be doable for most students.
	Q4: How many credit points earn students by successfully completing it? A4: The study task this case is part of takes a total of 40 hours of study load. This study task can be integrated in relevant courses on water management.
Case content	Q5: What is the main complex cognitive skill? A5: The main cognitive skills deal with analyzing a complex water governance issue. Central to the case is an analysis of a process already passed, acquiring competences that could be applied on similar processes to follow in the future. The students role will be a researcher at a consultancy working for a public or private party (one of the stakeholders) in the Perkpolder project. Tasks of the students - Students will analyse the case using a PERS-analysis (NL: PERS-analysis = Politieke Economische Rechtswetenschappelijke en Sociaalwetenschappelijke analyse. Niet helemaal hetzelfde maar wel vergelijkbaar met de Engelse term PESTLE analysis = Political Economic Social Technological Legal and Ecological analysis) - Students will apply "stakeholder" analysis by identifying perspectives and power positions of stakeholders. This case could be set in a virtual consultancy where a virtual coach, experts and colleagues can be consulted. Students will perform various activities, using a rich variety of resources and tools, including having a consultation with experts, attending a presentation, studying written reports, looking at documentaries or news, making notes, writing reports.

	Q6: Do other complex cognitive (sub) skills need to be acquired? A6: Analysis will have to be carried out by answering some questions provided by the (virtual) coach, that deal with mastering (sub) skills, for instance students have to provide an overview of key events and stakeholders in the case of Perkpolder, students have to select most appropriate methods and model to analyse the policy issue, et cetera.
	Q7: What subject matter domain(s) are involved? A7: The theoretical context in which the case is embedded is Public Private Partnership (PPP). Various public and private stakeholders (economy, green lobby / action groups, farmers, recreation investors, national, regional and local governments, governmental policy, …) are involved in the case of Perkpolder.
	Q8: What prior knowledge and skills are expected for enrolled students? A8: Basis knowledge of public administration and the Dutch system of governance.
	Q9: What is central to the case (for example: patient, equipment, process)? A9: Central to the case is an analysis of a process already passed, acquiring competences that could be applied on similar processes to follow in the future.
	Q10: What are physical locations in the case? (try to map them to virtual spaces) A10: In the virtual consultancy agency we will need offices to consult employees (virtual coach, experts, colleagues), locations where sources can be consulted, locations where meetings and presentations can be followed.
	Q11: What case characters (real persons, virtual persons) are relevant? A11: Of relevance are students' own role (researcher at a consultancy) , the role of the virtual coach (manager), various virtual experts and virtual colleagues, the role of the real teacher. **Note:** *In an EMERGO-case, playing characters and non-playing characters are distinguished. Non-playing characters can be virtual persons (i.e. all actions, reactions are predefined) or objects/tools. Playing characters are always executed by real persons during case runtime. Case characters can be real or virtual persons.*
	Q12: Do students need to proceed via a stepwise procedure? A12: No, students can make their own choice in how they go through the case. Each student has to find the way that works best for him/her.
	Q13: What kind of activities do students need to perform for acquiring the main complex cognitive skill? A13: Students will perform various activities, using a rich variety of resources and tools, including having a consultation with experts, attending a presentation, studying written reports, looking at documentaries or news, making notes, writing reports. Students have to identify stakeholders, their perspectives and power positions.
	Q14: Is there a strict order for the compulsory tasks? A14: No, students have the freedom to follow the way that's most effective for them.
	Q15: Are there compulsory tasks, non-compulsory tasks and what determines this? Q15: Each student has to write and submit a report (acceptability note) after studying the case, but furthermore students are at liberty to neglect feedback provided in the program (both positive and negative).
	Q16: Is redundant information provided, or is everything strictly needed? Q16: The case is authentic, meaning that it is ill-defined, at times contains distracting and useless information and unexpected events (like in reality). It is for the student to decide what is relevant or most useful (part of the competence involved).
	Q17: How realistic and authentic is the case? A17: We have modelled reality to make it studyable and feasible within a certain course and timeframe. However, most resources are derived from reality (e.g. experts) or directly taken from reality (e.g., recorded news), so it was made as real as required.
	Q18: If students can redo a case: will this be the same case or a variant?

	A18: Yes, the same case, there is no variant of the case available. Studying the same case twice can lead to different progress and outcomes, based on intermediate decisions taken.
	Q19: Can students undo former decisions? A19: Yes
	Q20: Are different learning routes and tasks for different students offered? A20: Yes, there are different learning routes, see also A12 en A14. No, the tasks are the same for all students.
	Q21: What kind of cooperation is needed by students? A21: None, students can follow the course on distance and individual. In some settings/curricula where cooperation is needed the teacher can bring it in. **Note:** *this will have to be different for skills labs cases where cooperation is an explicit competence defined in the project plan*
	Q22: Do students have different case characters? A22: No, all students have the same role of researcher at a consultancy, working in the virtual office, drawing up a report.
	Q23: Do students have active roles? A23: Yes, students need to take several decisions and need to perform various activities. This makes them a rather active participant instead of an inactive spectator.
	Q24: Do teachers have active roles? A24: This depends on the quality of the report send. Teachers may decide to actively provide feedback if the quality of progress and reports is too poor, cannot be handled by automated feedback and needs manual input.
	Q25: What aspects induce and sustain interest and motivation? A25: Various design measures will be taken to warrant sufficient interest and motivation, including identification with the student role, gaining knowledge that is highly authentic and implicit, having rich resources available that make the course lively.
	Q26: What unforeseen circumstances are incorporated? A26: None.
	Q27: Is competition incorporated? How do students get rewarded for excellent performance or behaviour? A27: No competition incorporated. Overall assessment is graded on scale 1-10 (10 = excellent).
Students' progress	Q28: How do students discover not yet having acquired the main complex cognitive skill? A28: The list with assessment criteria provides an overview of requirements where the product (the report) of the student has to conform to. Each report has to be accepted by the teacher.
	Q29: How can students monitor their progress? A29: Ibid. The list with criteria provides an overview of requirements where the product (the report) of the student has to conform to. So students can monitor their progress by looking if their product meets all the criteria. Each report has to be accepted by the teacher.
	Q30: How is it checked if students have acquired the main complex cognitive skill? A30: Students select appropriate methods. Teacher will take this into account when assessing the final reports send in. There is a list of assessment criteria available, focusing on content but also structure, source annotation, use of language, etc. Furthermore we have (good and bad) worked out examples of reports available for comparison.
	Q31: Is summative assessment included and are its results used in formative assessment? A31: The study task assessment is graded, and the case study result (report) is part of the study task assessment.
	Q32: Which students' progress figures are to be used by teachers during run time? A32: Reports send in.
Contact with peers	Q33: Should contact between students be encouraged? A33: No, students can do the course on distance and individual.

	Note: *this will have to be different for skills labs cases where cooperation is an explicit competence defined in the project plan*	
	Q34: Should students see if peers are on line, when they have been on line? A34: No	
	Q35: Can students compare their progress with peers? A35: No	
Using media	Q36: Will existing material be used, is new material needed? A36 When possible, we will try to acquire existing material. Feasibility depends on whether we can use Beeld en Geluid collection, what will be acquisition costs for resources beyond this collection, whether we can use external linking, et cetera. New material (mainly video) will be needed to record some of the virtual actors (like coach, experts and colleagues). Existing material will be mainly in Dutch. This raises the question which material has to be translated in English and how this will be realised.	
	Q37: What media genres are used (e.g., interviews, docudrama, movie, animations)? A37: That is not yet clear.	
	Q38: What media assets are needed and what are their costs? A38: Aside from video, no other media assets (music, animations, et cetera) are needed.	
Case delivery	Q39: Is the number of students within one run restricted? A39: There are no restrictions.	
	Q40: When can students enrol for a run? A40: Depends on curricular organisation for each partner institution. Ideally, this could be as flexible as possible. When not cohorts of students can start enrolling at more fixed intervals.	
	Q41: Is it possible to change the case after starting a run? A42: It is difficult within a run, but it is possible for the next run.	
(embedded) Support	Q42: How will technical support be provided? A42: In case of OUNL students the EMERGO technical support is part of ELOSA (OUNL Studienet helpdesk). **Note:** *This will have to be different for skills labs cases. Training super users for each institute is an explicit target defined in the project plan*	
	Q43: How will support be provided for acquiring the main complex cognitive skill? A43: See above as well. (Virtual) Coach will provide leading questions, and teacher assesses reports sent, and provides feedback when needed.	
Costs	Q44: How many students will enrol each year? A44: The first trial run will be with 10 students. In exploitation we expect 20-40 students yearly.	
	Q45: What are the development costs per student? A45: See skills labs documents.	
	Q46: What is the expected teacher/student ratio during exploitation? A46: Hard to estimate, but we would like to make the case so that students need little feedback during runtime. After submitting the report the teacher will assess it and give feedback.	
IPR	Q47: Is it allowed for others to use the case? A47: All EMERGO products, including cases, are freely available and adjustable as Open Source software under Creative Commons license. In practice it will be hard to use the cases without accompanying services and course materials though. OUNL course materials = OUNL copyright	
	Q48: Are materials from other parties incorporated and what are their Intellectual Property Rights(IPR) arrangements? A48: OUNL course materials = OUNL copyright . Materials developed within a consortium can be freely used by all partners within the consortium.	

Appendix 1- Template global description / case idea: "XXX"

Introduction

Case developers first need to consider various issues related to the intended case. By discussing them, the project team gains more insight, common ground and awareness: why is the case needed, for whom is it meant, how will it be placed in the curriculum, what are the (learning) objectives, what content and media will be needed, how will it be structured, how will progress be monitored, a.s.o.?   A realistic picture of possibilities and impossibilities has to emerge before actually starting case design and development using the EMERGO toolkit. By answering – could be an appropriate subset of - the questions in the table, the case team provides a *global description* of the intended case as input document for the design phase. Case designers will then continue by working-out a framework scenario.

Subject	Questions & Answers
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	Q2: Is it a stand-alone item or used with other instructional materials?
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	Q3: What study load and time interval is expected?
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