



2014-1-BE02-KA201-000432

LINPILCARE

ERASMUS+ KA2

2014-1-BE02-KA201-000432

Strategic partnership

VSKO



Dienst Nascholing
en Internationalisering

www.nascholing.be



PROFESSIONELE
LeerKRACHT



2014-1-BE02-KA201-000432

“Linpilcare strategy of two PLC in Flanders and examples of outcomes of their inquiry”



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To LINK Practitioner Inquiry via professional Learning Communities with results of Academic Research, in order to support teachers and schools in teaching Evidence based.

Format of the PLC's



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- 8 meetings of 2 periods
- Each meeting agenda and goals
- Content is a mix of background knowledge they need , actions to make a progress in all inquiries of the members, and teambuilding activities
- Participants get all info and protocols also on paper, for their own use, in case they find it possible in a class room situation.
- It is a course and an inquiry.

PS Feedback on this format: too many meetings, startup too slow.

=> This year max. 5 meetings and fast startup: end of October data gathering should start.



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Sessie 3: Di 17/11: 8:20-10:10	
Doelen:	
- de eerste versie van het onderzoeksplan opstellen	
- hierin een keuze maken uit mogelijke data	
- de gekozen data verantwoorden en na in put van de collega's bijsturen: het "Wat? En waarom? Wat nu? (welke data in mijn onderzoek)" protocol	
- evaluatie van de voorbije drie sessies	
Intro: tekenlijst	
1. Inleiding	5
2. Opstellen van de onderzoeksplannen	25
3. het "Wat? En waarom? Wat nu? (welke data in mijn onderzoek)" protocol over het verzamelen van data: welke soorten? Welke zijn geschikt (voor elke deelnemer)? Waarom?	60
4. Evaluatie	10
Sessie 4: Vr 11/12: 8:20-10:20	
Doelen:	
- Studie van het referentiekader van het project linpilcare: de CCFR van Linpilcare	
- Geven van feedback op de CCFR	
- een eerste kennismaking met academisch onderzoek.	
- NOZW protocol	
- regels voor deze PLG	
Intro: tekenlijst	
1. Inleiding	5
2. Bespreking van de CCFR van Linpilcare	20
3. Feedback op de CCFR	10



4. Hoe en waar informatie zoeken op academisch niveau? Actief op zoek! (+ korte uitwisseling)	35
5. NOZW protocol	10
6. Regels voor deze PLG	10
Sessie 5: Di 12/01/16: 11:30- 13:15	
Doelen:	
- regels voor deze PLG opstellen	
- bijkomend document: LPC_databronnen bespreken en inzicht geven in de mogelijkheden via Excel bestanden	
- eerste resultaten data verzamelen: wat, hoe, hoe analyseren	
- hoe kunnen we elkaar helpen: opstellen plan, noden en behoeften	
- hoe je eigen data analyseren?	
Intro: tekenlijst	
1. Vervolg: regels voor het goed functioneren van deze PLG	15
2. bijkomend document: LPC_databronnen bespreken en inzicht geven in de mogelijkheden via Excel bestanden	30
3. Bespreking van de eerste inspanningen om data te verzamelen	15
4. Samenwerking: hoe elkaar helpen?	15
5. Met data omgaan in functie van de analyse	30
6 Afronding	5
Sessie 6: Woe 24/02: 8:20-10:10	
Doelen:	
- regels van deze PLG opstellen	
• Stand van zaken: hoe kunnen we de kwaliteit van ons werk verbeteren?	



- planning van de laatste sessie (sessie 7) én de uitwisselingsessie	
Intro: tekenlijst	
1. Herhaling.	5
2. Regels van deze PLG	30
3. Bespreking van de verzamelde data: hoe is het verlopen	20
4. Schikken en ordenen van de data, analyse	10
5. Conclusies trekken	10
(indien nodig): acties in de klas plannen	
6. Planning van sessie 7 en sessie 8	25
Sint Franciscus College Heusden	
Naam:.....	
Sessie 7: Ma 07/03: 8:20-10:10	
Doelen:	
- overeenkomst tekenen	
- afspraken maken	
- data: bespreken	
- Protocol: microlab.	
Intro: tekenlijst	
Inleiding	
Afspraken maken: hoe verder tot 17mei? Hoe elkaar helpen? Format van de namiddag? Deelname internationale activiteiten	
Stand van zaken data verzameling	

2 PLG's



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- One was “strongly encouraged, 9 members of one school, one stopped after 1 session, 2 teachers in physics, 2 chemistry, 1 biology, and the others mixed tasks in natural sciences courses. During the process, 2 teachers decided to do the inquiry together – see further. All together 7 PI's.
- The other PLG consisted of 5 teachers of 3 schools: 2 teachers of mathematics, 1 of physics, 1 of chemistry, 1 of natural sciences. 1 teacher gave up because of a serious illness. 4 PI's.
- 11 examples of PI's, I will discuss 3 of them.

Synthesis of PI's



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- Disclaimer:
- It is unfair to explain what people have done over a whole year in only a few minutes.
- I selected different cases to show how wide the topics can be and to what kind of impact it can lead.
- I try to show the coherence between the PI's
- I will give info on the impact on learners, colleagues and school
- My comments are subject to discussion

1. How to deal with diversity of competences of science learners in chemistry in the 4th year of secondary.



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- Which kind of differentiation is most effective?
 - Better results
 - Better “good feeling”
- Sandra Vandeuren, Chemistry teacher, 14-16 yo learners



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- She tested 4 teaching methods, during 3 hrs
- All her lessons were redesigned for this aim
- All aimed at differentiation

Method details



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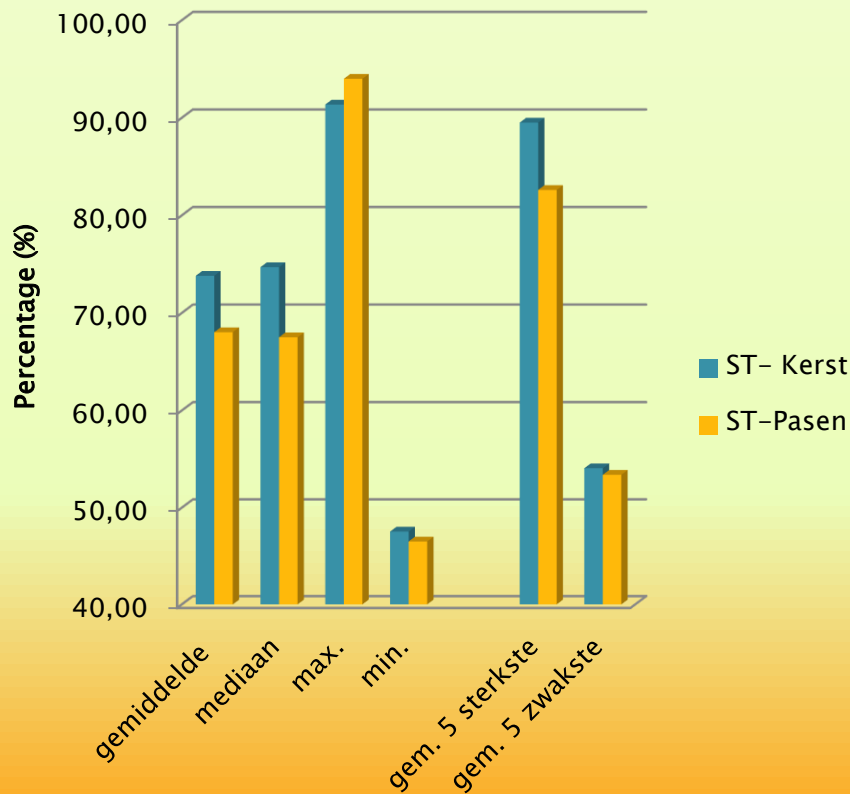
<p>Introduction: interview with learners</p>	<p>Their feedback: excercises are very important, we need more during the lessons</p>	<p>Good and weaker learners had different feelings regarding this issue.</p>
<p>Teaching method</p>	<p>Open dialogue</p> <p>Flip the classroom</p> <p>Independ learning and making excercises (with help)</p> <p>Group work: - Homogeneous groups - Heterogeneous groups</p>	<p>Let learners note as much as possible!</p> <p>Learners study new theory in groups</p> <p>Making excercises independently and ask teacher for help only when necessary</p> <p>Composition based on a test excercises</p> <p>Composition based on position in the class</p>

Results: Inquiry between Christmas (Kerst) and Eastern (Pasen)

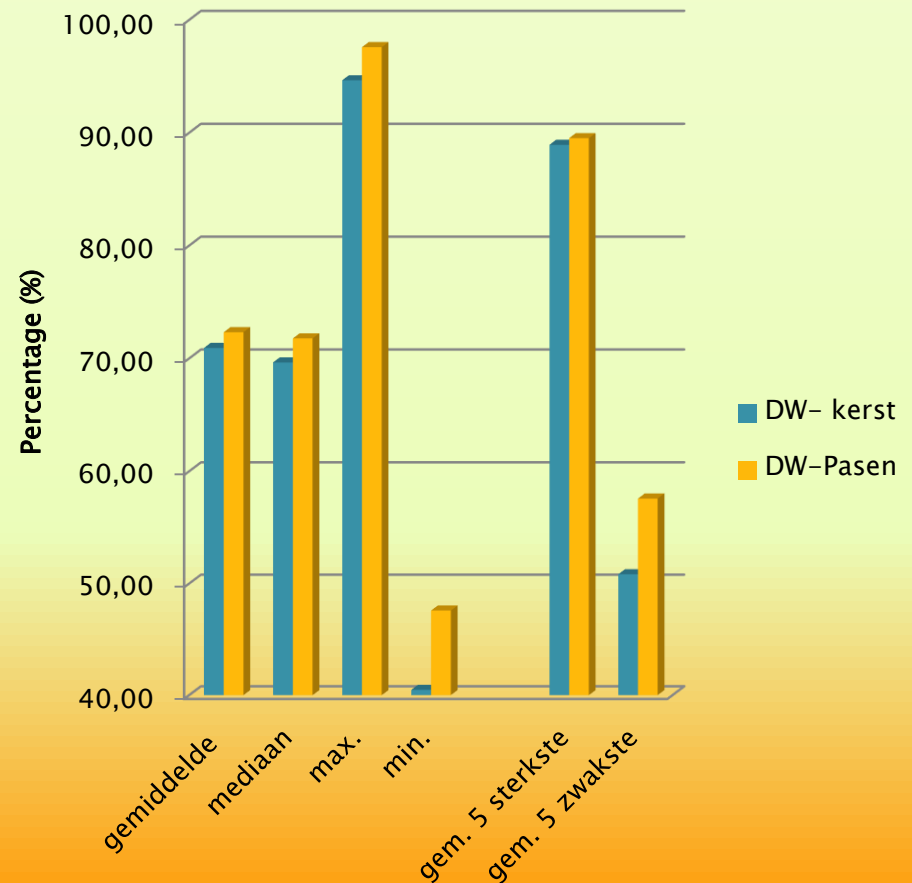


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Comparison Christmas–Easter Exams



Comparison Christmas–Easter daily work DW (without labwork)

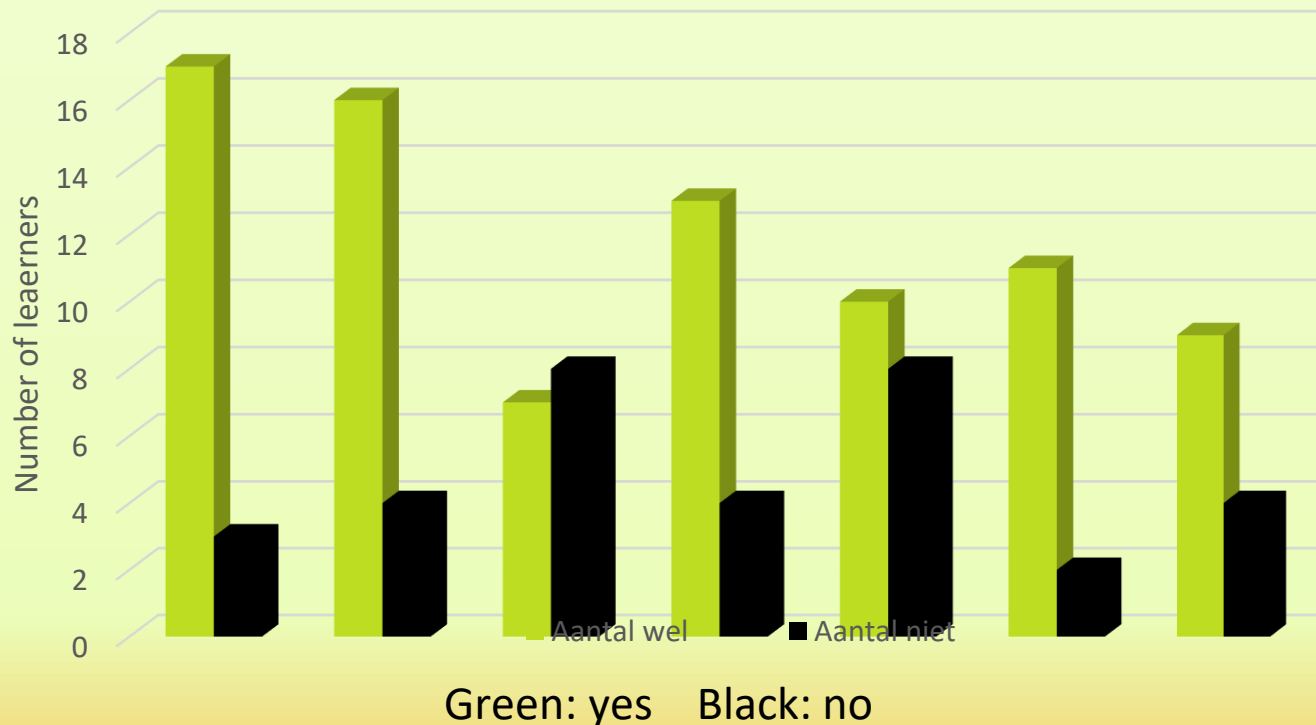


Results: Which teaching method on differentiation is most effective?



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“Good feeling” via questionnaire



From l => r: enough exercises? mastering exercises better since diff? homog. groups? , heterogenous groups? , independenly making excercising?, open dialogue?, flip the class room?

Conclusions



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- Differentiation: in results no convincing change, some indications, maybe.
- Differentiation: positive results mainly on good feeling
- Theory and examples of exercises in open dialogue most popular
- Making exercises in heterogeneous groups or independently (with help!)
- Variation!
- Results of exams: wait until June
- Future:
 - Parallel class?
 - Compare multiple years?
 - Follow up the same learners several years?

Feedback



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- Very strong result, PI in only one class, one course, one teacher
- This result is interesting: is this confirmed by academic research? => **third pillar of Linpilcare NOT done.**
- A lot of work in reshaping/ reconsidering the lessons
- The increase of the “good feeling” among students motivates the teacher
- Assessment of knowledge is a ?

2. What do learners from Social-Technical Sciences (STS) need to increase their rate of success in higher education?



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- Motivation: the class teacher (Nat. Sc. teacher) got feedback from former students, giving rather negative messages. She initially wanted to improve her lessons to work on this goal.
- Used data:
 - Statistics provided by inspectorate: these are detailed, for example on results in higher education
 - Questionnaire filled out by 145 (out of 240) former students of STS from years 2008-2014: questions on courses, school and the STS direction
- Analysis in view of chosen studies in higher education

Selected results:

BIOMEDICAL LABORATORY TECHNOLOGY



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- Exceeding the Flemish average by 18%
- Only 4 learners
- Courses that are important for them: Nat. Sciences, maths, Dutch, English
- **Maths:** they need more about integrals, logarithms, matrices
- **Nat Sc.: more** chemistry, lab work
- **Integrated Tasks:** more informatics (Excel)

ERGOTHERAPY

- 17% below Flemish average
- 4 learners
- Courses that are important for them: Soc. Sciences, maths, Dutch, Nat Sc (bio-chem)
- **Maths:** not enough statistics
- **Integrated Tasks :** should have a stronger content

PRE SERVICE TEACHER EDUCATION



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- 6% below Flemish average
- 33 learners
- Courses that are important for them: Nat. Sciences (bio), soc. Skills, maths, Dutch, French language
- **Maths:** calculations without calculator exercises: insight, understanding
- **French:** more verbal skills needed
- **Dutch:** spelling
- **Soc. Sc:** teach how to summarise a lot of learning materials

Overview of feedback for several courses



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Nat. Sc.	Soc. Sc.	Maths
<ul style="list-style-type: none">- Good- In scientific directions lack of chemistry, physics, and lab work	<ul style="list-style-type: none">-Good-Learn how to make summaries, learn how to make schemes and how to work with them.	<ul style="list-style-type: none">- More statistics, integrals, logarithms, accountancy, economy
Dutch	French	Integrated tasks
<ul style="list-style-type: none">- good: layout, reading and understanding-need for more spelling, learn to summarize, grammar	<ul style="list-style-type: none">- more verbal skills, commercial French- Big problem for "commercial" directions	<p>Good: Final task, group work, planning, deadlines, independent work</p> <p>Neg: no must, no added value, scratch this course, irrelevant, for primary school kids,</p>

Strengths of the school

- Good feeling
- Good atmosphere
- No number
- Good coaching
- Good organisation

- 2 periods of exams

and weaknesses

- More self study
- More info on studying in higher ed.

- Better selection of learners
- Dare to give another advice for

studies in sec. ed. if the learners are
not suited for this study



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Strengths and weaknesses of STS



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- Nat. Sc. : +
- No more textbooks to fill out, better to take notes oneself?
- Assess bigger quantities of knowledge
- Parts of the courses should be self study
- Special seminars for students who want to study scientific directions in higher education

Positive:

Soc. Sc.

Final task

In situ trainings

Weak:

Int. Tasks (cooking, exp.)

Maths

French

The “nutricion” course

Follow up

(decisions taken for the STS direction on the school level after Linpilcare inquiry)



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- Nat. Sc. gets a more supportive role in integrated tasks course (instead of being part of this course) , so more time to do theory and lab work.)
- From next school year on...
 - in year 3 and 4: Nat. Sc. only supports, nutricion course and expression course get 1 hr less + they need to work more on content knowledge => 2 extra hours become a choice for learners
 - In year 5 STS: only 3 Int. Tasks, not 5, they need to work more on content and theoritical in all courses, nutricion course and expression get 1 hr less + they need to work more on content knowledge => 2 extra hours become a choice for learners; Soc. Sc. need to be part of Int. Tasks
 - In year 6 of STS: start from two main streams: Soc. Sc. and Nat. Sc. parts should focus more on content, leaerners will need to argue better nutricion course and expression get 1 hr less + they need to work more on content knowledge => 2 extra hours become a choice for learners
 - Soc. Sc. need to be part of Int. Tasks

Feedback



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- Typical example of inquiry that ran out of hand
- 2 teachers needed for this, influence of ped. head of the school
 - Not only Nat. Sc. as initially was the idea, is influenced
 - All courses, on the level of content and evaluation!
 - The whole STS direction is reshaped: lesson table and distribution of courses, as well as strong recommendations...
- The enormous engagement of the former learners caused this series of decisions
- All courses get + and – remarks
- In principle one can imagine a lot of follow up inquiries here.
- Probably things will change, because teachers realise that their changed lessons can enhance the chances of their students in higher education

3. How can I coach students, that are absent for a long time, better in keeping their courses up-to-date?



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- Martine Dieltiens : theme: coaching of students
- Original question: How can I motivate students of 12-16 yo to contact their teachers after having been absent, in order to preserve their results?
- Questioning, interviewing 5 learners, 2 kinds of situations:



<p>Absent because of sports, AFS, ...</p>	<p>Own choice => have to take initiative themselves</p> <ul style="list-style-type: none">• Contact teacher/ fellow learners• Need to ask for notes themselves, or to make copies• Mail on a regular base <p>After returning: they want to be assessed like the others</p>
<p>Absent because of illness, accident, ...</p>	<p>Not their own choice => class teacher contacts him/her</p> <ul style="list-style-type: none">• For the whole period of absence• Distribute tasks to keep up with the courses among peers• Mail on a regular base• Assessment is also sent to this learners• Install “bednet”

- Deliberation (= teacher group meeting to decide whether the students passes to next year) remark is needed in case of involuntary absence (maybe only for most important courses)
- No change in deliberation in case of voluntary absence

Feedback



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- Microscopic inquiry
- Still improvement of coaching of students AND THEIR RESULTS
- An evidence-informed change is always more acceptable
- This teacher had very little time to do an inquiry, but still it added a small part to the improvement of the education in that school.
- We do not value the size of the inquiry, but the process and the reflective capacity to improve their profession.



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- Thank you.
- More examples are available, I can always tell you about...

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