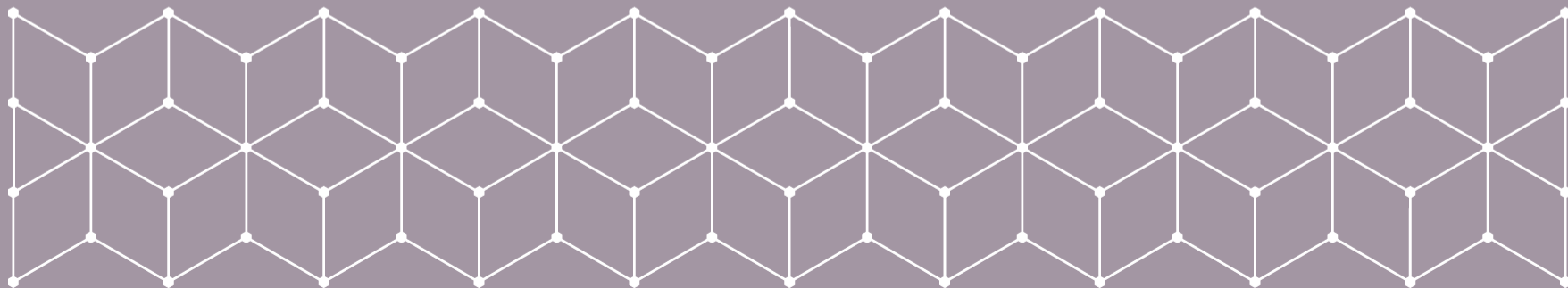




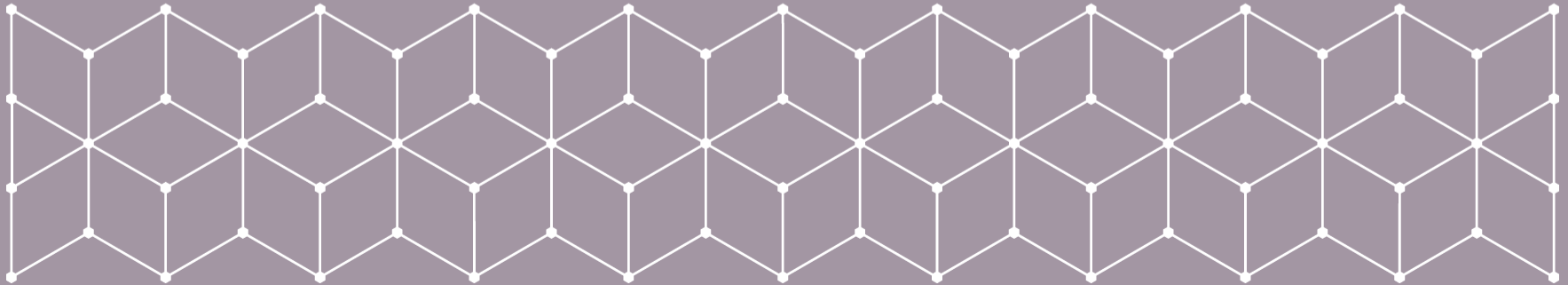
Developing Teachers' Professional Digital Competence (PDC)? An example from BlendVET in Norway





Developing Teachers' Professional Digital Competence (PDC)?

An example from BlendVET in Norway



Who are we?

- **Sonja Nygaard-Joki**, Assistant Professor, ICT in Teaching and Learning
- **Eva Martinsen Dyrnes**, Associate Professor, Vocational Education and Training
- **Stine Brynildsen**, Assistant Professor, ICT in Teaching and Learning



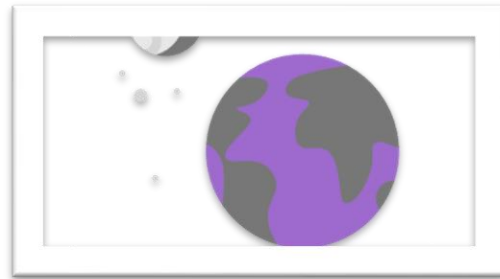
The ØUC Faculty of Teacher Education and Languages



- › Campus in Halden
- › Four departments:
 - › **Department of Education, ICT and Learning**
- › Educate student teachers in our master programs to all school levels (Kindergarten – Primary School - Secondary school)
- › Continuing professional development of teachers
- › Ca. 2 700 students
- › Ca. 170 members of staff



Teaching and learning
in
digitally infused environments (online
and physical)



MOOCs
(Massive Open Online Courses)

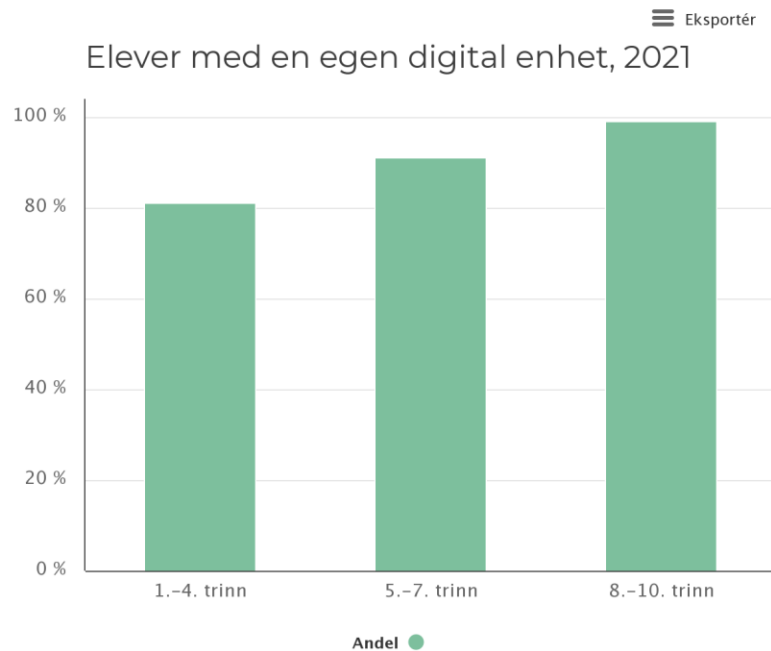


Teachers' professional digital
competences

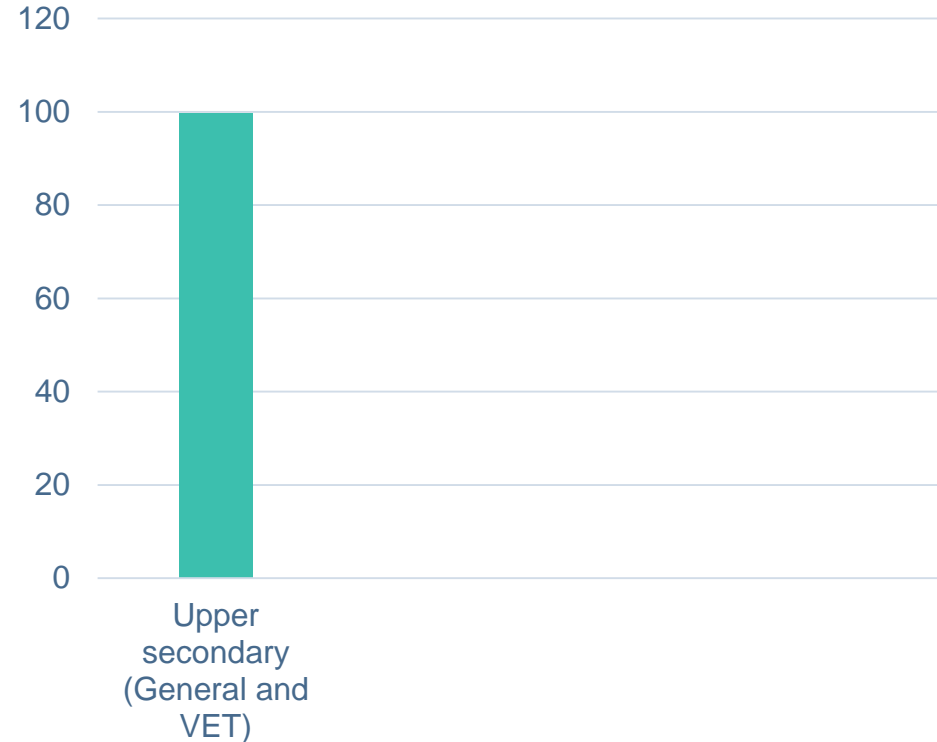
«The digital state» of Norwegian schools

- Digital skills is both a **basic skill** and **integrated** in all school subjects' curriculum
- Understood as a **prerequisite** to learning and taking an active part in society and work life
- Very good digital infrastructure, 1:1 devices for the vast majority of pupils & other digital equipment at schools

Pupils with 1:1 devices (PCs, iPads, Chromebooks)



Kilde: Utdanningsdirektoratet



«The digital state» of Norwegian schools

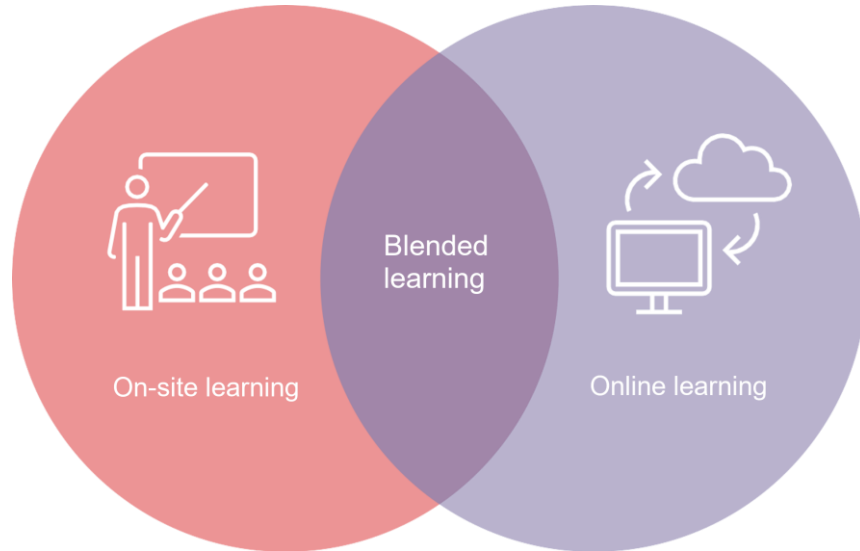
- Digital skills is both a **basic skill** and **integrated** in all school subjects' curriculum
- Understood as a **prerequisite** to learning and taking an active part in society and work life
- Very good digital infrastructure, 1:1 devices for the vast majority of pupils & other digital equipment at schools
- Pupils' learning outcomes **depend** on what the teacher does and how – when teaching in digitally infused classrooms (e.g. Blikstad-Balas, 2019; Krumsvik, 2013).
- Teachers in Norway, and internationally, state a **need** to continuously develop their digital competence

What is Teacher's Professional Digital Competence?

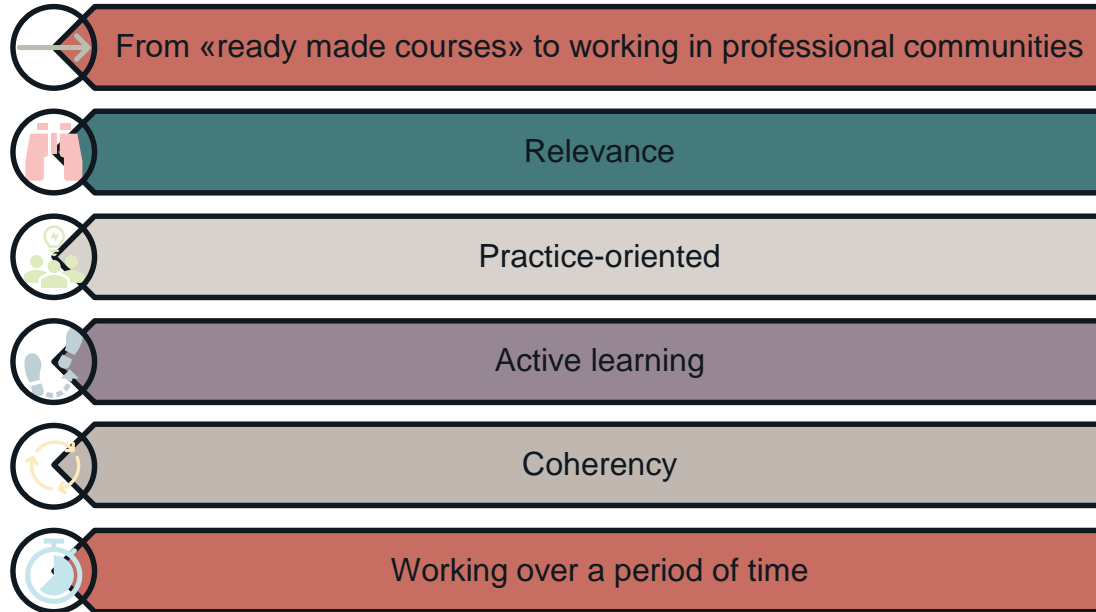


(Kelentric et al., 2017)

The Norwegian BlendVET partner schools

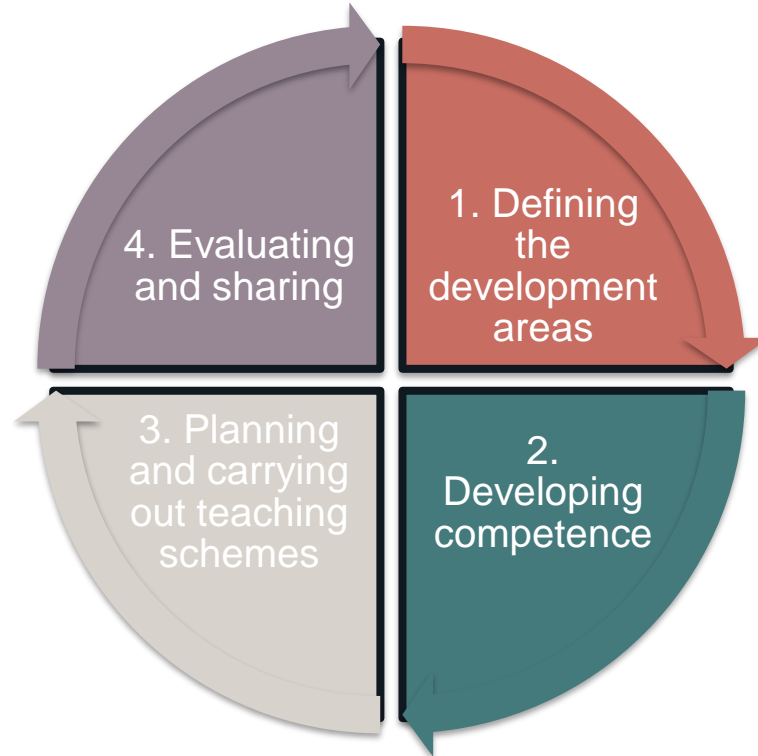


Good starting points for continuing professional development:



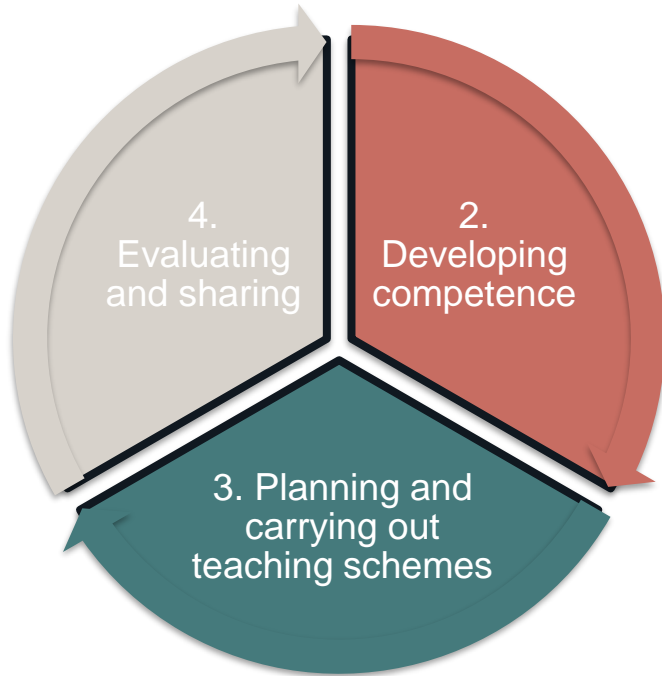
(Inspired by Desimone, 2009, Opfer & Pedder, 2011; Postholm, 2018)

Inspired by action research/ action learning:





1. Flipped classroom methodology
2. Pedagogical and didactical use of Microsoft Teams and OneNote Class Notebook
3. Using and producing videos and podcast

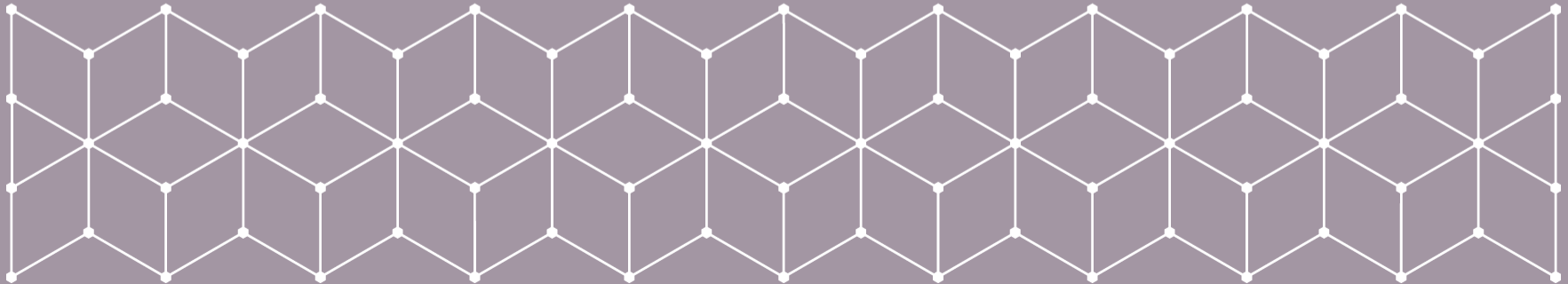


- › October 2022- March 2023
- › Three «competency packages»
 - › Flipped classroom methodology
 - › Microsoft Teams and OneNote Class Notebook
 - › Using and producing videos and podcast
- › “Learning loops”
 - › Physical or online meeting with input
 - › Work with online resources
 - › Plan and carry out teaching
 - › Physical or online meeting to share and evaluate

EXAMPLE

Learning loop 1:

Flipped Classroom methodology



Kick-off at Åssiden



Online resources



...

Dobrodošli! 😊

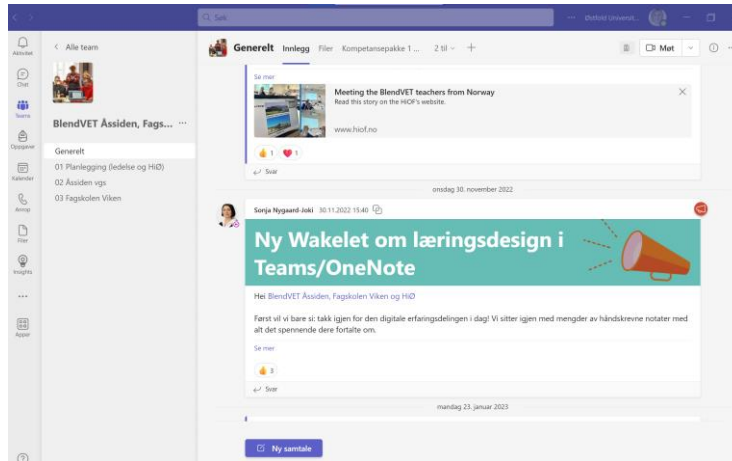
To je skupna zbirka virov v Wakeletu za učitelje, ki so del sodelovanja BLENDVET med Østfold University College, Åssiden vgs. in poklicno šolo v Vikenu. Deloval bo kot tako imenovana "vmesna misija" med zbirko 1 v Drammnu 12.10. in Zbirka 2, ki je digitalna na Teams 30.11.

Glavna tema: Blended learning a kot oblika mešanega učenja, ki lahko olajša aktivno poučevanje učencev v tehnološko bogati učilnici.

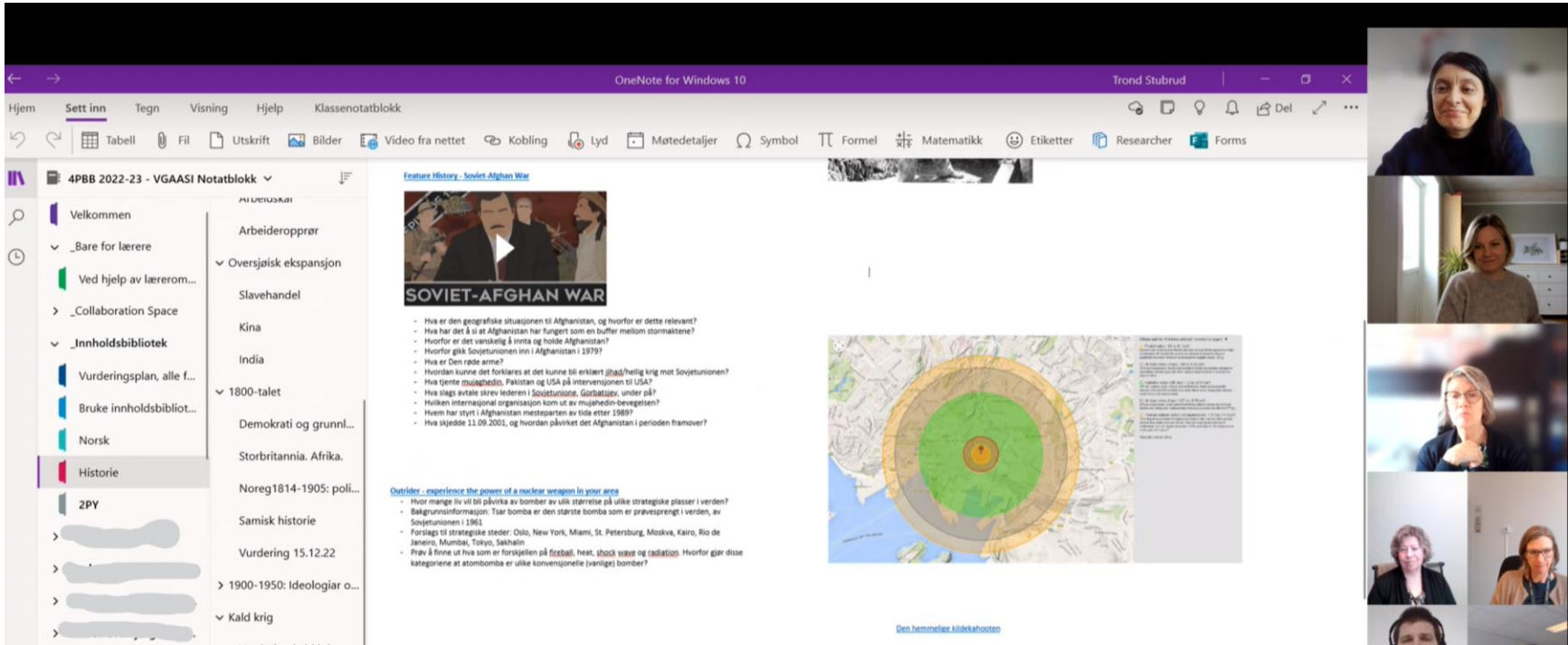
Glavni cilj v časovnem obdobju med 12.10. - 30.11. je, da načrtujete, ustvarite in izvajate program poučevanja, ki temelji na metodi Flipped Classroom.



Planning & teaching



Evaluating & sharing



The screenshot shows a OneNote for Windows 10 interface. The top bar indicates the user is logged in as 'Trond Stubrud'. The left sidebar shows a navigation menu with sections like 'Velkommen', 'Bare for lærere', 'Collaboration Space', and 'Innholdsbibliotek'. The main content area displays a lesson plan titled '4PBB 2022-23 - VGAASI Notatblokk'. The lesson plan includes sections for 'Arbeideropprør', 'Oversjøisk ekspansjon', 'Slavehandel', 'Kina', 'India', '1800-talet', 'Demokrati og grunn...', 'Storbritannia, Afrika', 'Noreg 1814-1905: poli...', 'Samisk historie', 'Vurdering 15.12.22', and '1900-1950: Ideologier o...'. A video player is embedded in the note, showing a video titled 'SOVIET-AFGHAN WAR'. The video player includes a play button and a list of questions related to the video content. A map of Afghanistan is also visible, showing a central green area surrounded by concentric yellow and orange rings. The bottom right corner of the screenshot shows a grid of video call participants.

OneNote for Windows 10

Trond Stubrud

Hjem Sett inn Tegn Visning Hjelp Klassenotatblokk

Tabell Fil Utskrift Bilder Video fra nettet Kobling Lyd Møtedetaljer Symbol Formel Matematikk Etiketter Researcher Forms

4PBB 2022-23 - VGAASI Notatblokk

Velkommen

_Bare for lærere

Ved hjelp av lærerom...

_Collaboration Space

_Innholdsbibliotek

Vurderingsplan, alle f...

Bruke innholdsbibliot...

Norsk

Historie

2PY

Arbeideropprør

Oversjøisk ekspansjon

Slavehandel

Kina

India

1800-talet

Demokrati og grunnl...

Storbritannia, Afrika.

Noreg 1814-1905: poli...

Samisk historie

Vurdering 15.12.22

1900-1950: Ideologier o...

Kald krig

Feature History - Soviet-Afghan War

SOVIET-AFGHAN WAR

- Hva er den geografiske situasjonen til Afghanistan, og hvorfor er dette relevant?
- Hva har det å si at Afghanistan har fungert som en buffer mellom stormaktene?
- Hvorfor er det vanskelig å innta og holde Afghanistan?
- Hvorfor gikk Sovjetunionen inn i Afghanistan i 1979?
- Hva er Den røde armé?
- Hvordan kunne det forklares at det kunne bli erklært jihad/hellig krig mot Sovjetunionen?
- Hva tjente mulaghadis, Pakistan og USA på intervensjonen til USA?
- Hva slags avtale slov lederen i Sjoesjarmia, Gurbangulo, under på?
- Hvilken internasjonal organisasjon kom ut av mujahedin-bevegelsen?
- Hvem har styrt i Afghanistan mesteparten av tida etter 1989?
- Hva skjedde 11.09.2001, og hvordan påvirket det Afghanistan i perioden framover?

Outsider - experience the power of a nuclear weapon in your area

- Hvor mange liv vil bli påvirket av bomber av ulike størrelse på ulike strategiske plasser i verden?
- Bakgrunnsinformasjon: Taar bomba er den største bomba som er prøvesprengt i verden, av Sovjetunionen i 1961
- Forslags til strategiske steder: Oslo, New York, Miami, St. Petersburg, Moskva, Kairo, Rio de Janeiro, Mumbai, Tokyo, Sakhalin
- Prøv å finne ut hva som er forskjellen på friball, heist, shock wave og radiation. Hvorfor gjør disse kategoriene et atombomba er ulike konvensjonelle (vanlige) bomber?

Den hemmelige kildetabellen

When?	What?	How?
October 12th	<ul style="list-style-type: none"> Kick-off with all partners for competency package 1: Flipped Classroom 	<ul style="list-style-type: none"> Meeting at Åssiden (Åssiden, FIV, ØUC)
October - November	<ul style="list-style-type: none"> Teachers working with online resources, planning and teaching Opportunities for guidance by ØUC 	<ul style="list-style-type: none"> At the schools Digitally (Teams, e-mail etc.)
November 30th	<ul style="list-style-type: none"> Meeting with all partners – sharing & evaluating Kick-off for competency package 2: Teams and OneNote 	<ul style="list-style-type: none"> Videomeeting (Åssiden, FIV, HiØ)
December-February	<ul style="list-style-type: none"> Teachers working with online resources, planning and teaching Opportunities for guidance by ØUC 	<ul style="list-style-type: none"> At the schools Digitally (Teams, e-mail etc.)
February 1st	<ul style="list-style-type: none"> Meeting with all partners – sharing & evaluating Kick-off for competency package 3: Videos and podcasts 	<ul style="list-style-type: none"> Meeting at Campus Remmen (Åssiden, FIV, HiØ)
February-March	<ul style="list-style-type: none"> Teachers working with online resources, planning and teaching Opportunities for guidance by ØUC 	<ul style="list-style-type: none"> At the schools Digitally (Teams, e-mail etc.)
March 30th	<ul style="list-style-type: none"> Final meeting – sharing, evaluating & concluding the three competency packages 	<ul style="list-style-type: none"> Videomeeting (Åssiden, FIV, HiØ)

Impact & results?

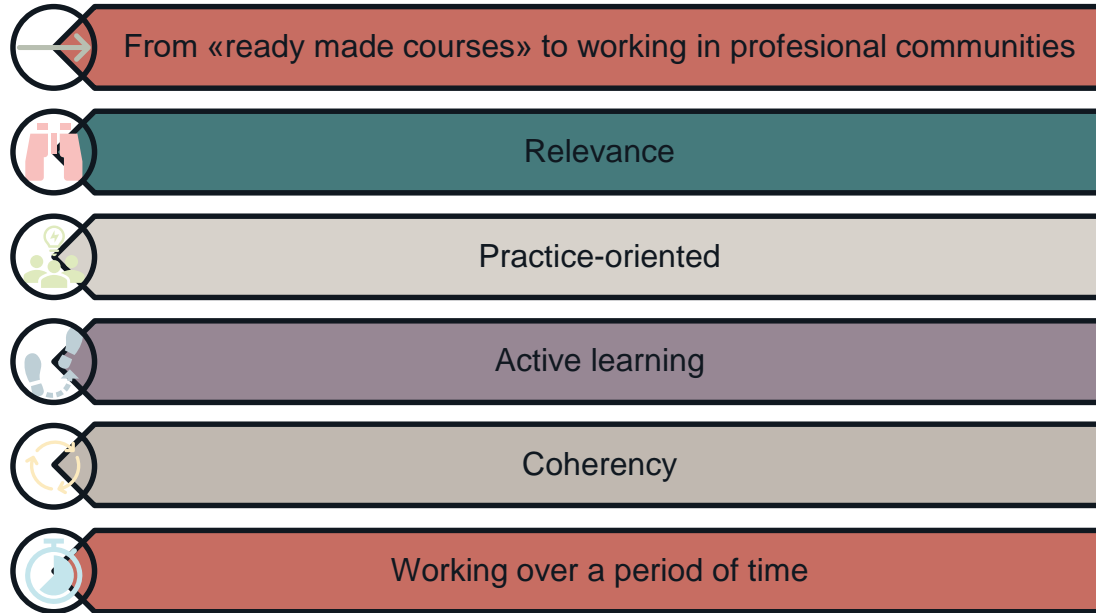
I'm a newly educated teacher, so to me everything feels new [...] But what I've appreciated is that this project has given me examples of ways of doing things [...] I've become more aware of how different teaching methods may complement each other

My own learning outcome has been really good. I've been able to develop myself and my own teaching methods [...] and I've appreciated these meetings where I've heard other teachers share what they have done. That's really valuable.

I have changed my teaching practices quite a lot. When I looked at my last planning document I realized that I had used all the [flipped classroom] principles and made use of content from all of the competency packages...

To me the combination of hearing what fellow teachers have done and to get theoretical, but also practical, input from you [ØUC] has been very valuable. It's made me think about and develop my own teaching.

I think this [flipped classroom] is something all teachers at our school should learn about and make use of. I believe the students' learning outcomes increase when they get to actively make use of their subject knowledge and skills.



(Inspired by Desimone, 2009, Opfer & Pedder, 2011; Postholm, 2018)