



**Viikki Teacher Training School,
University of Helsinki**

e-Mentoring - a practical tool for pre- and in-service mentoring

Ari Myllyviita

MSc (Chem.Ed.), BSc (Chem.), BEd (soc.pedag.)

Lecturer (Chemistry and mathematics), Teacher Educator

Project Coordinator (Teacher's in-service ICT-training projects)

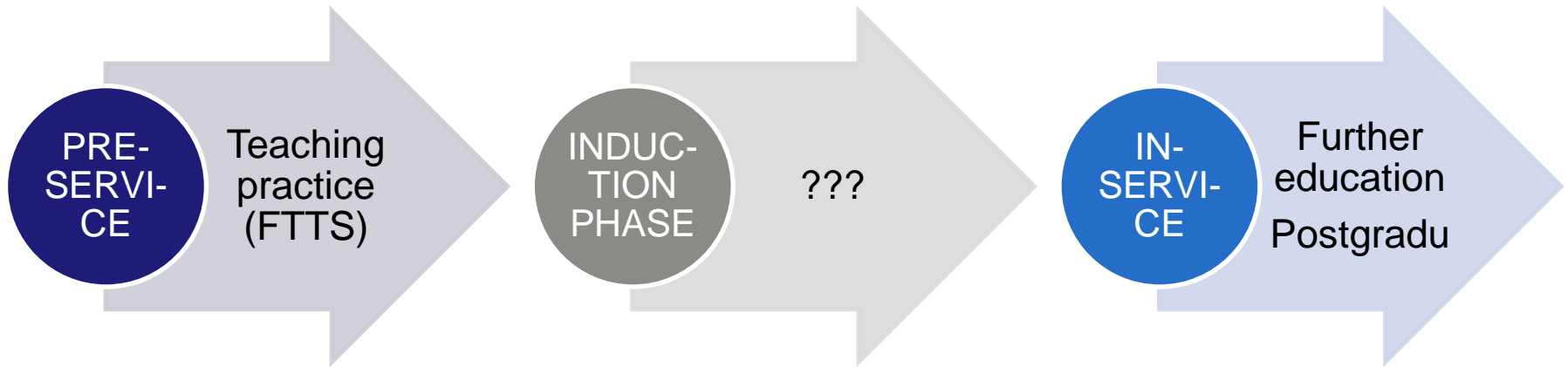


Finnish Teacher Training Schools, www.ftts.fi

- Finnish teacher education has a strong connection to Finnish Teacher Training Schools.
- A crucial part of it is the creation of pedagogical knowledge and the practical training in training school.
- During the school practice student teachers have their own supervising teachers, mentor teachers.
- During the teaching practice the relationship between student teacher and mentor teacher is relevant.
- During teaching practice student teachers are forced to learn how to use ICT and social media in teaching and communication in the school environment.
- e-Mentoring is a new approach how to support student teachers after they have finalized their studies.



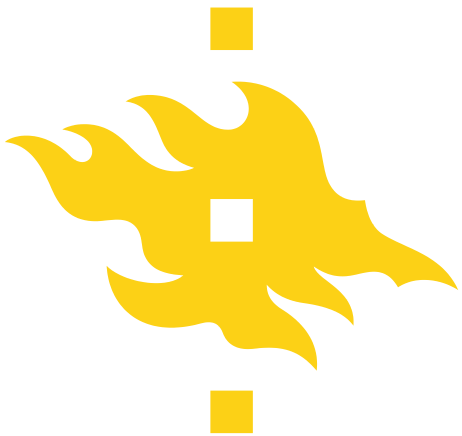
Short explanation of mentoring – what I mean with this concept



SOUTH AFRICA: **Mentoring** in the school, Mentor teacher

FINLAND: **Guidance**
Teacher educator

FINLAND: **Mentoring**, Tutoring, Supervision,
Employee orientation programs

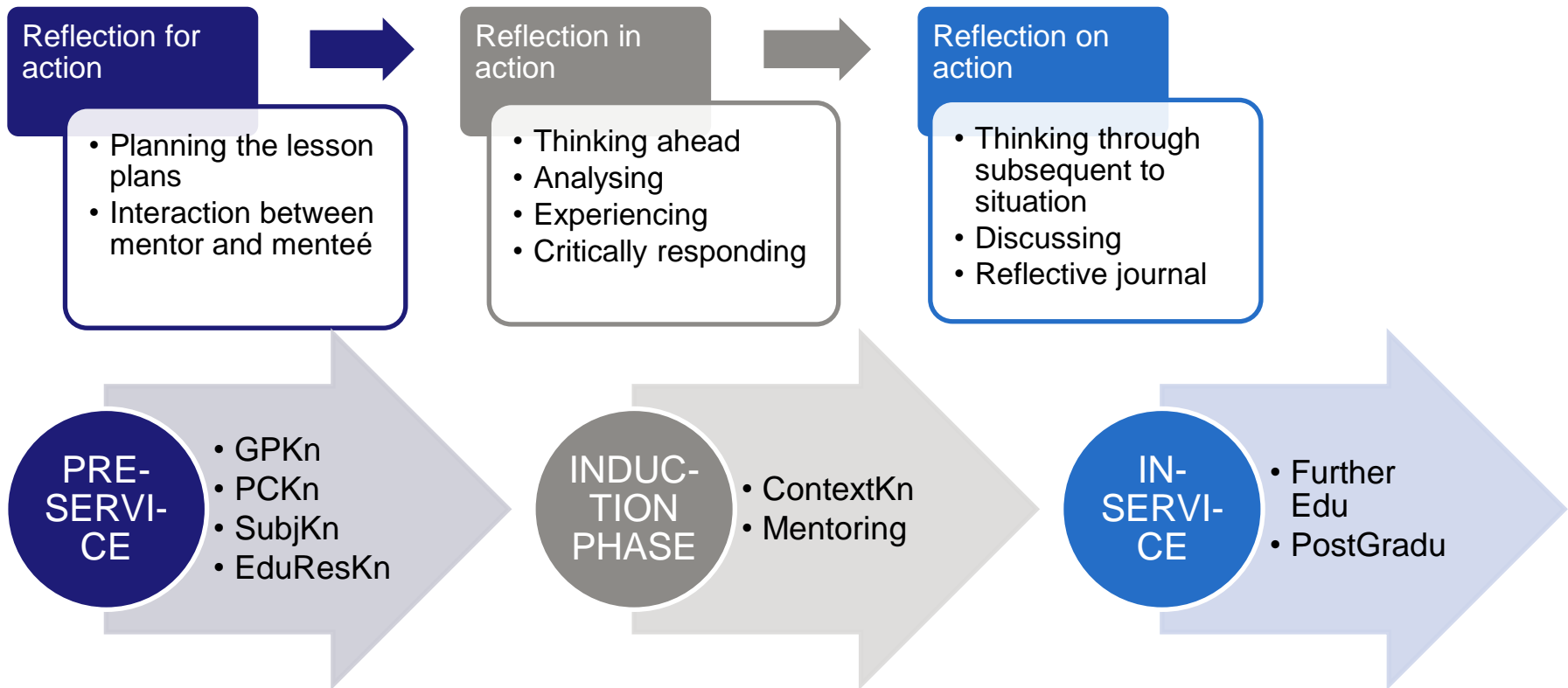


Building a theoretical framework(s)



The Finnish teacher education system – Pre-service and in-service teacher training

Revised the Schön's idea of reflection in pre-service teacher education



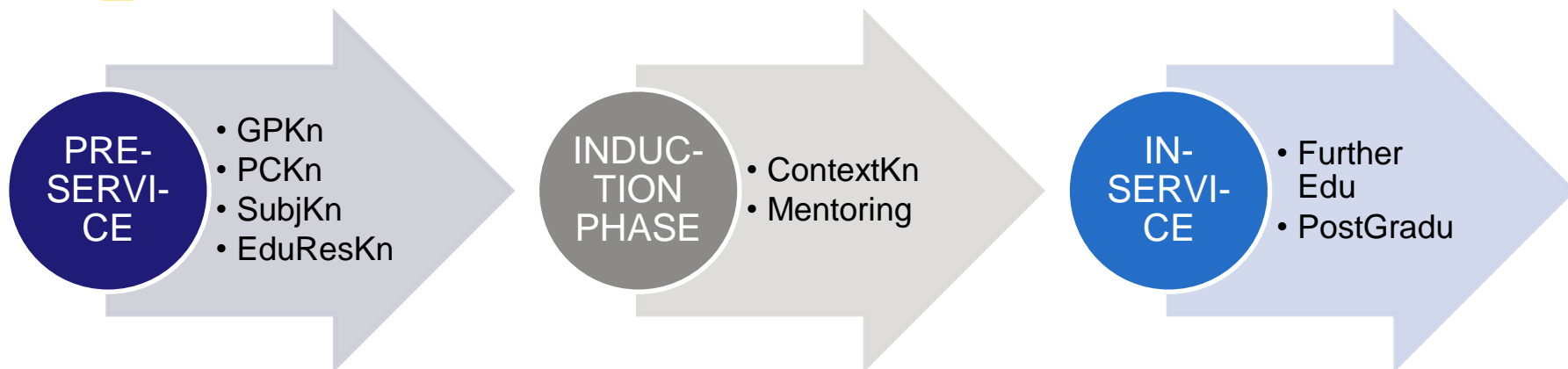


What kind of knowledge you share in e-mentoring?

1. Content (subject matter) knowledge
2. General pedagogical knowledge (Gore & Gitlin, 2004)
3. Pedagogical content knowledge (Shulman, 1987)
4. Contextual knowledge (Gess-Newsome and Lederman 1999)
5. Educational research-based knowledge (Jakku-Sihvonen & Niemi, 2006)



New way to think mentoring during teaching practise and after graduation → e-Mentorointi



→ e-Mentorointi

Relationship between student teacher and mentor teacher

Use of cloud services
Use of blogs as a reflection tool
Use of wikis for creating and sharing knowledge
Of course: GPK, PCK ...

Mentoring via Facebook group

Familiar platform for networking
Induction phase support = e-Mentoring and peer support
Common archives (tests, materials)

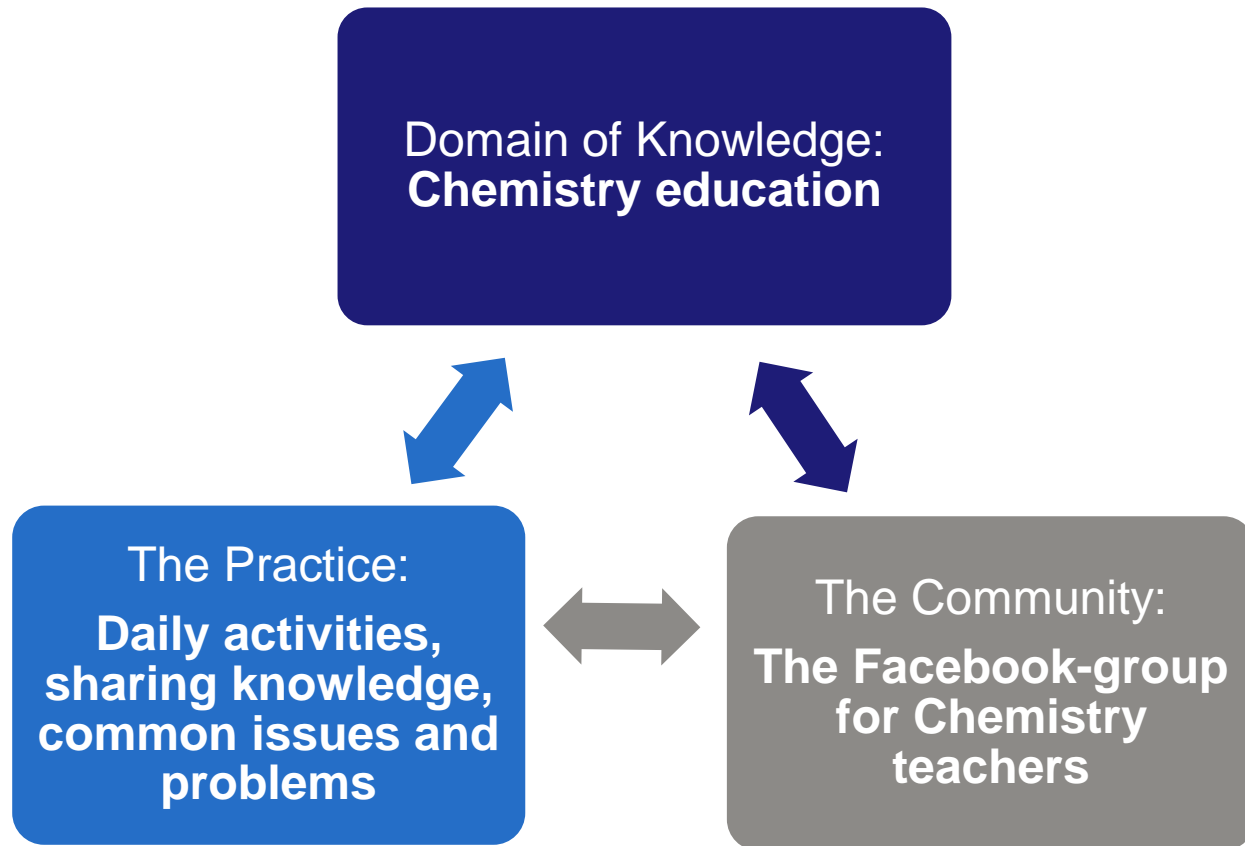
Network of chemistry teachers

Sharing experiences
Sharing pedagogical experiments
Seminars, workshops, webinars



The Community of Practice

Theory of Communities of Practices (Lave & Wenger, 1991)





Another approach to e-Mentoring: Formal – Nonformal - Informal

This concept of formal learning being the socio-cultural accepted norm for learning was first challenged by **Scribner and Cole** in 1973, who claimed most things in life are better learnt through informal processes.

Formal

- **Agreed** mentor and mentee relationship (paid)
- Long-term program based on **goals of the organization**
- Includes an **evaluation of results**
- Training program **using blended learning tools** (VLEs, wikis etc.)
- Pair or group

Nonformal

- **Voluntary based** relationship (from mentee side)
- **Discussions:**
 - Pedagogical views on something (ICT, modeling, experiments)
 - Practical views on teaching (experiments, equipment, groups)
- Target oriented
- A mentor helps a mentee in certain area (SubjKn, GPK, PCK ..., group dynamics)

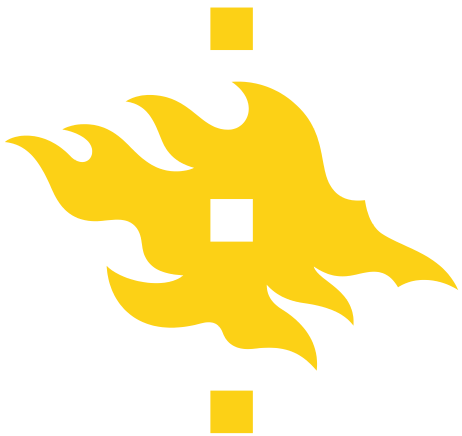
Informal

- **Spontaneous situations** (informal) → Situated approach
- **Spontaneous contacts** (chats, discussions) online between a mentee and a mentor (not a chosen one)
- Different areas from teaching dealt with (always mentee's choice)



What is the added value of the idea of e-mentoring (in induction phase)

- e-Mentoring is not (at the basis) a formal relationship – IT IS MORE INFORMAL, BASED ON TRUST, INDIVIDUAL NEEDS AND SHARING
- e-Mentoring is not a short term relationship – IT IS LONG TERM, CONSISTENCE
- e-Mentoring is not a course or a period – IT IS CONTINUOUS, IT IS PROCESS
- e-Mentoring is not pair mentoring or group mentoring – IT IS BOTH IN A VIRTUAL PLATFORM, IT IS ALSO PEER SUPPORT PLATFORM
- e-Mentoring is not a part of further education – IT IS PROCESS FROM TRAINER via MENTEE to MENTOR - from teacher training through the novice period to the experienced teacher



What e-Mentoring is with Facebook?



Practise and findings – creation of network for e-mentoring

- The case study is made within chemistry teachers. Few years ago the Facebook-group for chemistry teachers were created. The purpose was the create a **support group for new chemistry teachers**, and the **mentor teachers were acting like facilitators and mentors** in this group.
- **The connection between mentor teacher and student teacher will continue after teaching practice (pre-service)**
- **Created**
 - a) network of chemistry teachers,
 - b) supporting group for new teachers,
 - c) archive (mental) for theoretical and practical issues of chemistry education,
 - d) group mentoring of common problems and themes and finally
 - e) possible way to have private conversations between mentors and new teachers.



History of the FB-group for chemistry teachers (Building the Community)

RESEARCH QUESTIONS:

How often a new theme? Themes?

How many different actors? How makes comments?

How fast you get help (if you ask for it)?

Opened 29.1.2010

Mentor and student teachers (or just qualified)

Other teacher educators and teachers

Book writers, government officials and university researchers

New qualified Chemistry Teachers from all universities

15.5.2016
365 members

When the group begins to roll by itself? You need about **80 members**



Ari Myllyviita

Muokkaa profiilia

SUOSIKIT

Uutiset

Viestit

Tapahtumat

Windows-tabletit o...

Edmodon käyttäjät

Tieto-ja viestintätekn... 1

Kemian opettajat -...

Tulevaisuuden luki...

GAFE Finland - Go... 4

Kriittinen pedagogii...

Microsoft Office365...

Kemian opetuksen...

Lops2016

Opettajienmentorointi

Ubiikkilukio

Viikin kemiaa

Viikin norssin opet...

CERN-koulutus 2016

Myyntiryhmät

SIVUT

Punavihreampi Tul...

Sivut-syöte 20+

Tykkää sivuista

Luo mainos

Luo sivu

KAVERIT



Kemian opettajat -vertaisryhmä

Suljettu ryhmä

Olet jäsen ▾

Jaa

Ilmoitukset



Keskustelu

Jäsenet

Tapahtumat

Kuvat

Tiedostot

Hae tästä ryhmästä



Kirjoita julkaisu

Lisää kuva/video

Luo kysely

Lisää



Kirjoita jotain...

KIINNITETTY JULKAISU



Ari Myllyviita

16. toukokuuta kello 18:54 · Helsinki

Olemme saaneet (ilman kuluja) peda.net -ympäristöön oman alueemme oppimateriaaleihin. Keskustelimme jokin aika sitten sellaisen sivuston rakentamisesta, johon kokoaisimme mm. yo-tehtävät ja niiden vastaukset. Yo-tehtävien julkaiseminen hoitunee YTL:n luvalla - toki voimme ne kirjoittaa uudelleen, mutta kuvien ja kaavioiden käyttö jää edelleen luvan taakse. Vastaukset rakennamme sitten yhteistyöllä. Kuka lähtee työstämään sivustoa? Mitä muita ideoita voisimme toteuttaa tällä työkalulla?

Suula Arppe, Minna Jääskeläinen ja 15 muuta

5 kommenttia

LISÄÄ JÄSENIÄ ⓘ

+ Anna nimi tai sähköpostiosoite...

JÄSENET

365 jäsentä (1 uutta)



Viesti · Kutsu sähköpostitse

KUVAUS

Muokkaa

Kemian opettajaksi valmistuvien ja valmistuneiden verkosto. Tuem... Näytä lisää

TAGS

Lisää merkintöjä

Lisää pari kuvaavaa avainsanaa.

RYHMÄKESKUSTELUT

Ryhmäkeskusteluja ei ole. Aloita keskustelu heti.

+ Aloita uusi keskustelu



So what are those themes or questioning on our group? Examples

- Subject knowledge based
 - Luminol-works, how it works, (first answer in 16 minutes, 6 different persons answering)
 - Reaction enthalpy (53 min, 3 persons)
 - How to measure quantity of phosphorus (14 min, 3 persons)
 - Carbonate work (15 min, 7 persons)
- General pedagogical knowledge based
 - About testing before courses
 - Do you let pupils taste ammonium chloride (13 persons)
- PCK
 - Sharing knowledge and experiences
- Contextual knowledge
 - Where we teach (different physical and digital learning environments)
 - Who we teach (ethical, political, economic and social factors),
 - What we teach (curriculum, subject)
- Educational research-based knowledge
 - Sharing knowledge (material), creating knowledge (research target group)
- ICT-related questions
 - Modeling programs, how or what to use (mallinnusohjelmien vertailu (32 minutes, 2 persons - expertst!))
- Motivation, "spirit of the chemistry"
 - Sharing videos, graphs and so on
- Getting substitute teachers, practical matters (cheap labglasses ...)



Questions for further studies



- The addressed topic - induction of newly qualified teachers – is one of the key questions in teachers' professional development → should we make nonformal mentoring formal? can we do it?
- Expectations from mentoring and peer support
- How this kind of mentoring influences to learning (not just teaching)



Future of the Community?



More social media tools in action – practical approach

- **Tools for reflection**, from the teacher practise period – how to use blogs in reflection, as a tools for inverted classroom pedagogy
- **Tools for sharing knowledge and creating knowledge**, the change of paradigm: from owning to sharing, from individual to collaboration – how to use wikis and editable learning materials (learning objects)
- **Tools for networking** – Facebook-like communities



Wikis as a crucial part of sharing knowledge and creating knowledge

The image shows two overlapping screenshots. The top one is a wiki page titled 'Lukion kemian wiki' with a sidebar menu and a table of messages. The bottom one is a forum post on Peda.net titled 'Kemian opettajat -vertaisryhmä' with a search bar and a logo.

Wiki Page: Lukion kemian wiki

- Wiki Home
- Projects
- Recent Changes
- Pages and Files
- Members
- Settings

Search:

Lukion kemian wiki

Etusivu


Lukion kemian kurssit

| Subject | Author | Replies | Views | Last Message |
|--|------------|---------|-------|----------------------------|
| Wiki-sivuston kehittämistä | myllyviita | 0 | 7 | May 11, 2013 by myllyviita |

Peda.net Käyttäjät

Piilota toiminnot Myllyviita, Ari Uloskirjautuminen

Oppimateriaalit >

 **KEMIAN AINEISTOSIVUT**
Facebookin Kemian opettajien vertaisryhmän peda.net -ympäristö


Kemian opettajat -vertaisryhmä Julkisuus Muokkaa Siirrä Näytä arvioinnit Poista

Muokkaa tilausta Jaa Luo uusi

Yo-tehtävät

Sivukartta

Ohjeet - Lähetä palautetta Peda.net-ylläpidolle
Tämän sivun lisenssi Peda.net yleinen lisenssi





More information

www.myllyviita.fi

ari.myllyviita@helsinki.fi