A Collaborative Classroom-Based Teacher Professional Learning Model

Dr. Paed. Dace Namsone

The Interdisciplinary Center for Educational Innovation of the University of Latvia

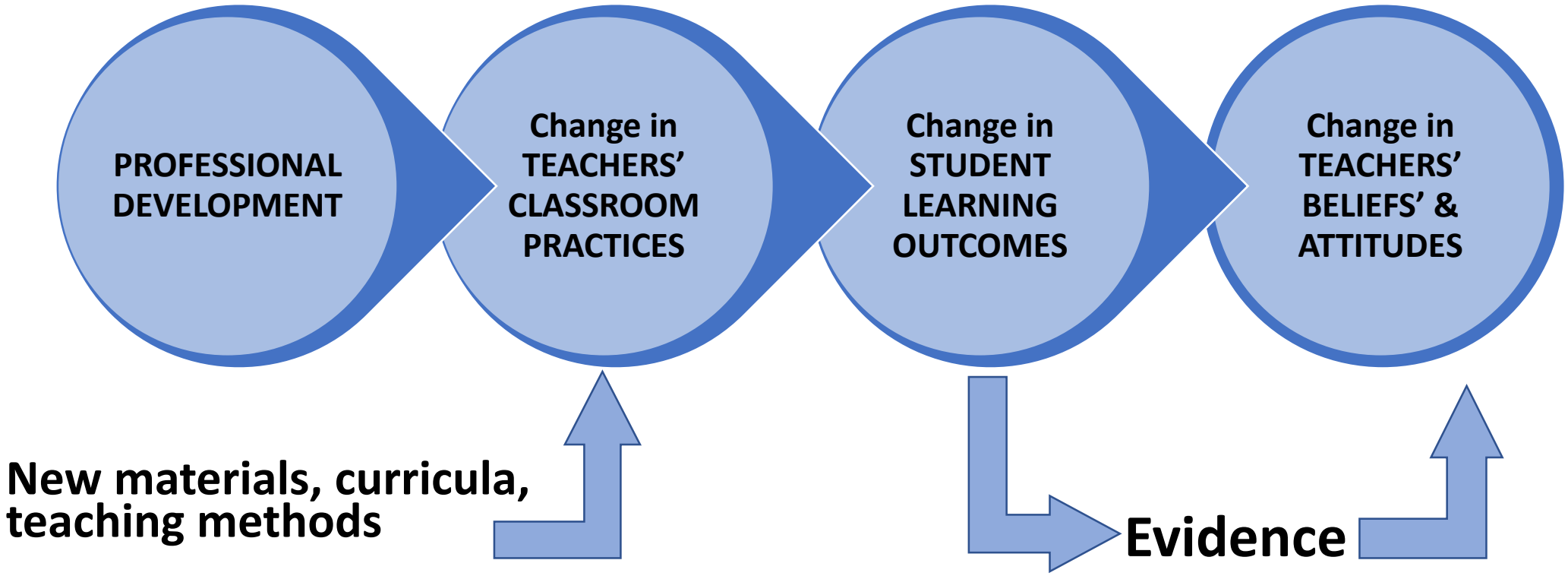
27.11.2017.

Latvian education background

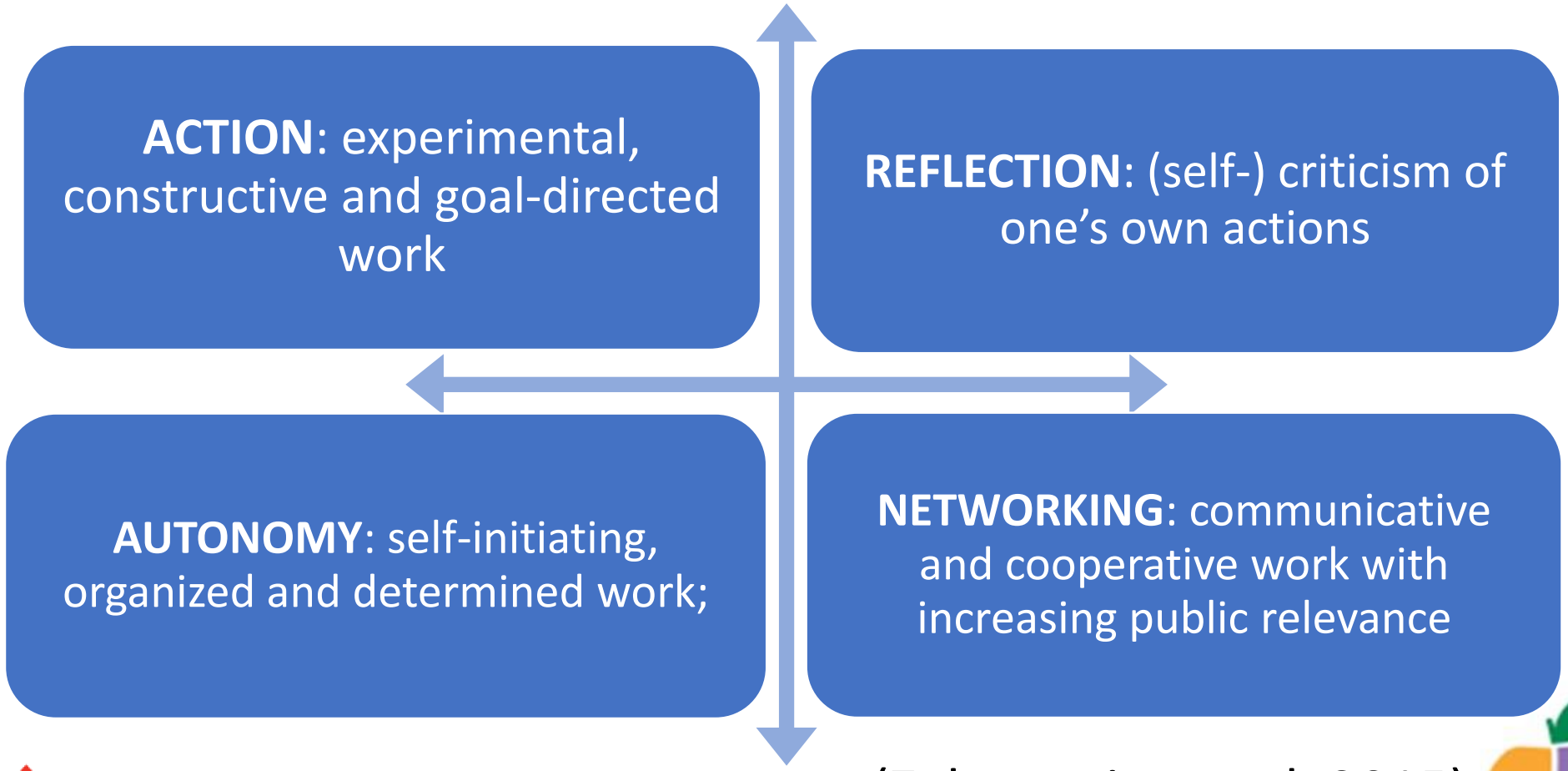
- Various reforms since 2008 demand changes in teaching representing deep learning (Fullan & Langworthy, 2013) and inquiry-based approaches
- Teachers lack formal education on teaching strategies (how to facilitate group work, conduct formative assessment, set learning goals for students etc.) (Volkinsteine et al. 2014)

Conceptual models

Model for teacher change (Guskey, 2002)



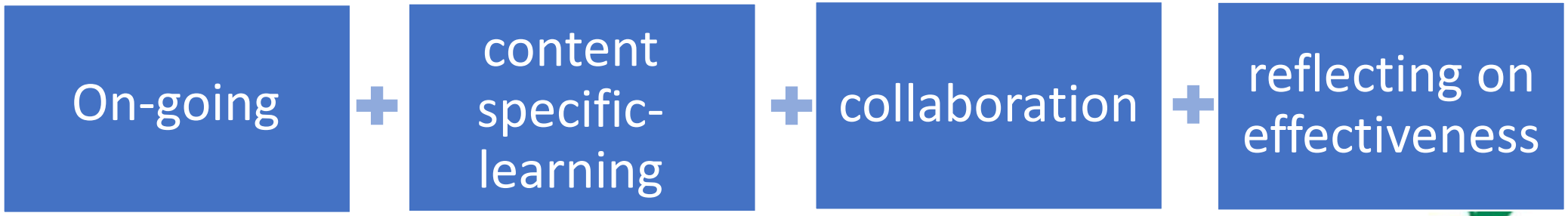
Dimensions of teacher professional development



(Zehetmeier, et al. 2015)

Why professional learning models?

- Professional training models with in-service courses inefficient for actual changes to happen (Fullan, 2011a)
- Traditional teacher professional training models have only a minor effect on classroom practices (Fullan 2011b)
- Therefor main elements proposed:



Teacher learning model (Namsone & Cakane, 2018)

Piloting of the model in Latvian schools

Participants

- Teams consisting of math and science teachers
- Another group of teams with primary school teachers
- Each team has an coach and a school administration representative involved
- Teams visit other schools & do **lesson observation** and day-long **workshops** for analysis and reflection
- Individual assignements
- 2 school years with ~40h of collaborative professional learning

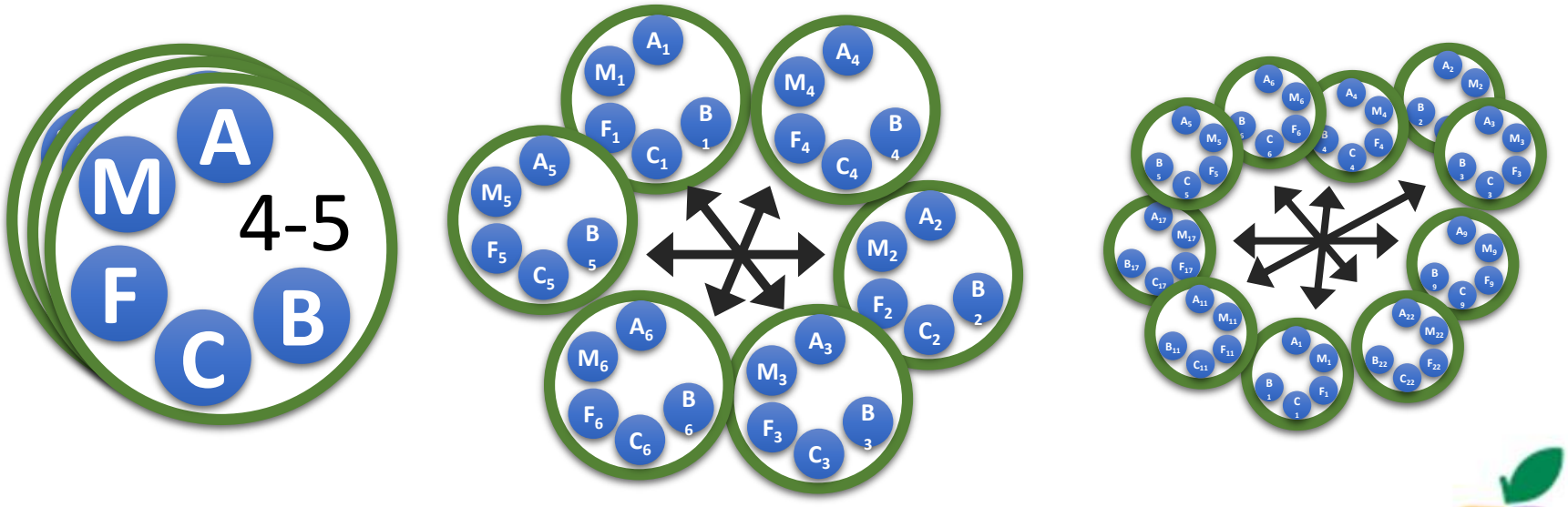
National networking

E X P E R T S

SCHOOL TEAM

REGIONAL GROUP OF NATIONAL NETWORK

NATIONAL NETWORK

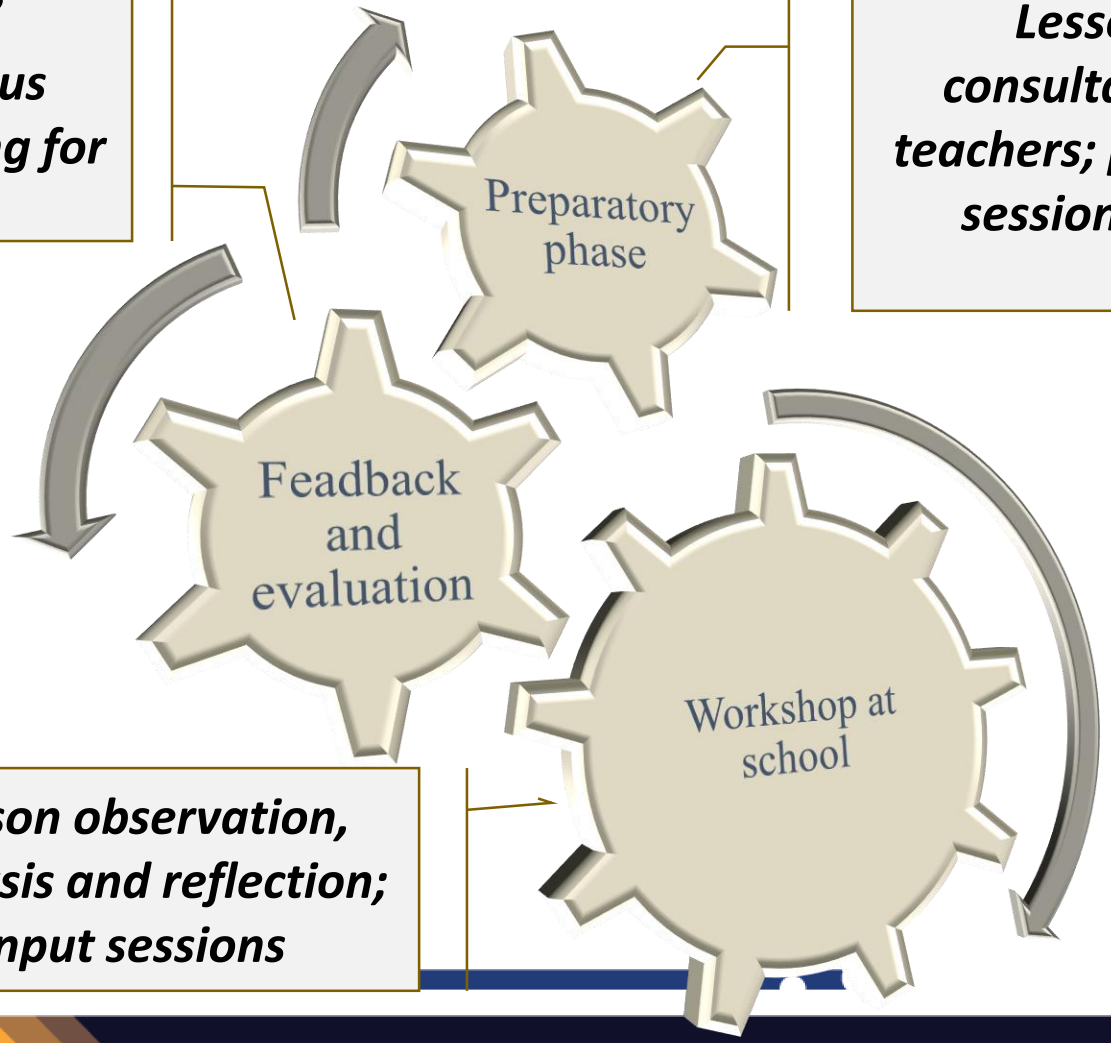


Role of each teacher

- Leader – leading a classroom lesson observed by colleagues
- Learner - observing, analysing & reflecting on colleagues' teaching and students' learning

Structure of workshops (1st phase)

Analysis of teachers' feedback; coaches' focus group discussion; planning for future sessions



Lesson preparation; consultations with leading teachers; preparation for input sessions; preparation for analysis

Lesson observation, analysis and reflection; input sessions

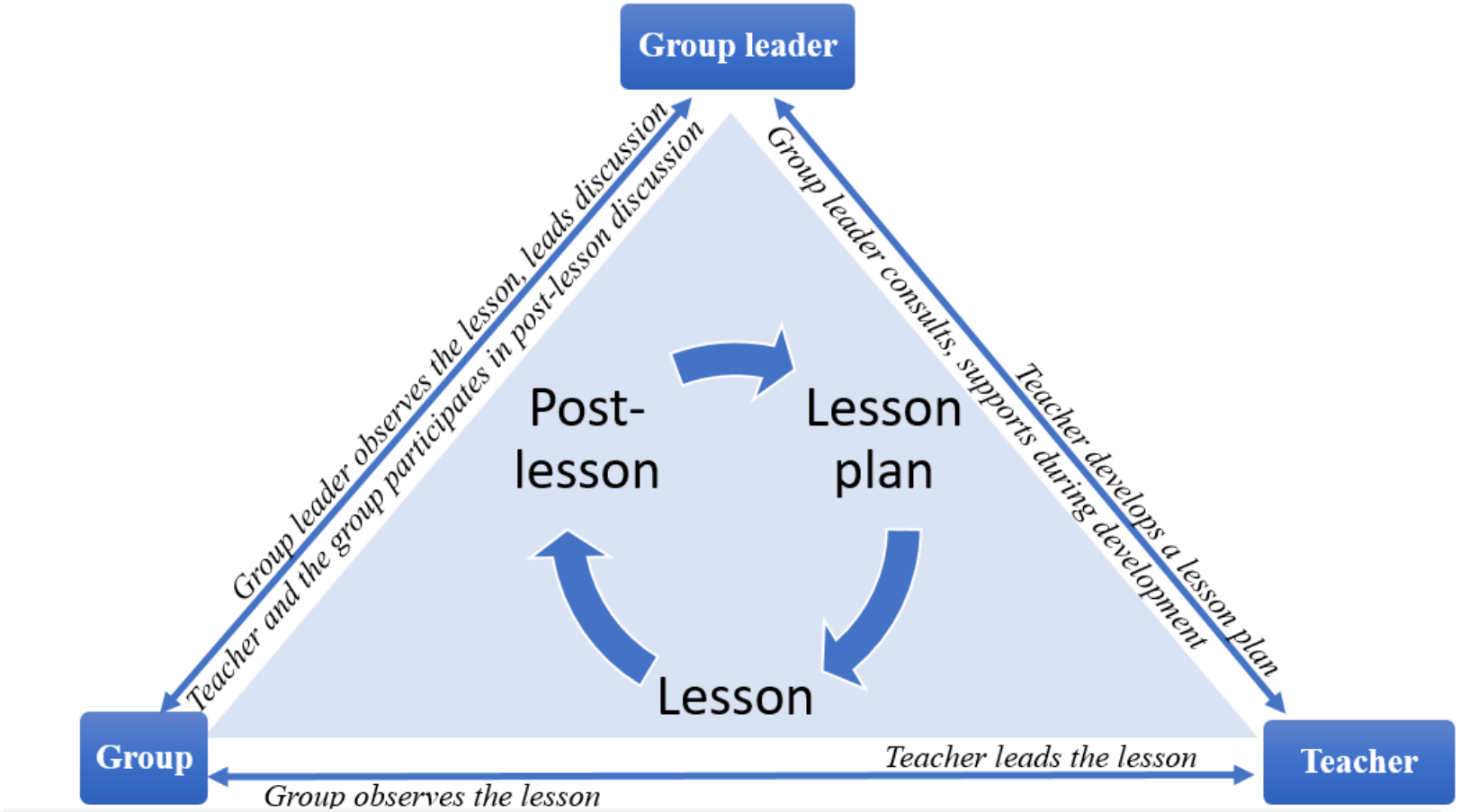
Structure of workshops (2nd phase)

Introduction	Introduction. Information session
Joint lesson observation	Lesson observation No 1 (for example, chemistry for chemists)
	Lesson observation No 2 (for example, physics for chemists etc.)
Joint analysis and reflection	Lesson analysis No 1
	Lesson analysis No 2
	Reflection about analysis
	Feedback from participants

Lesson study

- Lesson study is a *systematic inquiry into teaching practice* which happens to be carried out by examining lessons (Fernandez, 2002)
- Functions as a form of professional development that encourages teachers to develop their own communities of inquiry (Doing & Groves, 2011)
- Improvement of interpersonal relationships with other teachers (Lewis, 2009)
- Feeling ownership of their instructional methods (Lewis, 2009)

Lesson observation cycle



Iterative process where each group member takes on the role of a teacher and leads a lesson

Sources for data collection

Various data sources to determine the effect of the model:

- Teacher questionnaires (teaching skills, performance, reflection, collaboration skills, factors for training, growth, support needs)
- Opinion: Likert scale 5 “yes, agree completely”, 0 ‘’definitely not’’
- Participants evaluated different aspects and effects of the collaboration model and specific benefits (also written feedback)
- Focus groups of coaches
- Transcripts from teacher discussion groups
- School administrator survey and motivation letters

Results

Improved factors of teacher professional learning	Percentage of responses
Survey contains testimonies such as: *The workshops have improved my lesson planning and leading skills, while at the same time developing students' scientifc inquiry skills*	41% completely agree 45% agree
leading and analyzing lessons helped evaluate strengths and weaknesses	62% completely agree 30% agree
Improved skills to reflect on performance together with colleagues	58% completely agree 39% agree
Presence of stress	30%
Collaboration with colleagues helped improve teaching and lesson evaluation skills	88%
Improved ability to accept given feedback	91%
Improved ability to give feedback to colleagues	80%
Improved lesson observation and analysis skills through collaboration	77%

Improved factors of teacher professional learning (continued)	Percentage of responses
Immersed in their professional work	77%
Improved skills through collaboration with other teachers	71%
Viewed participation in seminars as extremely beneficial	96%
Teachers admit that collaboration with colleagues enabled them to more readily share ideas and experiences (*defnitely yes, yes*)	88% 1st group 100% 2nd group
Acquisition of common values (teaching philosophy) (*defnitely yes, yes*)	93% 1st group 77% 2nd group
Collaboration with colleagues developed trust in mutual relationships and provided a sense of safety (*defnitely yes, yes*)	86% 1st group 82% 2nd group
Sense of satisfaction and support (*defnitely yes, yes*)	89% 1st group 88% 2nd group
Positive emotions	89% 1st group 86% 2nd group

Results: directly learning from other teachers

- Teachers observed new teaching and learning skills (including scientific inquiry) in colleagues' lessons and transfered to their own classroom

Finally I saw group work that I could learn from

***

Colleagues often find more positive than I do myself. This is very inspiring

***

I learned several "tricks" from other people that I can use in my lessons

***

When I lead a lesson and get feedback I often find out things I was not even aware of

Results: higher levels of reflection

- Leading and analyzing lessons helps evaluate strengths and weaknesses and improves skills to reflect on performance together with colleagues
- Improves ability to accept and give feedback to colleagues
- Developing a need to reflect on performance and to collaborate with colleagues
- It is important to emphasize that the model combines individual reflections and group reflections

I learned to understand what my actual knowledge and skills were and what I had assumed I knew and was able to perform

***

Coaches and colleagues help me to understand whether I am going in the right direction

Results: new leadership skills

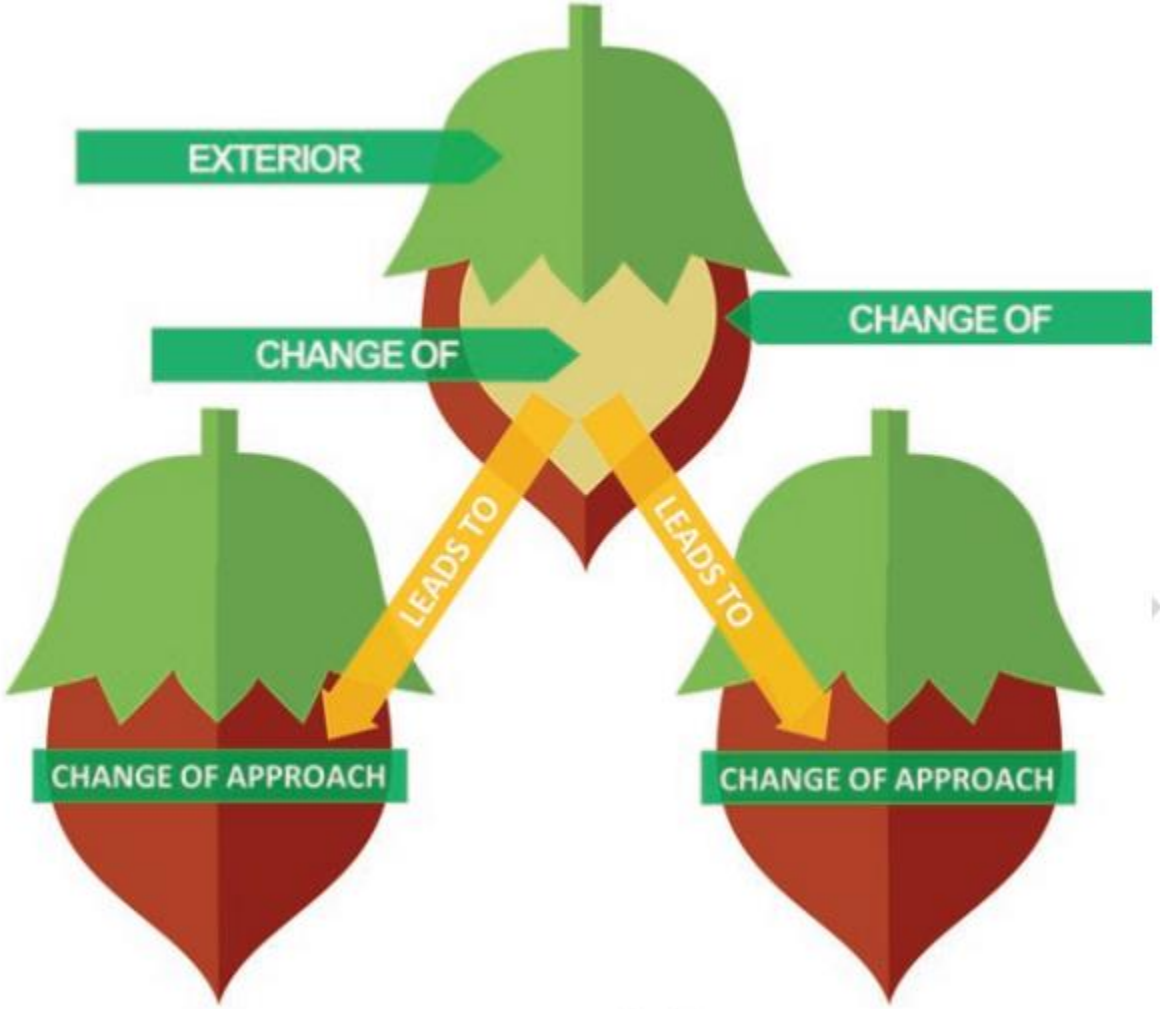
- Teachers expressed a desire to become teacher-leaders
- Lesson analysis based on emphasizing the positive
- Sense of achievement and rising self-esteem
- Leading a lesson observation stimulates to do your best and transfer new knowledge to clasroom practice

Demonstration of best practices is really helpful – we can watch other teachers perform, and this encourages us to take over the good practices

Main conclusions

- Knowledge acquired in the workshops is successfully transferred to classroom practice
- The new model can inspire changes in the practices of those teachers who lack familiarity with different teaching paradigms
- Ownership: chicken and egg dilemma
- Deeper changes in teaching philosophy and practice require **regular** reflection

How changes occur and disseminate: “the hazelnut model”



Limitations to be taken into account

- Live classroom observation is advised
- The quality of demonstration in the observed lessons
- Stress element during observations = High level of trust is needed
- Long-term work relationship between coaches and teachers
- Coaches need to carefully give feedback and make it positive
- Rescheduling lessons for inter-school visits can be demanding
- School administration support is highly needed!
- Needs both individual and group reflection

References

Doig, B., & Groves, S. (2011). Japanese Lesson Study: Teacher Professional Development through Communities of Inquiry. *Mathematics teacher education and development, 13(1),* 77-93.

Fernandez, C. (2002). Learning from Japanese approaches to professional development the case of lesson study. *Journal of teacher education*, *53(5),* 393-405.

Fullan, M. (2011a). Learning is the work. Unpublished paper. Retrieved from: http://michaelfullan.ca/wp-content/uploads/2016/06/13396087260.pdf

Fullan, M. (2011b). Whole system reform for innovative teaching and learning. In: *Innovative teaching and learning research*. Findings and implications.

Fullan, M., & Langworthy, M. (2013). *Towards a new end: New pedagogies for deep learning*. Seattle, Washington: Collaborative Impact.

Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: theory and practice, 8(3),* 381-391.

Lewis, C. (2009). What is the nature of knowledge development in lesson study? *Educational action research, 17(1),* 95-110.

Namsone, D., & Cakane, L. (2018). A Collaborative Classroom-Based Teacher Professional Learning Model. In *Science Education Research and Practice in Asia-Pacific and Beyond* (pp. 177-195). Springer, Singapore.

Volkinsteine, J., Namsone D., & Cakane, L. (2014). Latvian chemistry teachers' skills to organize student scientific inquiry. *Probl Educ 21st Century,* 59:86–98

Zehetmeier, S. (2015). Sustaining and scaling up the impact of professional development programmes. *ZDM, 47(1),* 117-128.

More information:

Dace.namsone@lu.lv