

Centre for Physically Active Learning

A Twenty-Year Journey on Developing and Sustaining Physically Active Learning in Education



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Centre for Physically Active Learning

A Twenty-Year Journey on Developing and Sustaining Physically Active Learning in Education

 Australia TransformUS	 Norway SEFAL Centre for Physically Active Learning	 Italy The Joy of Moving	 Finland LIKES Schools on the Move
 UK Creating Active Schools	 USA SWITCH programme and Comprehensive Schools Physical Activity Programme	 Estonia Schools in Motion	

T U E S D A Y									
8:15-9:00	REGISTRATION AND REFRESHMENTS <i>Atrium</i>								
9:15-10:30	OPENING & KEYNOTE SPEAKERS <i>Great Hall</i>								
	Welcome and Housekeeping by Rich Williams, Shirley Congdon (Vice-Chancellor of the University of Bradford) and John Wright (Founder of the Bradford Institute for Health Research) Keynotes by Andy Daly-Smith (Reader of Physical Activity and Healthy Childhood), Kim Leadbeater (Labour MP for Batley and Spen), David Richardson (Headteacher at Sunnyfield's Primary School).								
10:30-11:00	BREAK AND REFRESHMENTS <i>Atrium & Small Hall</i>								
11:00-12:30	<table border="0" style="width: 100%; text-align: center;"> <tr> <td style="width: 25%;">International Case Studies 1 <i>Great Hall</i></td> <td style="width: 25%;">Shaping WSPA through Pupil Voice and Insights <i>D2</i></td> <td style="width: 25%;">Building School Stakeholder Capability to Deliver Impactful WSPA Programmes <i>JSB Lecture Theatre</i></td> <td style="width: 25%;">The Influence of Policy, Culture and Context <i>E92</i></td> </tr> <tr> <td>11-11:30 Transform Us, Aus</td> <td>11:30-12 Joy of Moving, Italy</td> <td>12-12:30 SWITCH, USA</td> <td></td> </tr> </table>	International Case Studies 1 <i>Great Hall</i>	Shaping WSPA through Pupil Voice and Insights <i>D2</i>	Building School Stakeholder Capability to Deliver Impactful WSPA Programmes <i>JSB Lecture Theatre</i>	The Influence of Policy, Culture and Context <i>E92</i>	11-11:30 Transform Us, Aus	11:30-12 Joy of Moving, Italy	12-12:30 SWITCH, USA	
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11-11:30 Transform Us, Aus	11:30-12 Joy of Moving, Italy	12-12:30 SWITCH, USA							
12:30-13:30	LUNCH <i>Small Hall, Atrium & Great Hall</i>								
13:30-15:00	<table border="0" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;">International Case Studies 2 <i>Great Hall</i></td> <td style="width: 33%;">Learning from Practice: Insights on Embedding WSPA in School Culture <i>D2</i></td> <td style="width: 33%;">Physical Literacy and Physical Education <i>JSB Lecture Theatre</i></td> </tr> <tr> <td>13:30-14:00 Finnish Schools on the Move, Finland</td> <td>14:00-14:30 Schools in Motion, Estonia</td> <td>14:30-15:00 CSPAP</td> </tr> </table>	International Case Studies 2 <i>Great Hall</i>	Learning from Practice: Insights on Embedding WSPA in School Culture <i>D2</i>	Physical Literacy and Physical Education <i>JSB Lecture Theatre</i>	13:30-14:00 Finnish Schools on the Move, Finland	14:00-14:30 Schools in Motion, Estonia	14:30-15:00 CSPAP		
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15:00-15:30	BREAK AND REFRESHMENTS <i>Small Hall & Great Hall Balcony</i>								
15:30-16:30	<table border="0" style="width: 100%; text-align: center;"> <tr> <td style="width: 33%;">International Case Studies 3 <i>Great Hall</i></td> <td style="width: 33%;">The Role of Localities (Municipalities) in Supporting WSPA <i>JSB Lecture Theatre</i></td> <td style="width: 33%;">Embedding Movement in Lessons <i>D2</i></td> </tr> <tr> <td>15:30-16:00 Creating Active Schools, UK</td> <td>16:00-16:30 SEFAL, Norway</td> <td></td> </tr> </table>	International Case Studies 3 <i>Great Hall</i>	The Role of Localities (Municipalities) in Supporting WSPA <i>JSB Lecture Theatre</i>	Embedding Movement in Lessons <i>D2</i>	15:30-16:00 Creating Active Schools, UK	16:00-16:30 SEFAL, Norway			
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15:30-16:00 Creating Active Schools, UK	16:00-16:30 SEFAL, Norway								
16:45-17:45	PANEL DISCUSSION <i>Great Hall</i>								
	Panel: Amika Singh (Senior Researcher at Muller Institute), Ian Holmes (Co-founder of Move and Learn), and Steve Caldecott (Deputy CEO of aPE).								
17:45-19:00	DRINKS, CANAPÉS AND POSTERS <i>Atrium</i>								
	Welcome from Active Bradford. Enjoy some evening networking with, drinks, buffet-style food with music.								

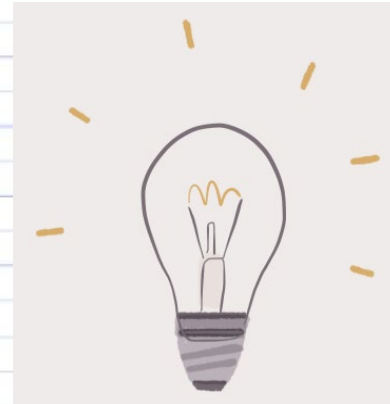
***new ideas arrive...
when together with curious, open and interesting people!***



Kick-start your brain. New ideas come from watching something, talking to people, experimenting, asking questions and getting out of the office!

— Steve Jobs —

**New
Ideas &
perspective!**



Anchoring
Ownership
Meaningfulness
Purpose
Readiness
Approach-mindset
Tribal language
**Co-creation in equal
partnership
(in the “third space”)**



Agenda

Part 1

- **From Parachuting to Co-Creation: A 20-year Journey of School-Based Research**
 - *Phase 1: Implementing Physical Activity in School*
 - *Phase 2: Creating Hybrid Solutions*
 - *Phase 3: Co-creating Physically Active Learning*

Part 2

- **Center for Physically Active Learning**
 - *Three Pedagogical Principles*
 - *The SEFAL model*
 - *Modules*
 - *Results*

Part 3

- **What is next?**
 - *Take Home Message*
 - *What is next?*



Western Norway
University of
Applied Sciences

But first...

Center for Physically Active Learning 2018 - 2023

2018



2023



Structure

- Funded by Gjensidige Foundation in 2018
- Western Norway University of Applied Sciences, Campus Sogndal

Aim

- Work together with teachers and head teachers in schools to develop and sustain PAL as a teaching method in school
- Educate 1,000 teachers in 100 schools through a CPD

The Center

- Education: PAL CPD (15 ECTS on masters-level)
- Research: Papers; Norwegian teacher journals & international peer-reviewed journals
- Dissemination: E-learning and online webpage

Part 1

From Parachuting to Co-Creation: A 20-year Journey of School-Based Research

Part 1

From Parachuting to Co-Creation: A 20-year Journey of School- Based Research

PA – Preventative
Public Health
Perspective
(Resaland Ph.D.)

1. 2004-2010

PA and public
health/
cognition
(ASK-Study)

2. 2011-2015

PA/PAL –
academic
achievement

(SciM)

3. 2016-2019

PAL –
Developing
and sustaining
PAL together
with schools

(SEFAL)

4. 2018-2023

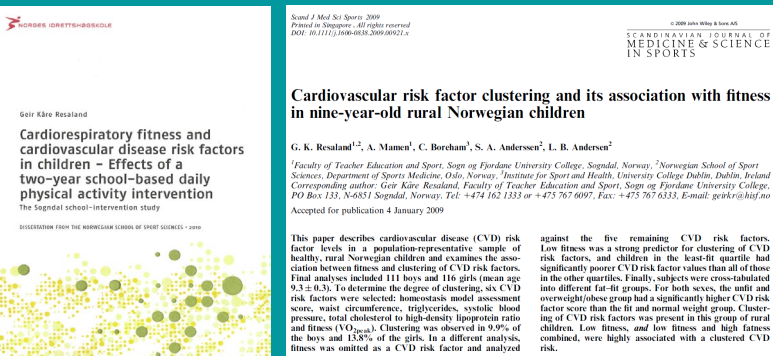
SEFAL



SCHOOL
INMOTION

2 & 3 =

Cluster-randomized controlled studies (cluster-RCT)



Phase 1: Implementing Physical Activity in School

The Sogndal School-Intervention Study

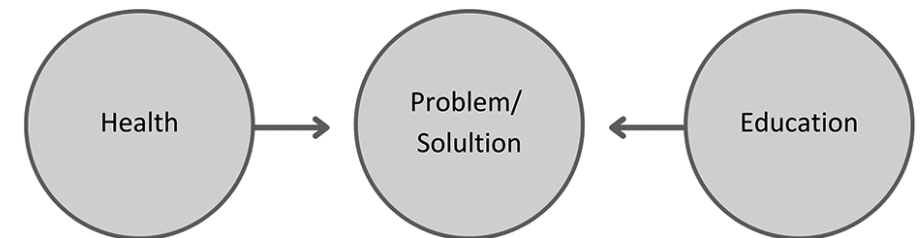
- A 2-year school-based 60 minutes daily physical activity intervention on CVD risk factors (n=256, 4th graders in two age cohorts)

The characteristics

- Design focus on large-scale trials and generalizability (Love, 2019)
- Tightly constructed, single-component programs (Jago et al., 2023)
 - Predefined parameters of interest and measures
- Distinct methodological approaches such as cross-sectional, longitudinal or intervention trials (E.g., Donnelley et al., 2016)
- Limited capacity to consider education disciplines (Felt et al., 2016)

Phase 1 = the multidisciplinary phase

- Draws on knowledge from different disciplines but stays within its methodological boundaries (Mandelid et al., 2023)



Phase 2: Creating Hybrid Solutions

The Active Smarter Kids (ASK) Study

- A Cluster-RCT across Sogndal Municipality 28 intervention schools (n= 596 children) and 29 control schools (n=533 children)
- Investigating Academic Performance, QoL wellbeing, CFR, CDV risk Factors, Qualitative Perspectives

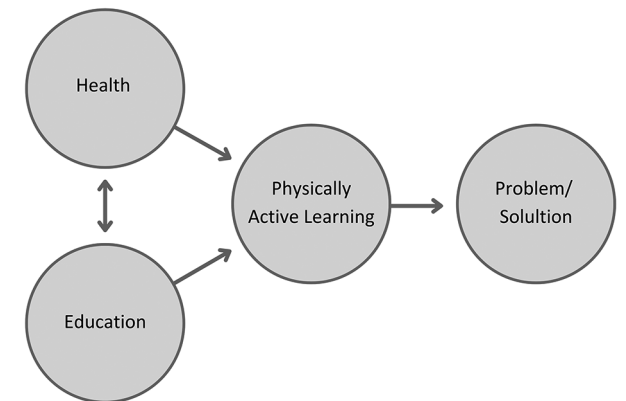
The characteristics

- Creating hybrid solutions by combining physical activity and learning in a mutual relationship.
- Research approaches such as RCT, interviews, questionnaires, and fieldwork (e.g, Lerum et al., 2019; Chalkley et al., 2022)
- Extending theories that underpin PAL (e.g., Quarmby et al., 2018; Daly-Smith et al., 2020; Mandelid et al., 2022)

Phase 2 = the interdisciplinary phase

- Enables a equal relationship between disciplines that links to a coherent whole (Mandelid et al., 2023)

SCHOOL
INMOTION



Phase 3: Co-creating Physically Active Learning

SEFAL

- A competence centre that has a dual aim of educating teachers PAL competencies and to further develop a PAL pedagogy with teachers.

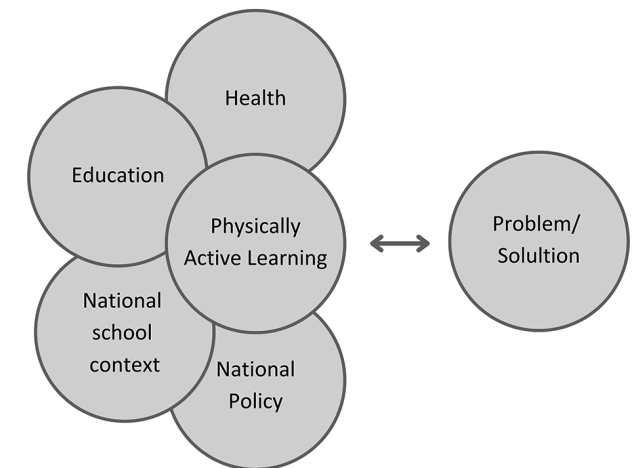
The characteristics

- Take into consideration problem-solving in the real-life world to evolve and adapt practices continuously (McPhee et al., 2018)
- Equal relationship between practice and theory (Piggin, 2020; Matias & Piggin, 2022)
- Including wider Stakeholder perspective to co-create knowledge (E.g., Daly-Smith et al., 2020; Madsen et al., 2022)

Phase 3 = the transdisciplinary phase

- Moves beyond disciplines and research-led approaches to develop PAL in reciprocal relationships with non-academics (Mandelid et al., 2023)

SEFAL



What have learned?



The 20-Year Journey is an Acknowledgement that:

- “on top of everything else” - in an already hectic school day
- not a legally mandated task - in a "legally mandated" school day
- not something that teachers experienced as pupils themselves
- not a competence in the teacher training education
- Teacher-Union negative to a (top-down) mandatory teaching method. For them: Autonomy in the choice of teaching methods (including PA) is vital
- And more; not enough "research evidence"... a change... will I lose control?



Maybe RCTs are not always the most appropriate design for doing school-based research?

Schools are very different:

Every school is unique, in size, type, pupils, teachers, budget, urban/rural, leadership (rector, municipality), schoolyard, culture, readiness, etc

Schools are NOT a lab-setting, schools are:

- **Dynamic**
- **Complex**
- **Unpredictable**
- **«Uncontrollable»**

Needed in collaboration with schools:

- **Relationships (equality, respect and trust)**
- **Anchoring and ownership (buy-in)**
- **“Meaningfulness” and “purpose” (relevance)**

**Third Space
is needed!**

Part 2

Center for Physically Active Learning

Part 2

Center for Physically Active Learning



SEFAL

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- Research:
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Three Pedagogical Principles

1. Structuring the SEFAL PAL CPD program
2. Whole School Approaches and School Culture in the SEFAL PAL CPD program
3. Locating the SEFAL PAL CPD in theory and practice



1. Structuring the SEFAL CPD

- One-Size-Fits-One ideology (Avalos, 2011; Biesta, 2015)
- ALACT model (Korthagen, 2001; 2017)
 - 1) Action, 2) Looking Back on Action, 3) Awareness of essential aspects, 4) Create alternative methods of action, 4) trial
- Reflection and experience as starting point of development
- Reflective portfolios to create awareness (Klenowski et al., 2006)
- Time consuming task (Hoekstra et al., 2009)

Whole School Approaches and School Culture

- Collaborative development (Klenowski et al., 2006)
- Development includes principals, teachers, social workers (Hargreaves, 2008)
- Professional Environment
- Creating change from within
- No quick fix, deep cultural change (Fullan, 2006)
- Define and create sustaining change in the semantic, social, and physical culture (Kemmis et al., 2014)

Theory and Practice

- Link between theory and practice is guided by experiential knowledge (Zeichner et al., 2005)
- Strengthen the connection between academia and school (Ball & Forzani, 2009)
- Informal education / workplace-based (Avalos, 2011)

Structuring the SEFAL CPD

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Please **DISCUSS**

2:00

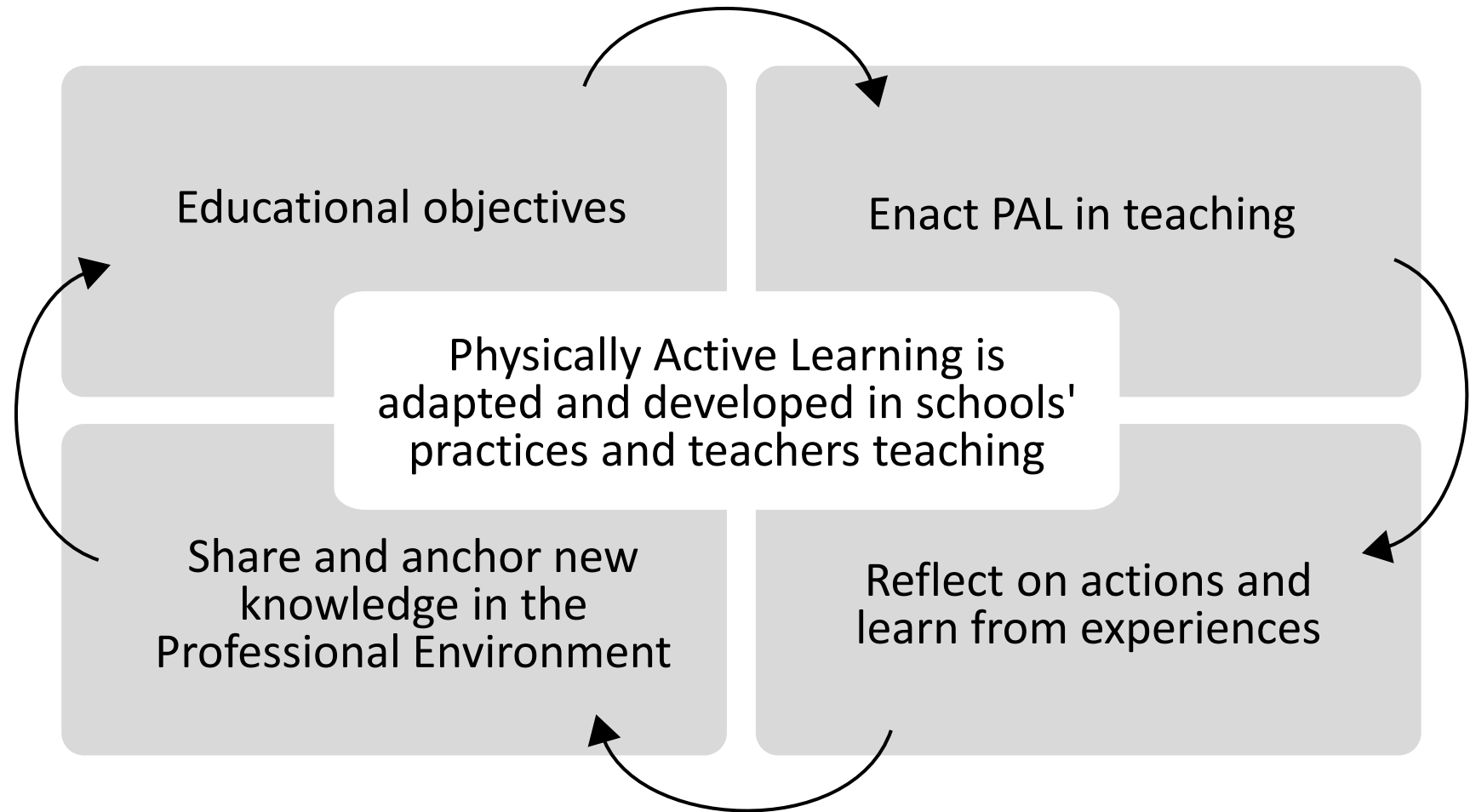


*School-based projects:
How can we make co-creation meaningful
for teachers, head teachers and
researchers?*



The SEFAL model

- Workplace-based
- Whole school approach
- Spans one year
- No right or wrong way of enacting PAL
- teachers' experiences as starting point, support with PAL examples, create awareness of the process



The SEFAL Workplace-Based Continuous Professional Development Framework (Mandelid et al., in press)

Knowledge



Skills

Competence

Theory



Practice

Modules

Onboarding

- Initial meeting with school leaders
- Criteria for participation
 - Dedicate time during working hours
 - All employees participating
- Introductory lecture that aims to identify PAL in schools' existing practice

PAL and Learning in Various Learning Environments

- Focus attention on how various learning environments afford learning and movement opportunities
- Portfolios place attention on reflecting on opportunities different learning environments have at their school.

Module

1

Module

2

Approaches to PAL

- Focus attention on different forms of movement and physical activity
- Portfolios place attention on reflecting on how different ways of movement can contribute to educational purposes.

PAL in the professional environment

- Focus attention on developing PAL as part of the school culture
- Portfolios place attention on reflecting on current individual and school practices, and how the CPD are contributing to cultural change.

Module

3

Exam

- Voluntary exam
- Exam is structured for teachers to 1) write a plan for how to sustain PAL at the schools and 2) plan and organize a PAL activity and argue for it by using available resources and research

Results

CPD program

1565 Teachers

Have completed the SEFAL
Continuous professional development
program

18 500



Pupils have gotten a more physically
active, practical and varied school day

88



Primary and elementary
schools have

Participated



From **37**
Municipalities in
Norway

PAL as Pedagogy



Break down
social barriers

- An arena for collaboration
- Become familiar with others
- Enables verbal/ non-verbal
communication



Get to know the subject content
through:



- Movement
- Explore and experience
- Combining skills and knowledge
- Interaction and critical thinking

FALtastisk.no



Knowledge site
Activities
E-Learning



Five forms of PAL

Relation
ships

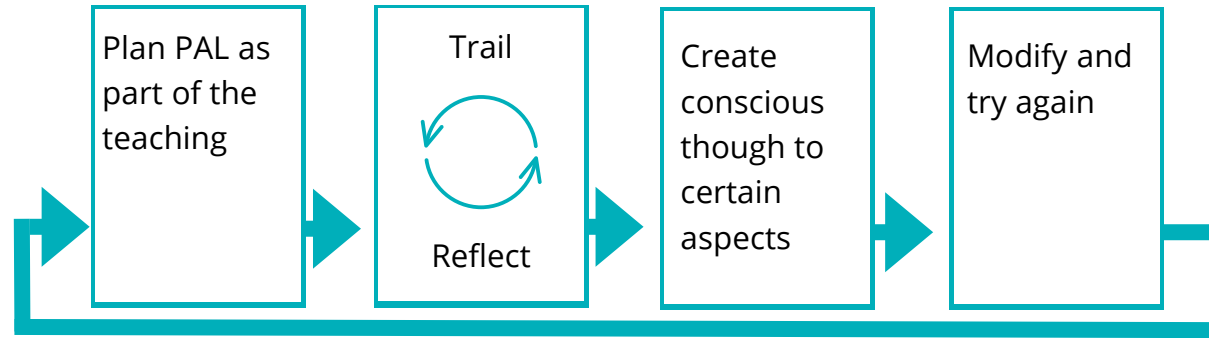
Learning
arena

Subject
content

Results

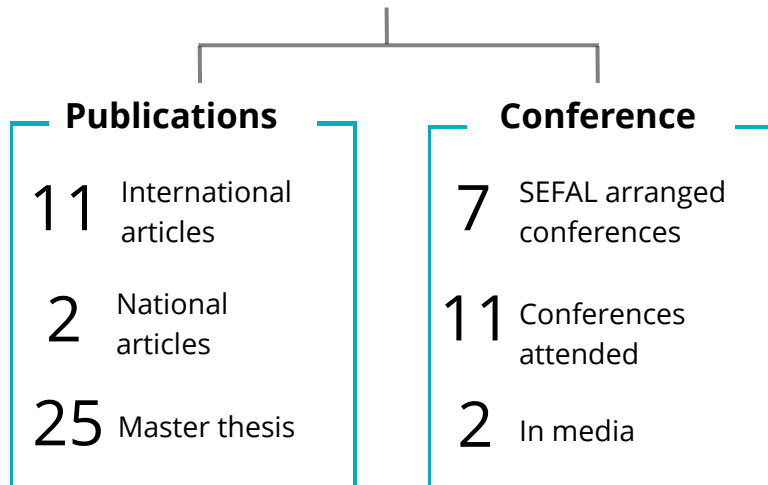
CPD program

- Workplace-based Continuous Professional Development Program
- Experience based
- Co-creation



Research

58 Publications and research conferences



International network

Create an international network

- Curriculum for PAL
- webpage ACTivateyourclass.eu

National network

- Facebook: fysisk aktiv læring (FAL) 10 000 members
- FALtastisk: 3000 users each month

Political impact in two White Papers

NOU 2022: 13 & NOU 2023: 4



Learn more?



Unpacking Physically Active Learning in education: a movement didaktikk approach in teaching? (Mandelid et al., 2022)



“Just because it’s fun, it’s not without purpose”: Exploring the blurred lines of physically active learning. (Mandelid et al., 2023)



Reframing Physically Active learning as movement centred pedagogy: a European priority action framework. (Chalkley et al., 2023)



Behaviours that prompt primary school teachers to adopt and implement physically active learning: a meta synthesis of qualitative evidence. (Daly-Smith et al., 2021)



Teachers’ sensemaking of physically active learning: A qualitative study of primary and secondary school teachers participating in a continuing professional development program in Norway (Teslo et al., 2023)



It's the journey, not the arrival that matters – Teachers' perceptions of their practice after participating in a continuing professional development program in physically active learning. (Teslo et al., 2023)



“Go beyond your own comfort zone and challenge yourself”: A comparison on the use of physically active learning in Norway, the Netherlands and the UK. (Chalkley et al., 2022)



The Conforming, The Innovating and The Connecting Teacher: A qualitative study of why teachers in lower secondary school adopt physically active learning (Lerum et al., 2021)



Senter for Fysisk Aktiv Læring
Sluttrapport 2018-2023



**Center for Physically
Active Learning -
final report**

<https://www.hvl.no/en/about/sefal/>

Part 4

What is next?

Education

CPD 1) PAL

To develop PAL competencies in teachers' practice and create a cultural change

CPD 2) PAL in Public health and life mastery

To create a connection between PAL and the interdisciplinary topic 'Public health and life mastery' in schools

Research

Evaluation

Evaluate the fifth year of the SEFAL education

Third Space

Cocreate new opportunities with schools in the future

Dissemination

FALtastisk.no

Continue to develop and evaluate FALtastisk as a digital learning resource for teachers



Why should teachers work more together and less alone



“Constructive teacher communities Research shows that if professional communities are to be productive in the sense that they have a positive effect on students' and teachers' learning, it is not sufficient for teachers to describe and share experiences and practices (Cordingley et al. 2005). Several studies have shown that professional communities are beneficial for students only when the teachers' collaboration and conversations are rooted in the testing of new approaches, and when the effect of such trials is jointly examined.

In other words, it is questioning the established, not just sharing it, that is crucial.

In a comprehensive research summary on what characterizes well-functioning education systems, Darling Hammond (2017) identified the teaching community's research approach to their own practice as a key factor. Such an approach entails, among other things, that teachers write down experiences, evaluate them, discuss them and see them in the light of other knowledge.

Productive communities are typically oriented towards practical, daily tasks related to teaching and student learning, while at the same time they have access to and use resources, expertise and knowledge from outside (Avalos, 2011; Kennedy 2016).”



Gro Tronsmo



UNIVERSITY
OF OSLO

https://www.uv.uio.no/forskning/satsinger/fiks/kunnskapsbase/stengte-skoler-digital-hjemmeundervisning/nye-veier-og-varige-spor/profesjonsfellesskap/bs-02-2020-web_tronsmo.pdf

Læreplanen
og profesjonsfellesskapet

» Av Eli Tronsmo Det er lagt mer vekt på læreres samarbeid i det nye læreplanverket. Men forskningen viser at lærerfellesskap i seg selv ikke kan garantere ny og bedre praksis. Typisk produktive fellesskap er villige til å teste ut og snu opp ned på gamle rutiner - samtidig som de utvikler felles standarder for god praksis.





Pupils!



SEFAL teachers!

Thank you for your attention!



Do you have any questions?

- ✉ Geir.Kare.Resaland@hvl.no
- ✉ Mathias.Brekke.Mandelid@hvl.no
- 🌐 <https://www.hvl.no/sefal/>
- 🌐 www.FALtastisk.no

SEFAL |



Western Norway
University of
Applied Sciences



Knowledge which builds human beings and society



SEFAL

Physically active learning (PAL)



SEFAL understands PAL as an umbrella term for learning processes where the pupils are in motion.

PAL expands the teachers' didactic repertoire and can contribute to the pupils' learning.

PAL can take place in many ways, in different subjects and in different learning arenas.

***Bridging the gap between
academia & practice through
CO-CREATED knowledge- and experience
driven innovative practice***



Move beyond top-down policy makers or researcher-led school-based initiatives by acknowledging the importance of all stakeholders in the school system, especially those of teachers

ORIGINAL INVESTIGATION

Active Smarter Teachers: Primary School Teachers' Perceptions and Maintenance of a School-Based Physical Activity Intervention

Lerum, Øystein¹; Bartholomew, John²; McKay, Heather³; Resaland, Geir Kåre⁴; Tjomsland, Hege E.⁴; Anderssen, Sigmund Alfred⁵; Leirhaug, Petter Erik¹; Moe, Vegard Fusche¹

«Recognises principals and teachers as innovative and creative chefs rather than as short-order cooks who merely follow set recipes».

Quote from: Lerum et al. *Active Smarter Teachers: primary school teachers' perceptions and maintenance of a school-based physical activity intervention. The Translational Journal of the American College of Sports Medicine. Sept 1, Vol 4, Issue 17, p 141-147*

Please **DISCUSS**

2:00



Do your pupils sit still too much during the school day?



YES