

P= Positiivisesti (positively)

R= Ryhmässä (in group)

O= Oppien (learning)

Koulu = School



Savolainen, Hannu (JYU)

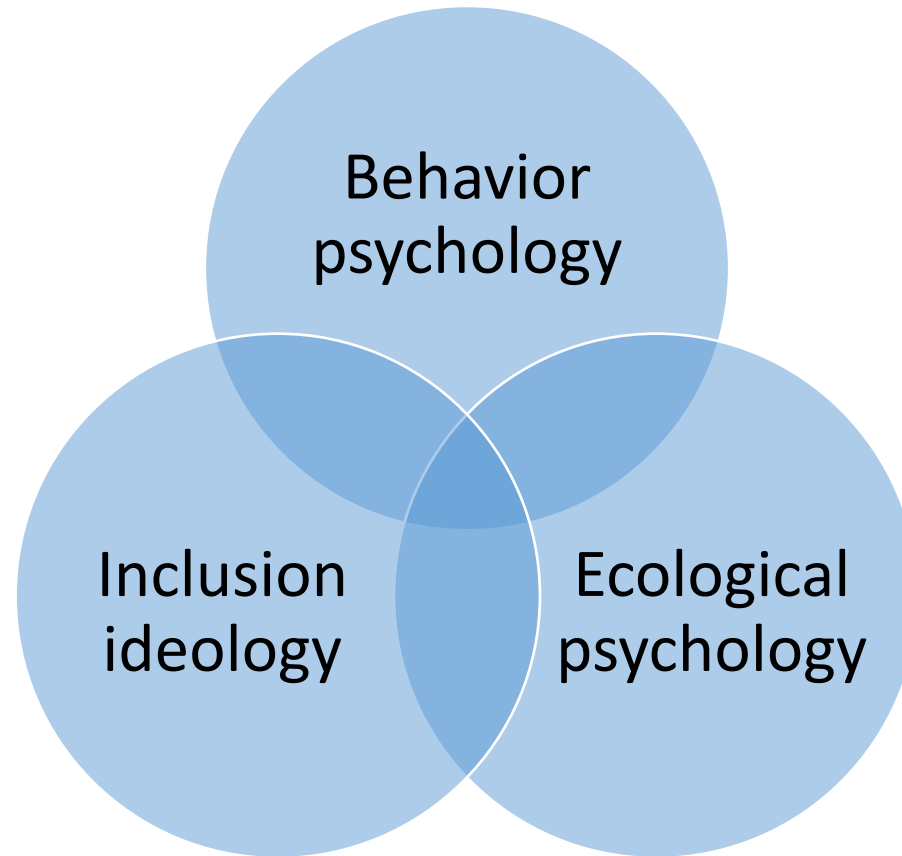
Närhi Vesa (JYU)

Savolainen, Pirjo (UEF)

# How was ProSchool born?

- Background: co-operation between University and Municipalities in developing three tiered support to schools since 2010
- The 3-tiered model (of educational supports to learning) implementation emphasized Tier 2 and Tier 3 supports (individual supports)
- We came into agreement with municipalities:
  - To increase inclusivity in schools we need more support to address behavior problems
  - Rather than the more intensive individual supports, the first priority should be on developing Universal (Tier 1) support
    - Universal support – All teachers take responsibility of all children – inclusion?

# Theoretical background



# ProKoulu research team

## *Active research team:*

- *Hannu Savolainen (JyU, NMI)*
- *Vesa Närhi (JYU, NMI)*
- *Pirjo Savolainen (UEF, NMI)*
- *Anne Karhu (JYU, UEF)*
- *Mika Paananen (JYU, NMI)*
- *Noora Heiskanen (UEF)*
- *Henrik Husberg (NMI)*
- *Jukka Sivola (UEF)*
- *lines Palmu (JYU)*
- *Ville Vauhkonen (JYU)*
- *Hanna Markkanen (JYU)*

## *Earlier Members*

- *Olli-Pekka Malinen (HY)*
- *Sami Määttä (NMI)*
- *Kristiina Lappalainen (UEF)*
- *Marika Peltonen (JYU)*
- *Tiina Kiiski (JYU)*
- *Teija Koskela (TY)*
- *Marika Mervola (UEF)*

## *Active municipality partners:*

- *Kontiolahti*
- *Lappeenranta*
- *Varkaus*
- *Tuusula*
- *Esbo*
- *Borgå*
- *Turku*
- *Kitee*
- *Saarijärvi*
- *+ many others continuing of the 69 schools in the 2013-2014 initiated program*

## *Funding:*

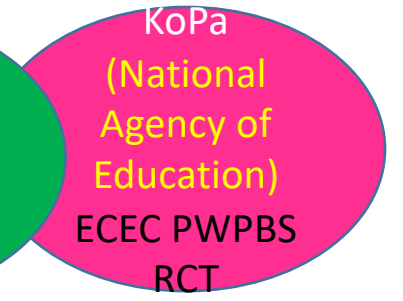
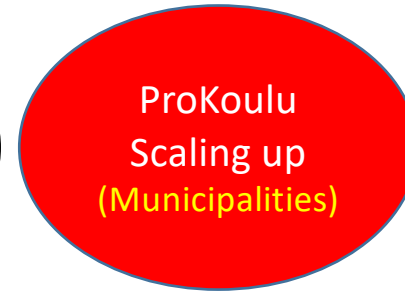
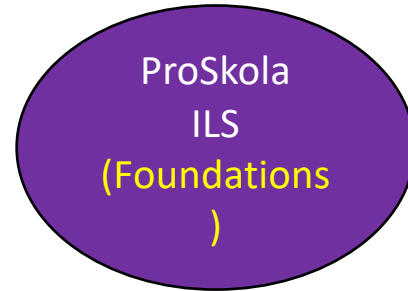
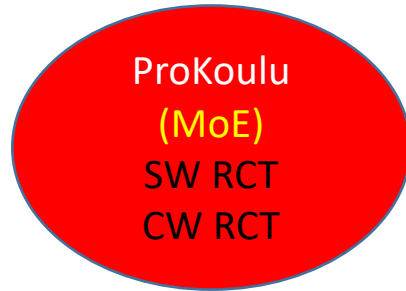
- *Ministry of Education and Culture (ProKoulu, 1,75 M€)*
- *ESF / ELY (Pro Varkaus 1 & 2 400.000€)*
- *National Agency of Education (Provaka (100.000€), Kopa 4 interventions 500.000€)*
- *Self-financing by municipalities*
- *Erasmus+ KA3 (1,8 M€; 4 countries)*
- *Svenska kulturfonden, Brita Maria Renlunds Minne, SFV (ILS2 776.400 €)*

# ProKoulu research group projects

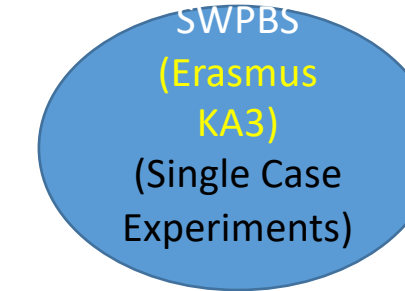
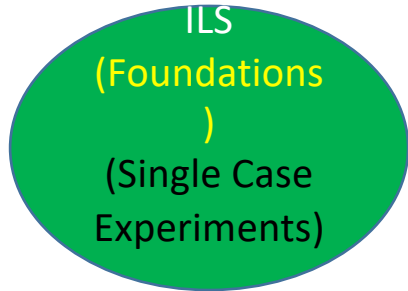
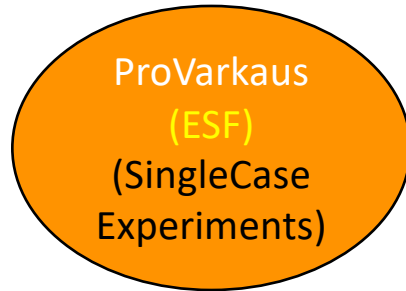
School, especially grades 1-6 (7-9)

Early childhood care and education,  
Pre-school

Tier 1



Tier 2-3



Text in yellow= funding source

SW= School wide  
CW= Classwide

Tier 2-3:  
Check in Check out  
Check in Check out Plus  
Maltti  
Focus+

+



# Implementation of the RCT field trial (2013-2017)

- General principles of planning the intervention:
  - Fit with the Finnish schools, e.g. highly educated and motivated teachers with large autonomy in schools
  - School ownership of the program
  - Sustainability of implementation
- Practical implications:
  - Relatively "light" coaching of the schools
  - Schools have clear autonomy in choosing practical details of the intervention elements
  - Training coaches from the municipalities, for them

# Research design and intervention

- Design:
  - Randomized delayed control experimental design
  - 60 schools (10 has dropped out) randomized into the two groups beginning intervention either in 2013 or 2014
  - Measurements with questionnaires twice a year (Oct-Nov; Mar-Apr)
  - Respondents: all teachers (N= 1386), all students (N=9730) from classes 2-6 (+7-9 in some schools)
- Intervention(s):
  - Schools have ProKoulu teams which lead the process
  - All schools assigned a coach trained by the project, coach meets the team min. 4 times a year + additional contact if needed
  - Schools are provided with a manual that describe each step and give assignments that support the support model development
  - In addition to the large scale experiment we have done single subject experimental studies on individual support (CICO) (secondary support) and developed also special support (tertiary) interventions

# The key elements of ProKoulu

1. We are committed to **support and guide** students' behavior and form a ProKoulu team
2. We define **behavior expectations** together with students and parents
3. We make behavioral instructions about **expected behaviors** to all important school situations or locations
4. We **teach** the behavioral instructions to students
5. We help students to learn expected behaviors by **positive feedback** and use an agreed **reward system**
6. We respond to undesirable behavior using **agreed pedagogical practices**
7. We develop our school **utilizing data** collected from the school.
8. We adopt new ways to give **more intensive support** to some students
9. We develop our **special education** approaches so that they support student participation to regular classroom activities
10. We have a new **working culture** in our school which we constantly **develop**



# Measured constructs

## Students

- Problem behaviors in school
- Classroom behavioral climate
- Socio-emotional strengths and difficulties
- School engagement
- Student-teacher relationship
- Feeling of justice
- Intervention acceptance & fidelity

## Teachers

- Problem behaviors in school
- Classroom behavioral climate
- School climate
- School leadership
- Teacher efficacy
- Job satisfaction
- Burnout
- Frequency of disruptive classroom behavior
- Transformational leadership
- Intervention fidelity
- Intervention acceptance

## Principals

- Principal self-efficacy
- School climate
- Intervention fidelity
- Intervention acceptance

# Initial results

- ProKoulu reduces problem behaviors as observed by the teachers and students
- There are positive effects of the intervention in:
  - Increase of teachers' collective efficacy in behavior management (on the second year of intervention)
  - Teacher – student relationships judged both by the teachers and students
  - Reduction of bullying
- Implementation fidelity is related to the outcomes
- There is remarkable variance between schools in outcomes and fidelity of implementation

**Table 1. Intervention schedule and measurements**

	T1	T2	T3	T4	T5	T6	T7
<b>Intervention group</b>							
<b>Delayed/Control groups</b>							
	2013	2014	2014	2015	2015	2016	2016 2017
Baseline							
Preparation							
Initiation							
Implementation							
Maintenance							

**Table 2: Teacher outcomes - Group effects on outcomes (Std. Beta coefficient) at school level and Intra class correlations (in brackets)**

Measure:	Measurement time				
	T2	T3	T4	T5	T6
<b>Problem Behaviors</b>	<b>.22*</b> (.17)	.23 (.10)	.13 (.17)	.22 (.17)	.18 (.18)
<b>Collective Efficacy on Behavior Man.</b>	.08 (.21)	.09 (.20)	.16 (.21)	<b>.19*</b> (.19)	.18 (.20)
<b>Teacher-Student relations</b>	- -	.12 (.23)	- -	<b>.41**</b> (.12)	- -
<b>Teacher collaboration</b>	- -	.13 (.20)	- -	.01 (.12)	

Note:  $p < .001 = ***$ ;  $p < .01 = **$ ;  $p < .05 = *$ ;  $p < .10 = +$

Note: The colors refer to the approximate phase of the experimental group at each time of measurement.

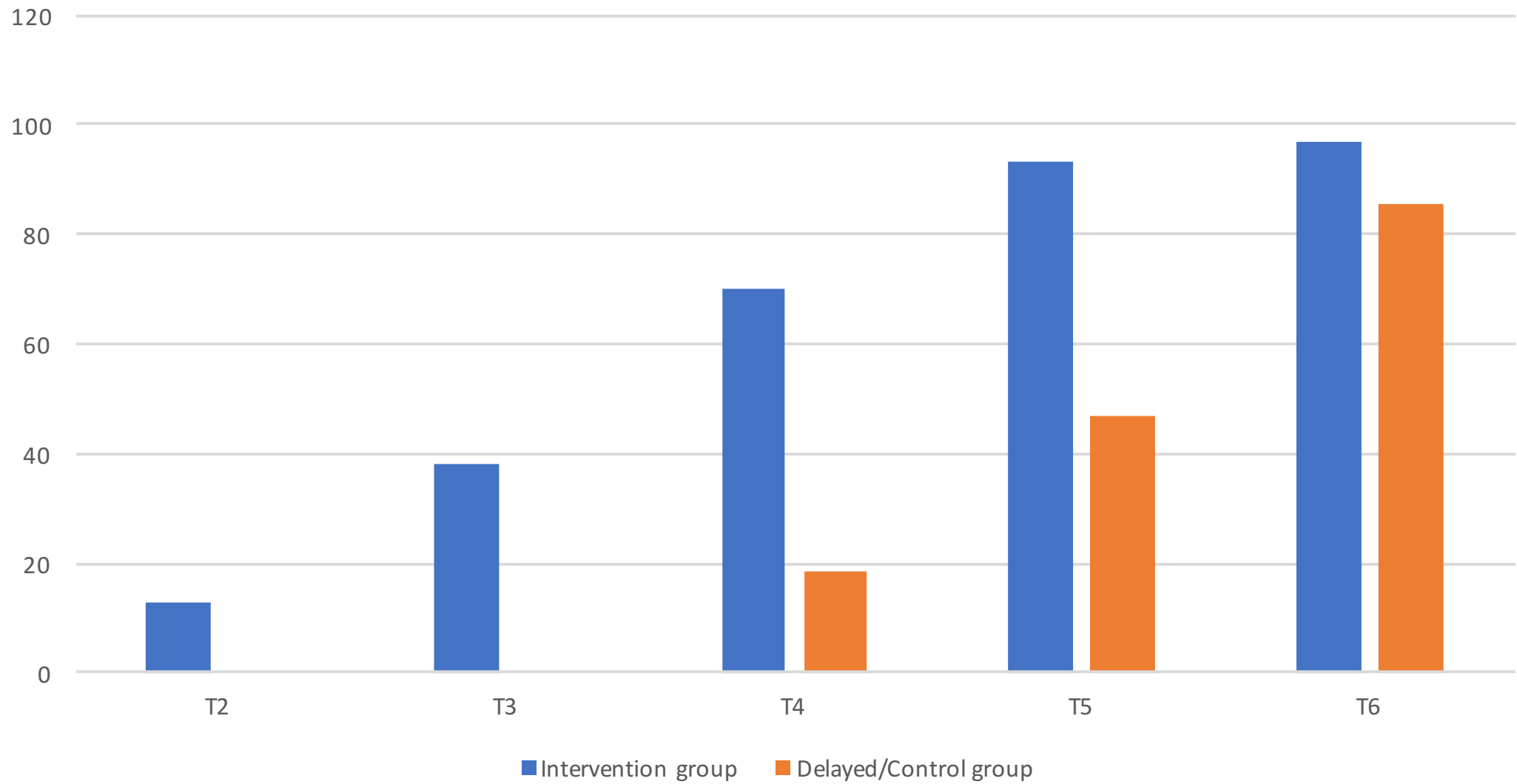
**Table 3: Students outcomes - Group effects on outcomes (Std. Beta coefficient) at school level and Intra class correlations (in brackets)**

	Measurement time				
Measure:	T2	T3	T4	T5	T6
<b>Problem Behaviors</b>	.01 (.10)	.24 <sup>+</sup> (.11)	.16 (.14)	.34** (.15)	.39** (.09)
<b>Byllying:</b>					
<b>Victim</b>	-	.16 (.02)	-	.42*** (.07)	
<b>Bully</b>	-	.02 (.03)	-	.63** (.04)	
<b>Bully-Victim</b>	-	.18 (.03)	-	.47** (.09)	
<b>Student-Teacher relations</b>	-	.05 (.12)	-	.26 <sup>+</sup> (.12)	
<b>Student Relations</b>	-	.08	-	.26*	

Note:  $p < .001 = ***$ ;  $p < .01 = **$ ;  $p < .05 = *$ ;  $p < .10 = ^+$

Note: The colors refer to the approximate phase of the experimental group at each time of

Percentage of schools in implementation phase (Team evaluation)



# Other observations in implementation

- Many teachers believe that their school already has clear behavior expectations, but actually agreeing and reaching understanding on 2-4 expectations and developing behavior instructions on them requires quite a bit of work
- Being able to use constant and frequent positive feedback requires a lot of practice.
- Spontaneous feedback on behavior often mostly (10-15:1) negative or corrective
- The power of positive feedback on changing behaviors is a surprise even for many experienced teachers
- Practicing giving positive feedback among staff has often unintended positive consequences, e.g. on the working climate of the school.

# Observations on school level intervention

- Schools experience more changes and developments as expected:
  - Teacher and principal turnover
  - Changes in school network (closing, merging etc.)
  - During intervention many national level processes: new curriculum writing, quality assurance system development, student care reform (individual vs. system level) → challenges for time
- The important role of leadership in school wide approach
- Teacher education seems to give very little background for school wide or school community development :
  - → e.g. pedagogical skills for behavior management individual “silent” knowledge rather than skills and knowledge acquired and practiced in teacher education



- Savolainen, H., Närhi, V. & Malinen, O-P. (2016) . Finnish SWPBIS - initial results on the reduction of problem behaviors Presentation in The 13th International Conference on Positive Behavior Support, San Francisco, California, March 23-26, 2016
- Savolainen, H., Närhi, V., & Savolainen, P. (2017) Finnish SWPBIS – First results after three years of implementation. Presentation in The 14th International Conference on Positive Behavior Support, Denver, Colorado, March 1-4, 2017.