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« Implementing large scale instructional change in secondary schools? A field experiment »

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Outline

1. Introduction

- Educational reform and instructional change

2. Theoretical settings

- Policy and program Implementation

3. Research objectives

4. Methodology

- Design, sample, data collection

5. First results

6. Conclusion

1. Introduction

■ Instructional change is a difficult and complex process

□ Many instructional reforms have no or weak effects

- Especially in a top-down way (Tyack & Tobin, 1994; Hamilton & al., 2003; Dumay, 2009...)
- Fail in their twin-goals to (Dupriez, 2015)
 1. Change teaching practices
 2. Improve student achievements

■ New initiatives to change practices

□ *Comprehensive School Reform* (CSR) which aim to :

1. Introduce evidence-based practices in schools.
 2. Integrate new practices in various aspects of the local school projects.
- (Rowan & al., 2004)



1. Introduction

- **Organisational perspective on instructional change**
- **Main objectives** are understanding CSR's effects on:
 1. The change of teachers' practices
 2. The improvement of students' learning

2. Theoretical settings

■ Major issues (Berman, 1980 in Rowan & Miller, 2007)

- **Programmed approach** = « promoting the conformity to well-defined set of instructional practices » (p. 253)
 - 1. Highly explicit instructional guidance and monitoring for fidelity
 - 2. Coaching and implementation support (by school principals)

- **Adaptive approach** = « creating instructional innovations that are accommodating to local settings » (p. 254)
 - 1. By encouraging professional communities
 - 2. By giving enough discretion and autonomy to teachers

2. Theoretical settings

■ Major issues:

□ Three models of instructional change (Rowan & Miller, 2007)

1. **Procedural model**= which prescribes very precisely the expected change through explicit guidelines
2. **Professional model**= based on the autonomy of educational teams and on practices' orientation through the appropriation of professional standards defined by experts
3. **Cultural model**= based on collective reflexivity in relation to the instructional change

→ Procedural or professional model, more than cultural one, can have substantial effects on teaching practices and students' learning (Rowan & Miller, 2007)

2. Theoretical settings

■ What implementation is?

- **Implementation** = « refers to what a program consists of when it is delivered in a particular setting » (Durlak & DuPré, 2008, p. 329)

- **Implementation is generally defined and measured by two dimensions** (Resnicow & al., 1998; Dane & Schneider, 1998; Dusenbury & al., 2003; Payne & al., 2006; O'Donnell, 2008; Durlak & DuPré, 2008; Fortin, 2012...)
 1. **Dosage** = « refers to how much of the original program has been delivered (a k a quantity, intervention strength, intensity) » (Durlak & DuPré, 2008, p. 329)

 2. **Adherence** = « is the extent to which the innovation corresponds to the originally intended program (a k a fidelity, compliance, integrity, faithful replication) » (Durlak & DuPré, 2008, p. 329)

3. Research objectives

■ Two main objectives

1. What are effects of procedural control and professional control on the implementation of alternative teaching practices? Do these types of control affect the implementation process differently?
2. Do these types of control have the same effect regarding the dosage or the adherence to core instructional principles?

4. Methodology

- **Design**

- ☐ Field experiment

- **Instructional intervention**

- ☐ Based on explicit teaching of learning strategies for reading comprehension

- **Teachers' training**

- ☐ Introducing the program and its core instructional ideas

- **Coaching sessions**

- ☐ Helping and supporting teachers facing difficulties of implementation.

4. Methodology

■ Sample

- 19 voluntary schools from French-speaking part of Belgium
- 85 teachers of French classes
- 1868 students (1st year of secondary school)

■ Randomized allocation of schools to experimental groups

Control group	Exp. condition 1 « Training »	Exp. condition 2 « Coaching »
No intervention	Intervention + training	Intervention + training + coaching
7 schools 36 classrooms 804 students	6 schools 24 classrooms 502 students	6 schools 25 classrooms 562 students

4. Methodology

■ Data collection

☐ Dosage

- Checklists completed by teachers
 - ☐ Number of activities done by teachers (/66)
 - ☐ Number of modules covered by teachers (/5)

☐ Adherence

- Self-reported questionnaire completed by teachers and students
- Adherence to core instructional principles
 - ☐ Guidance and feedback
 - ☐ Peer collaboration
 - ☐ Explicit teaching of reading and writing strategies

4. Methodology

■ Variables

1. Dosage

- Number of activities done by teachers
- Number of modules covered by teachers

2. Adherence reported by teachers

- Adherence reported to guidance, feedback and explicit teaching of strategies
- Adherence reported to peer collaboration

3. Adherence perceived by students

- Adherence to guidance and feedback
- Adherence to peer collaboration
- Adherence to explicit teaching of strategies

5. First results

■ What are experimental effects ?

- No significant effect of the experimental condition on « **dosage** »

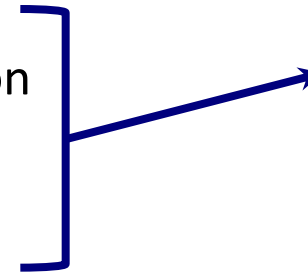
[F(1,47) = ,041 ; Ns]

- No significant effect of the experimental condition on « **adherence reported by teachers** »

[F(2, 79) = ,150 ; Ns]

- Significant effect of the experimental condition on « **adherence perceived by students** »

[F(2,81) = 11,085 ; p < ,000 ; r = ,463]

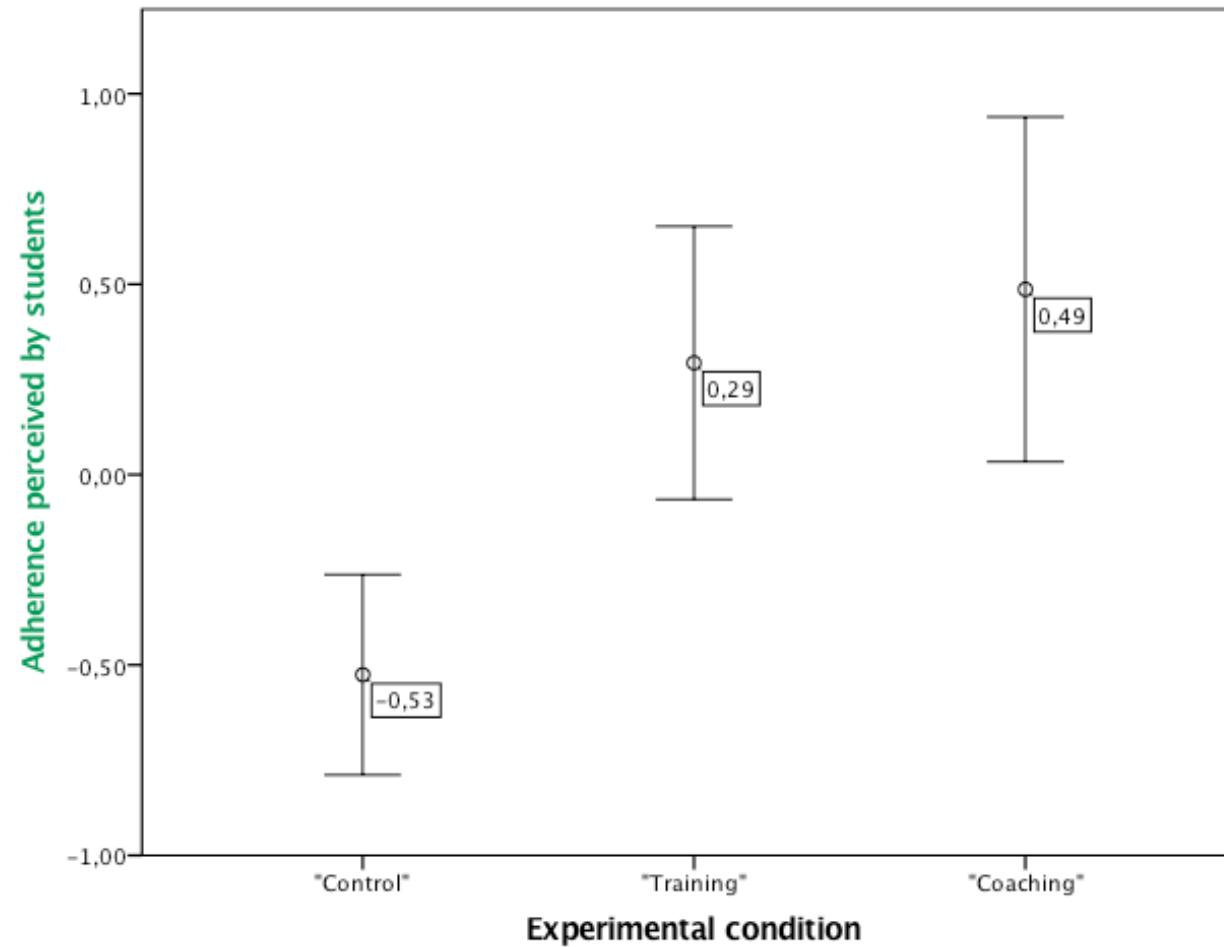


	Mean differences
Control vs Training	-0,82 *
Control vs Coaching	-1,01 *
Training vs Coaching	-,19

Note: * p < 0,05.

5. First results

- What are experimental effects ?



5. First results

■ What are experimental effects ?

- Significant effect of the experimental condition on « adherence perceived to guidance and feedback »

[F(2,1767) = 14,419 ; $p < ,000$; $r = ,126$]

- Significant effect of the experimental condition on « adherence perceived to collaboration among students »

[F(2,1744) = 93,531 ; $p < ,000$; $r = ,311$]

- Significant effect of the experimental condition on « Adherence perceived to explicit teaching of strategies »

[F(2,1761) = 30,797 ; $p < ,000$; $r = ,183$]

Mean differences			
	Guidance and feedback	Peer collaboration	Explicit teaching of strategies
Control vs Training	-0,20 *	-0,48 *	-0,36 *
Control vs Coaching	-0,21 *	-0,67 *	-0,31 *
Training vs Coaching	-0,01	-0,17 *	0,54

Note: * $p < 0,05$.

6. Conclusion

1. **Procedural control and professional control seem to foster instructional change**
 - ☐ But only visible through students' perceptions
2. **No differences between experimental conditions « training » and « coaching »**
 - ☐ 3 coaching sessions of 3 hours each is not enough
 - ☐ One year is not enough
3. **Instructional change is a broad process**
 - ☐ Go beyond a conformity perspective of practices
 - ☐ Questioning the nature and effects of adjustments made by teachers



THANK YOU FOR YOUR ATTENTION

For more information, feel free to contact us...

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