

Integrating research on teacher professional development and educational effectiveness: The dynamic approach

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INTRODUCTION

- This presentation aims to:
 - Discuss the dominant approaches to Teacher professional development
 - Identify the need for synthesizing merging the dominant approaches
 - Describe the Dynamic Approach to Teacher Professional Development

RESEARCH FRAMEWORK: DEVELOPMENTAL STAGES IN TEACHING SKILLS

- Teacher training and professional development are considered essential mechanisms for deepening teachers' knowledge and developing their teaching practices in order to teach to high standards (Cohen & Hill, 2001).
- The underlying rationale is that high quality teacher professional development could facilitate improvement of teaching practices, which could in turn translate into higher levels of student achievement (Borko et al., 2010; Desimone, 2009).

PARADIGMS TO TEACHER PROFESSIONAL DEVELOPMENT

- Zeichner (1983) was the first to identify and describe the paradigms that dominate practice in teacher education and professional development.
- Two dominant paradigms:
 - Competency-based approach
 - □ Holistic (reflective) approach

THE COMPETENCY - BASED APPROACH

- The word competency is taken in the broad sense of knowledge, attitudes, skills, and "behaviors that facilitate intellectual, social, emotional, and physical growth in children" (Weber, 1972).
- The basic concepts of this approach are:
 - Program requirements derived from the practice of Effective Teachers
 - Instruction is modularized based on specific skills
 - Requirements are stated as competencies (What teachers know about teaching is less important than their actual ability to teach)
 - Instruction and assessment are related to demonstration of competencies

THE COMPETENCY - BASED APPROACH

- However,
 - The approach is rather decontextualised.
 - □ The long detailed lists of skills which were formulated gradually resulted in a kind of fragmentation of the teacher's role.
 - Too many isolated skills which cannot be cover thoroughly, no matter how long the training program is.
 - □ Almost no basic definite research was conducted to prove or disprove its effectiveness (Houston, 1998).
 - There is little consideration to changes in teacher cognitions and beliefs



THE COMPETENCY - BASED APPROACH

It is becoming increasingly apparent that this view of teaching takes insufficient account of the fact that a good teacher cannot simply be described in terms of isolated competencies, which could be learned in a number of training sessions (Korthagen, 2004).

THE HOLISTIC / REFLECTIVE APPROACH

- Today's dominant orthodoxy in teachers' training and professional development is that of reflective practice (Golby and Viant, 2007).
- Reflection enables practitioners to analyze, discuss, evaluate, and change their own practice, adopting an analytical approach towards their practice,
- Encourages them to appraise the moral and ethical implicit in classroom practices, and their own beliefs and perceptions about good teaching.
- Assumption: Increased reflection will translate into action and in improvements in teaching and learning.

THE HOLISTIC / REFLECTIVE APPROACH

- However,
 - □ Major problem of content
 - Major problem of definition (self-monitoring teachers, teachers as experimenters, teachers as researchers, teachers as inquirers etc.)
 - □ Reflection separates theory and practice: Some teachers are excellent at reflecting about practice but awful in its execution (Johnston and Usher, 1996).
 - □ There is little solid empirical evidence that supports the view that it results in superior teaching practices with teachers (Cornford, 2002, NcNamara, 1990).

CONCLUSIONS RELATED WITH TEACHER PROFESSIONAL DEVELOPMENT

- Both have major disadvantages
- Taking those weaknesses into consideration, we argue that a synthesis of these two approaches in a more productive way is needed.
- A synthesis of the dominant two approaches in a more productive way is needed and this could be achieved by utilising validated theoretical models of EER, such as the dynamic model of educational effectiveness (Creemers & Kyriakides, 2008).

THESIS - ANTITHESIS - SYNTHESIS

- Research on teacher professional development should increasingly take into account the concurrent results of EER, addressing groups of skills and competencies that are found to contribute to student learning.
- At the same time, reflection for understanding and critical thinking on those skills should be important elements in all aspects of learning and performance.

Integrating research on teacher professional development and educational effectiveness

- The development of the DA is based on the argument that research on teacher training and development should increasingly take into account the results of research on teacher effectiveness, addressing skills that are found to contribute to student learning.
- By establishing links between EER and research on teacher professional development, both fields could have mutual benefits.

Integrating research on teacher professional development and educational effectiveness

- Particularly, research on teacher professional development could expand its research agenda by taking into consideration the impact of effective programs on student outcomes and at the same time EER could identify the extent to which its validated theoretical models can be used for improvement purposes.
- In this way, stronger links between research, policy and improvement of teaching practice could be established (Antoniou & Kyriakides, 2011).

THE DYNAMIC APPROACH

- □ The Dynamic nature: The content of the program is based on the grouping of teaching skills included in the dynamic model of educational effectiveness.
- □ The Integrated nature: The model relies on the fact that this model could be situated in between the Competency and the Holistic approaches. Particularly, although the content of this approach refers to grouping of teaching skills and competences that were found to be positively related with student achievement, at the same time the participants are engaged into critical reflection on these teaching skills.

THEORETICAL FRAMEWORK OF THE DYNAMIC APPROACH

- It is based on the teaching skills included in the Dynamic Model of EER.
- Assumption that teacher factors are inter-related and the importance of grouping of factors has been demonstrated (Creemers & Kyriakides, 2008).
- Specifically, a longitudinal study revealed that the eight teacher factors and their measuring dimensions can be grouped into five levels, situated in a developmental order.

RESEARCH FRAMEWORK: DEVELOPMENTAL STAGES IN TEACHING SKILLS

Kyriakides, Creemers & Antoniou (2009)

LEVEL 3

LEVEL 2

LEVEL 1

- 1)Frequency management time
- 2) Stage Management of time
- 3) Frequency structuring
- 4) Frequency Application
- 5) Frequency Assessment
- 6) Frequency Questioning
- 7) Frequency teacher-student relation

LEVEL 1 SKILLS

- 1) Stage Structuring
- 2) Quality Application
- 3) Stage Questioning
- 4) Frequency student relation
- 5) Focus Application
- 6) Stage Application
- 7) Quality of questions

LEVEL 1 & 2 SKILLS

- 1) Stage student relations
- 2) Stage teacher-student relation
- 3) Stage Assessment
- 4) Frequency Teaching Modelling
- 5) Frequency Orientation
- 6) Focus student relations
- 7) Quality: feedback
- 8) Focus Questioning
- 9) Focus teacher-student relation
- 10) Quality structuring
- 11) Quality Assessment

LEVEL 5

LEVEL 1, 2,3 & 4 **SKILLS**

- 1) Quality teacherstudent relation
- 2) Quality student relations

LEVEL 4

1) Differentiation

Structuring

3) Differentiation

4) Differentiation Application

6) Differentiation

7) Stage teaching

LEVEL 1, 2 & 3 SKILLS

2) Differentiation time

management

Questioning

5) Focus Assessment

modelling

8) Stage orientation

Assessment

- Dif teacher-student relation
- 4) Differentiation student relations
- 5) Focus Orientation
- 6) Quality Orientation
- 7) Differentiation Orientation
- 8) Quality of teaching modelling including differentiation
- 9) Focus Teaching Modelling

THEORETICAL FRAMEWORK OF THE DYNAMIC APPROACH

- These levels were found to be associated with student outcomes, thus, teachers who demonstrate competencies in relation to higher levels were found to be more effective than those situated at the lower levels.
- This association was found for achievement in different subjects and for both cognitive and affective outcomes (see Kyriakides et al., 2009).

- The DA is based on the assumption that improvement of teacher effectiveness can be focused neither on the acquisition of isolated skills/competencies (Gilberts & Lignugaris-Kraft, 1997)
- nor in reflection across the whole process of teaching in order to help teachers get "greater fulfilment as a practitioner of the art" (Clarke & Hollingsworth, 2002, p. 948) without considering the professional needs and developmental priorities of the teachers.

- Second, the DA takes into account the importance of identifying specific needs and priorities for improvement of each teacher / group of teachers.
- Unlike most professional development approaches with a "one size fits all" orientation, the content of the training program should vary accordingly, since teachers with the same profile (i.e., teaching experience, initial training qualifications) may have different priorities for improvement.

In order to identify these priorities, multiple evaluation data related with teacher behaviour in the classroom should be collected and factors that need to be addressed and further developed should be identified.

Thirdly, it is acknowledged that teachers should be actively involved in their professional development in order to better understand how and why the factors / teaching skills addressed have an impact on student learning.

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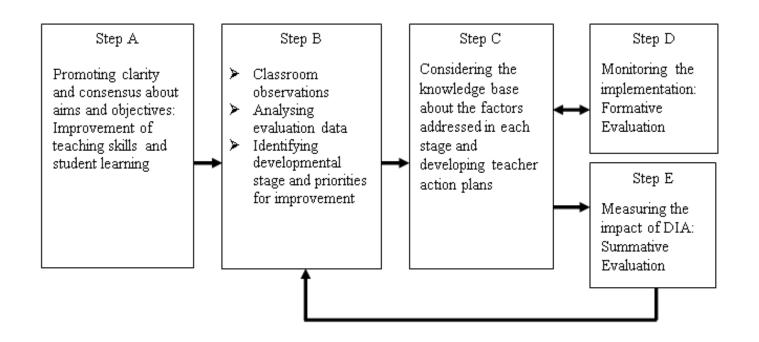
- Fourth, teachers should become aware of both the empirical support available related to the factors involved in their developmental program and the way these factors operate within a conceptual framework (Sammons, 2009).
- Through this approach, teachers are offered the opportunity to utilise in a flexible manner the existing knowledge-base on effective teaching, adapt it to their specific needs, and develop their own strategies and action plans for improvement.

- Fifth, building upon the previous point, the DIA supports that the Advisory and Research Team (ARTeam), responsible for the coordination and the general provision of the developmental program, has an important role in facilitating and supporting teachers in their efforts to develop and implement their action plans in their classrooms.
- The ARTeam has an important role to play in designing teachers' improvement strategies. The ARTeam is expected to share its expertise and knowledge with practitioners and help them develop strategies and action plans that are in line with the relevant knowledge base of effective teaching.

- Sixth, monitoring the implementation of teacher action plans in classroom settings is an essential part of the DIA.
- During this procedure, teachers are expected to continuously develop and improve their action plans based on the information collected through formative evaluation.
- Critical reflection on the implementation of the action plans is also an important aspect of formative evaluation (Admiraal & Wubbels, 2005)

- Finally, the DIA refers to the importance of conducting summative evaluation in order to identify the impact of the developmental program on the teaching skills of the participating teachers and on the learning outcomes of their students.
- Despite the number of studies on teacher professional development, the majority of these do not measure the impact of different approaches and programmes on student learning outcomes (Cochran-Smith & Zeichner, 2005; Borko, 2004).

Main Implementation steps



Impact of D.A

- The results of several studies (....) have shown that for teachers at all stages the Dynamic Approach is more effective than the holistic approach in improving teaching skills and student achievement.
- This implies that improvement of teacher effectiveness can be focused neither solely on the acquisition of isolated skills/competencies nor in reflection across the whole process of teaching.
- The results of EER related to teacher effectiveness and guided reflection practices are linked. Emphasis in teacher professional development on either one without considering the other is likely to fail.

THANK YOU FOR BEING ATTENTIVE