



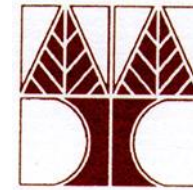
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Characteristics of effective educational systems: A study testing the validity of the Dynamic Model of educational effectiveness

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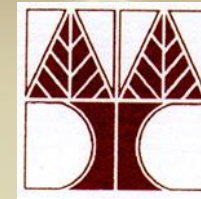
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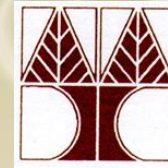
Introduction

- Globalization is imposing pressures and necessitates the conduct of international studies in education
- The most of the studies were carried out within the countries, looking at factors that make difference between the classrooms and the schools within a single country
- The level of the system remains poorly explored
Lack of international comparative studies about the educational policies in different countries

Introduction



- The Dynamic Model of educational effectiveness (Creemers & Kyriakides, 2008) can be used as a starting point for establishing a theoretical framework that will support these studies
- The conduct of comparative studies on countries' educational policies demands access to detailed sources of data
A single source of evidence is inadequate
- Possibility of a gap between the policy and the perceived impact-policy in action
Need for multiple sources of evidence for a clear picture of the applied policies



The Dynamic Model

- The model refers to multiple factors of effectiveness, which operate at different levels and have both direct and indirect effects on student achievement
- Each factor is defined and measured using five dimensions: Frequency, focus, stage, quality and differentiation
- Teaching and learning are dynamic processes, constantly adapted to changing needs and opportunities
- The final level refers to the influence of the educational system
Development and evaluation of policy at national level

System level factors of the model



According to the Dynamic Model the most important factors operating at system level are

- School policy regarding teaching and actions taken to improve teaching in practice
- Evaluation of school policy regarding teaching and actions taken to improve teaching
- Policy towards creating a school learning environment and actions taken towards improving the learning environment
- Evaluation of the learning environment

School policy regarding teaching and actions for improving teaching



Quantity of teaching: Regulations which ensure that the quantity of teaching is kept at the maximum level

- Teacher and student absenteeism
- Teacher and students late arrival
- Lesson schedule and timetable
- Management of teaching time (interruptions, preparation for festivals etc.)

School policy regarding teaching and actions for improving teaching



Quality of teaching: Educational systems may develop standards of teaching or evaluation criteria that refer to the quality of teaching

According to the model there are eight factors that enhance the quality of teaching in the classroom

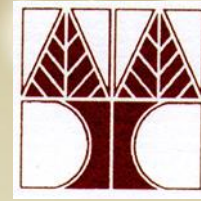
- Structuring
- Orientation
- Application
- Questioning
- Assessment
- Modelling
- Management of time
- Classroom as a learning environment



School policy regarding teaching and actions for improving teaching

Provision of learning opportunities: The policies at national level that encourage schools to undertake extracurricular activities that will contribute to the achievement of the curriculum aims

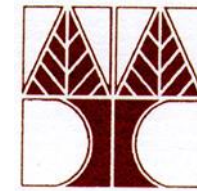
- Long and short term planning
- School trips and extracurricular activities
- Textbooks and resources
- Provision of support to students with special needs and gifted students



Purposes of the study

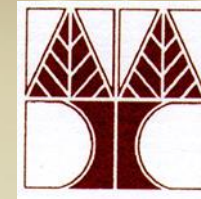
The study attempts to

- Investigate whether the proposed measurement framework can be used in order to understand the functioning of the system level factors
- Develop valid and reliable instruments measuring the system level factors
- Investigate the extent to which the factors situated at the system level of the Dynamic model are associated to student achievement



Documentary analysis

- Collection, study and content analysis of official policy documents (Project Eurydice, educational laws, official websites)
- Use of a specific measurement framework to measure the functioning of the factors
- A table for each factor, proposed by the model
The table presents the policies of the educational system, which are related to the factor
Profile of the country: The sum of the tables



Documentary analysis

- Each policy is getting down accompanied by information about the five dimensions of the model

Frequency: Number of policies

Focus: Law or guideline, groups that are involved

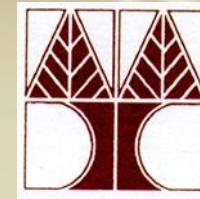
Quality: In line or not in line or not related to the model

Stage: Year of establishment / renewal year

Differentiation: Differentiation for specific groups of students or teachers or other stakeholders (parents)

Suggestion	Guideline (optional) or law (compulsory)	For primary/secondary education	Groups/persons that are involved	In line with the model/literature Impact	Differentiation according to the age/group of teachers	Period of establishment/ change of suggestion

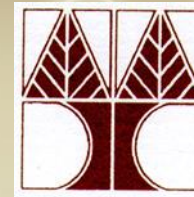
Documentary analysis



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Long term and short term planning of teachers

Suggestion	Guideline (optional) or law (compulsory)	For primary/secondary education	Groups/persons that are involved	In line with the model/literature Impact	Differentiation according to the age/group of teachers	Period of establishment / change of suggestion
Each teacher prepares at the beginning of the quarter a three month Work Plan , which he shows to the headteacher (Long Term Planning) (1)	Law	Primary	Teachers Headteacher	In line with the model		1997
Each teacher prepares short-term planning (Weekly / Fortnightly Work Plan) which is available to the headteacher and the inspector, upon request (Short term planning)(1)	Law	Primary	Teacher Headteacher Inspector	In line with the model		1997



Documentary analysis

- The data collected using the profile format are classified, in order to have numerical scores for each country
- The numerical scores enable the comparison between the countries



Limitations/difficulties of the documentary analysis



- The main source is the project Eurydice and not all the countries are included in the project (some of them are not european)
- The online official documents of some countries are limited
- Many online documents are not translated in english
- Only a small number of the countries have posted in the internet their educational law

Interviews



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- The limitations of the documentary analysis constitute the interviews really important
- Some of the interviews have been completed by the end of December
- Policy makers from different countries are interviewed
- The interviews are semi-structured

Questions included in the interviews (example)

Question 1:

We would like to know which policies and actions are taken in order to encourage primary teachers and schools to maximise teaching time in your educational system. Please refer to any type of actions that are taken such as the publication of official documents, the provision of guidelines to the schools, and the support offered by advisors.

Checklist:

Long-term and short term planning of teachers

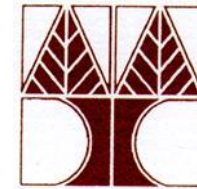
Student absenteeism

Teacher absenteeism

Dropout

Management of time at classroom and/or school level

Regulations of policy related to any other issue linked to maximising teaching time



Policy in action

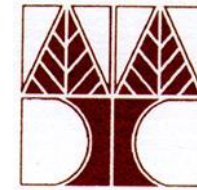
- Sometimes the policy in action is different from the policy that is included in the documents

When we see the policy in written form, we can not see the impact on practice, the way in which the teachers and the schools understand and apply it.

- A policy that looks beneficial in the documents, may cause malfunction in action

For absences over five days for medical reasons the parents must take a certificate from the doctor who did the treatment (1)	Law	Primary	Teachers Pupils	Not in line with the model		1997
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➡ **NECESSITY:** The collection of data from the schools, to identify the impact of the policies on the schools and the teachers



The example of Cyprus

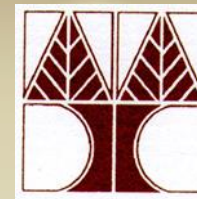
Extra curricular activities (including festivals, excursions) - Clubs

Suggestion	Guideline (optional) or law (compulsory)	For primary/secondary education	Groups/persons that are involved	In line with the model/literature Impact	Differentiation according to the age/ group of pupils	Period of establishment/ change of suggestion
Each school should establish quarterly program of visits and tours for all classes (1)	Law	Primary	Pupils Teacher	In line with the model		1997
Proper information and preparation of the children to maximize the educational benefit and safety (1) (4)	Law	Primary Secondary	Teachers Pupils	In line with the model		1997
The teachers should visit the places before to identify any dangers and take appropriate action (1)	Law	Primary	Teachers	Not related to the model		1997
The director and teachers accompanying the children should be in service (1)	Law	Primary	Head Teachers Pupils	Not related to the model		1997

Suggestions for conducting comparative studies to identify characteristics of effective educational systems

- The data should be collected through a variety of sources – triangulation
- We should find the crossroad between the policy in the documents and the policy in action

The next step of the study



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- Continue of the data collection
- Interview and documentary analysis for twenty countries
- Collection of data from schools: Questionnaires to the teachers to measure the perceived impact of policy
- Data from TIMSS 2007 study on student achievement in mathematics and science - to investigate the extent to which the system level factors can explain variation in student achievement



Thank you for your attention!
Enjoy your stay in Cyprus!