Monitoring and Evaluation
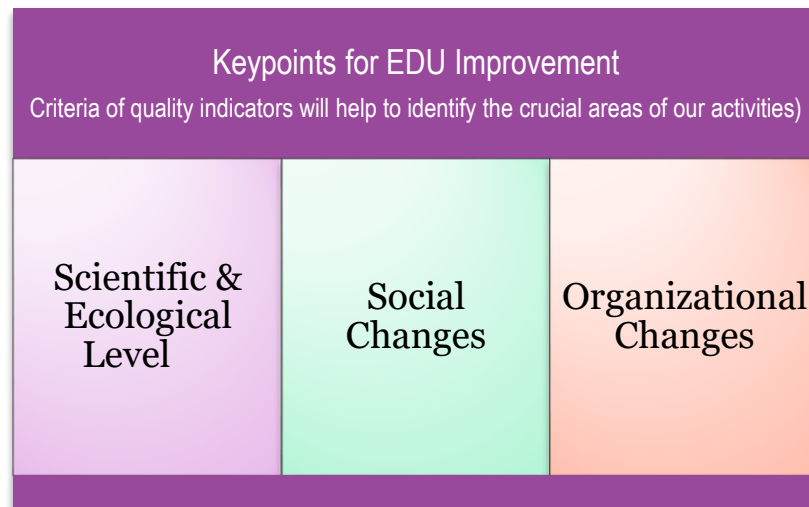
Kavazidou Eleni, Andreadou Harikleia, Miliarakis Emmanouil

Introduction to Quality Management in Education

Scope of Monitoring and Evaluation

Quality management ensures that an organization, product or service is consistent. It has four main components: quality planning, quality assurance, quality control and quality improvement.[1] Quality management is focused not only on product and service quality, but also on the means to achieve it. Quality management, therefore, uses quality assurance and control of processes as well as products to achieve more consistent quality (Iordanides, Tsakiridou & Valasi, 2015).

Improving

Assuring

Monitoring

Planning

QUALITY MANAGEMENT

Keypoints for EDU Improvement
Criteria of quality indicators will help to identify the crucial areas of our activities)

Scientific & Ecological Level	Social Changes	Organizational Changes

Monitoring and Evaluation
Axioms

Management by result is no longer sufficient to deal with the problems that schools are facing in order to promote *Work Load* or *Output* Quality $_{(QM3)}$.

Monitoring and Evaluation
Axioms

Quality Management in Education
provides and Improves Quality

Monitoring and Evaluation
Axioms

Quality Control
supports Project's Quality and is strengthening the competitive advantage

Monitoring and Evaluation
Axioms

Quality in Education
includes:

Educational Model

Institutional Mission
(goals, standards of the system, facility, program, event)

Monitoring and Evaluation
Axioms

1. We compare the results with the given Goal
2. We Compare the present with the previous established standards.
3. Students are counted as products
4. Any Human Activity is identified by the Quality of its Products

Monitoring and Evaluation
Quality Evaluation Criteria

Methodological Approach
1. Good/ Tested Methods and Procedures of Data Collection
2. Definition of Key Concepts and their Relations with the Concept of Quality
3. Active System of Internal and External Evaluation **(ISO 9000 standards)**
4. Appropriate Quality Monitoring PLAN

Monitoring Plan

1.1. Monitoring Evaluation Plan is a part of the contemporary **Organizational Culture** in Education

1.2. The Structure of the Monitoring Evaluation Plan depends on the Quality Management Model that will be applied for selecting the quality indicators.

Quality Management Models in Education

- **Total Quality Management**
  - The most frequently used model
- EFQM Excellence Model
  - Requires the identification of those who make performance possible (more demanding in the starting point procceedures)
- Balanced Scorecard
  - A system of QM built upon Finance, Customer, Internal Process & Learning)
- Malcolm Baldridge Award
  - Improved Performance in terms of 7 criteria (Leadership, Strategic Planning, Orientation towards Market & Customer, Knowledge Management, Evaluation & Analysis, Human Resource Orientation, Process's Management, Results)
- ISO 9000 standards
  - International standards for quality systems, targeting the conttinuous improvement through preventive actions
- Business Process Reeengineering
  - Based upon redesigning processes, systems and structures to achieve performance
- SERVQUAL
  - It evaluates customer requirements in terms of services' quality based on five dimensions (reliability, clarity, commitment, trust & identification of losses
- **Teaching Capability Maturity Model**
  - Quality staging > 1) the maturity level (namelly, the overall and systematic performance), 2) the capability level (that is, when focusing on a particular process)

1.2.A. Total Quality Management in CS project

Advantages
- High Quality in Education
- Influence of All Segments of Education
  1. Organization
  2. Management
  3. Interpersonal Relations
  4. Material
  5. Human Resources

Changes required to be observed in:
1. Attitudes of the Management
2. Activities of the Management
3. Monitoring of the Educational Process
4. Evaluation of Results
5. Culture of Communication
6. School Atmosphere
7. Interpersonal Relations (QM2)

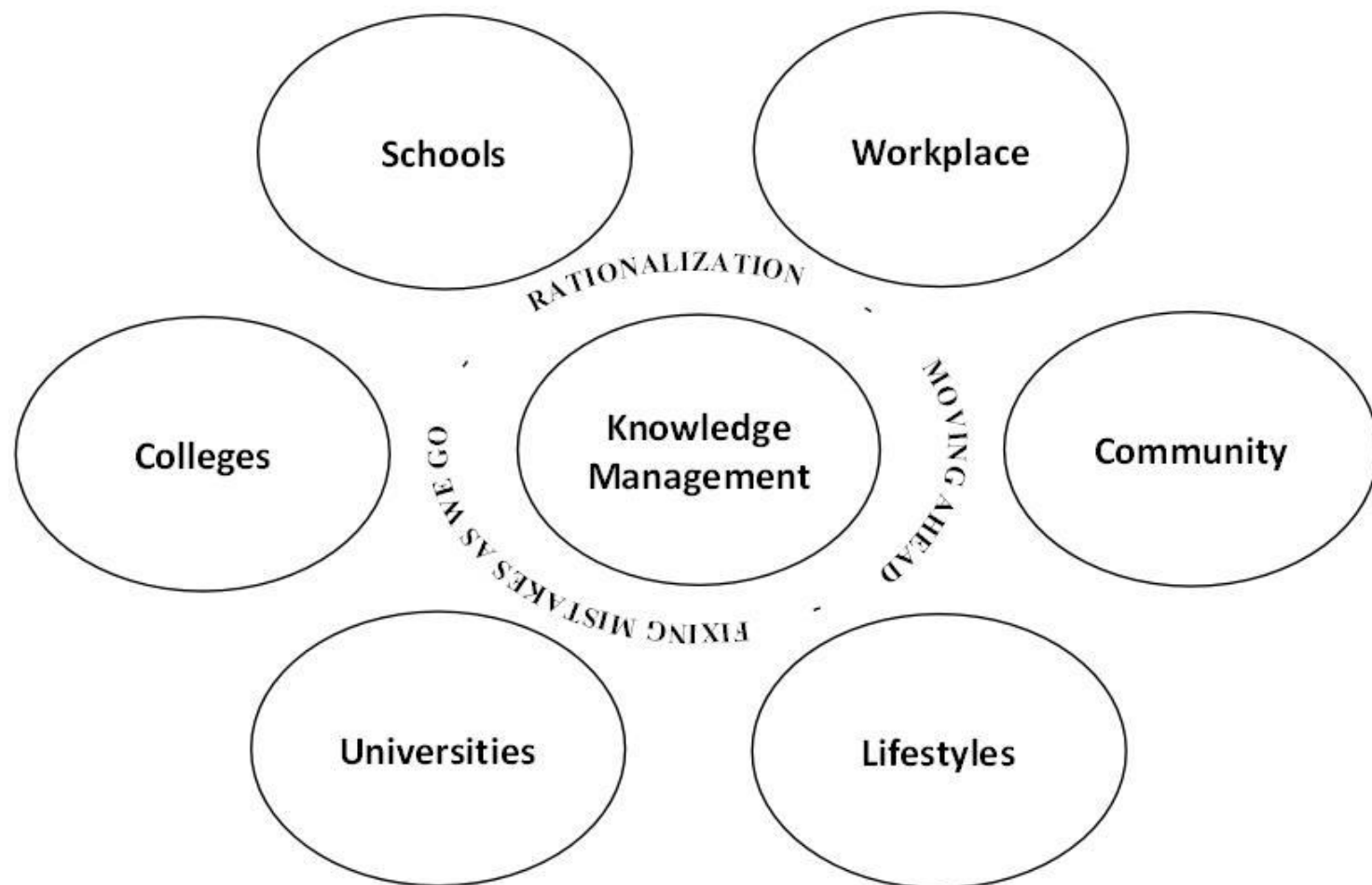# 1.2.B. Total Quality Management in CS project

TQM Model includes

- Process Planning
- Process Management
- Continual Improvement
- Total Involvement & Focus on the User
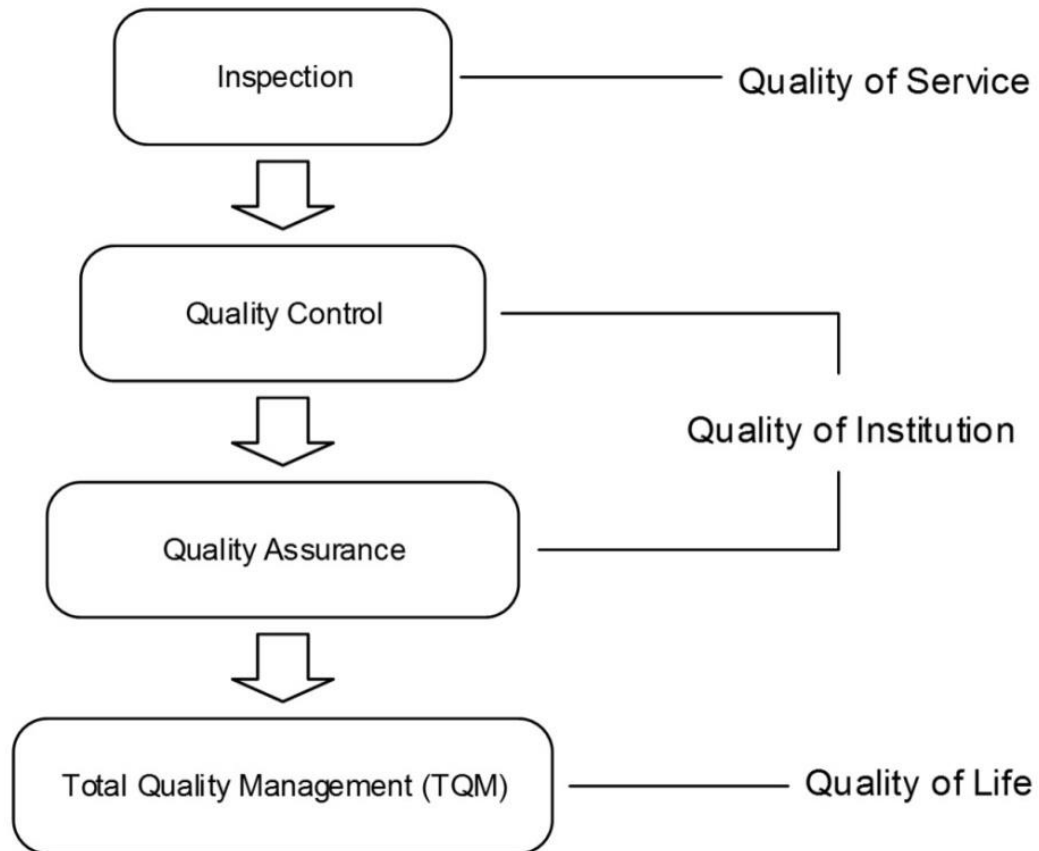 [elements of the Organizational Culture]

TQM Model enhances collaborative work, trust and respect through a systematic, consistent and organized way.

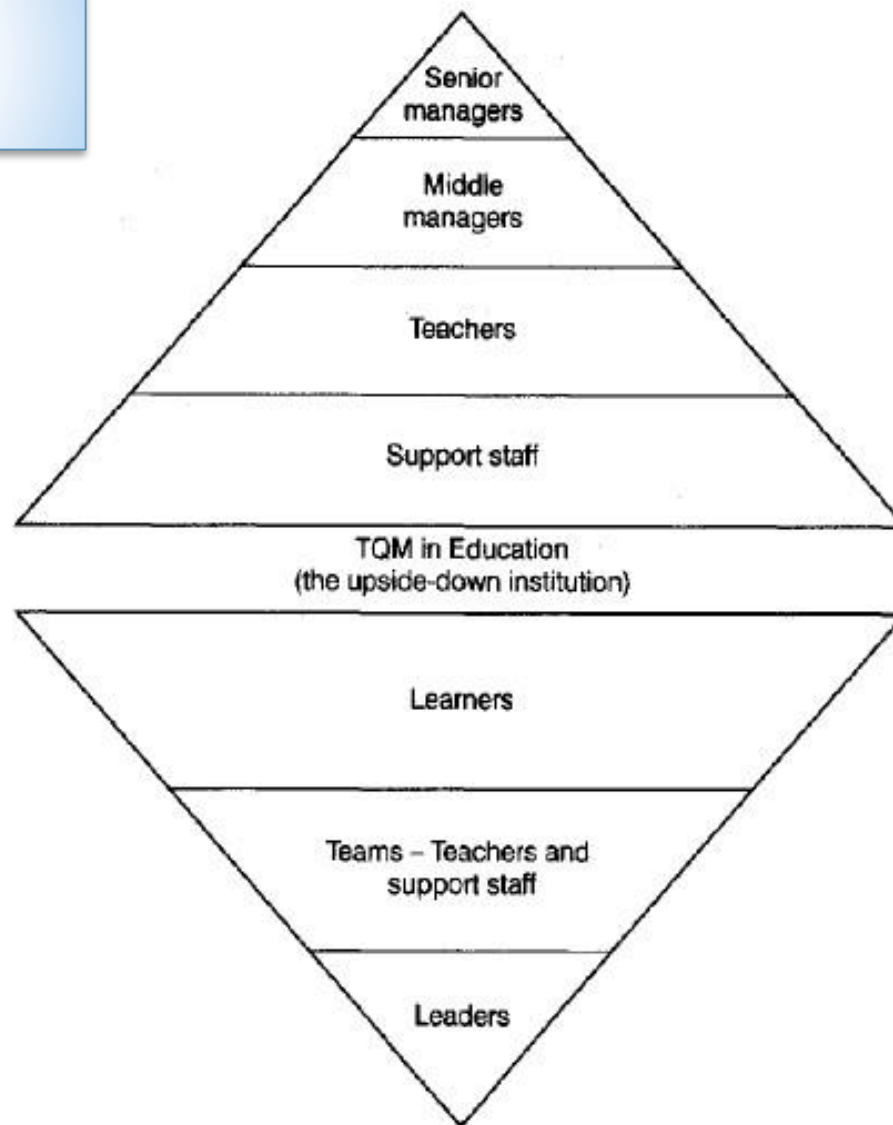# 1.2.B. Total Quality Management in CS project

Basic Steps

- Develop a Quality Baseline
- What Partners, Directors, Teachers & Students want?
- GAP Analysis
- Identify Weaknesses
- Quality Tests?
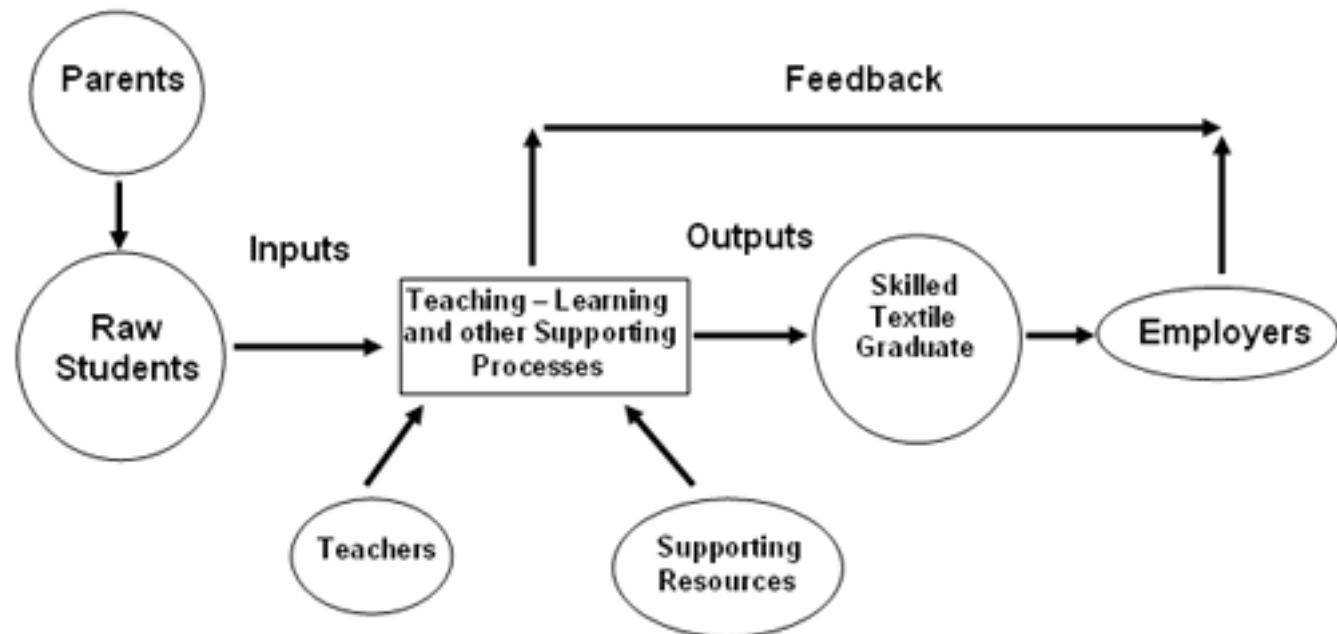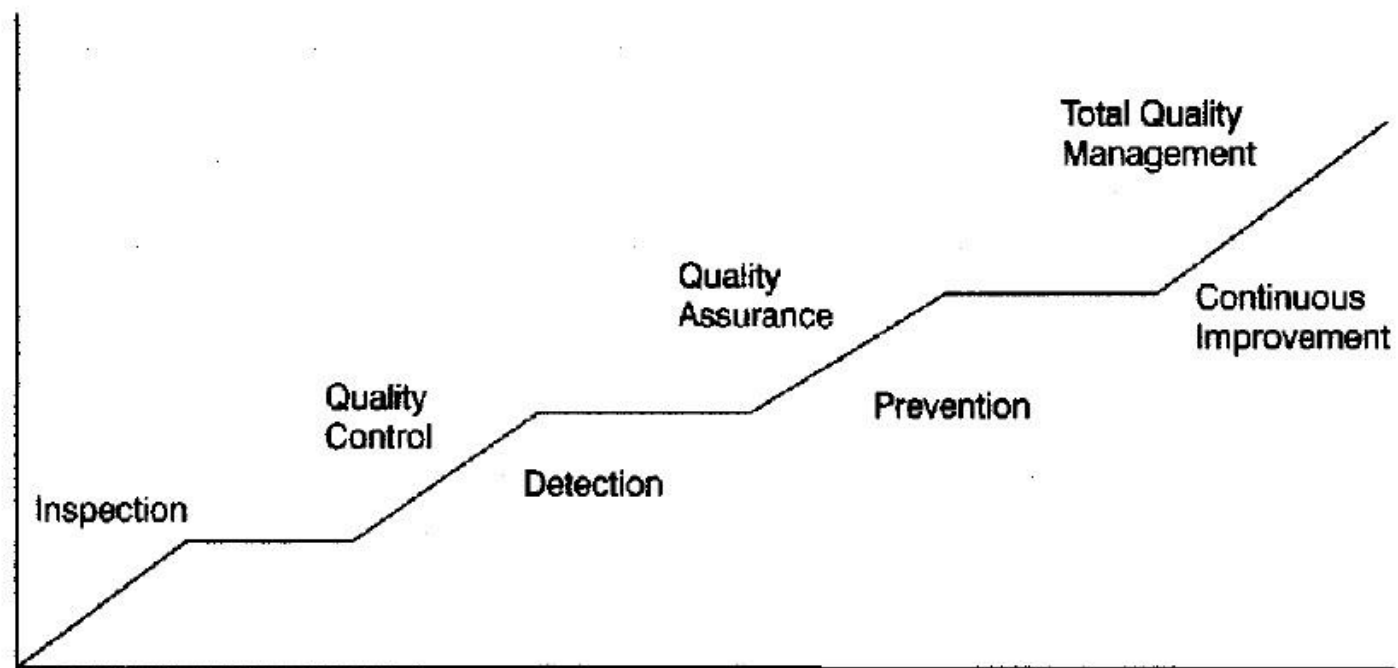 [elements of the Organizational Culture]

Trainner / Manager Curriculum

Senior managers

Middle managers

Teachers

Support staff

TQM in Education
(the upside-down institution)

Learners

Teams – Teachers and support staff

Leaders

The Process

further analysis….

- **Values & Duties…**
  - Annual Goal
  - Development Plans
  - Team-Building (Teachers + Students + Parents) to achieve school goals and formulate long-term plans as to meet student needs.
  - <u>Collaborative Leadership Styles</u>: Participation of Teachers in the School Management Committee & School Executive Committee **(better decision making, quality decisions, sharing of workloads, greater staff commitment)** school culture

further analysis….

- ## **Systems & Teams…**
  - Division of Labour and Specialization
  - Impersonal Orientation
  - Hierarchy of Authority
  - Rules & Regulations
  - Career Orientation

Effective Schools

Development facilitation of educational process

Interaction within effective functioning of the whole school system

Effective conditions & efforts for uniting sll dub-units

Conductive "Managerial, structural & cultural conditions" to effective schools

Efficiency of visionary leadership

Effective performance measurement index

further analysis….

- ## **Resources and Change…**

  School culture is one of the most important elements to bring about change in a school. Educational management and policy is traditionally fragile when it comes to operational implementation of policy reform in schools. Thus, culture is a critical influence in determining the degree of receptivity to change

  To develop quality schools, the government and teacher education institutions should provide key players like principals with appropriate courses, especially in financial and human resource management

  To successfully implement TQM in schools, there is a need to accommodate change in terms of making legal arrangementd, improving social networks for teamwork and cooperation, educating people to effectively participate in this process and inducing them to exert necessary effort for this process

further analysis….

- **Meeting Pupils' Needs and Empowering Staff…**
    - ❖ In order to promote the educational quality, the pupils' needs should be identified and met.
    - ❖ Good teachers' teaching quality can foster students' self-regualted learning.
    - ❖ Teachers are of key importance when considering educational effectiveness.
    - ❖ Teachers should be empowered to participate in school management and the foundations of empowerment at teacher level are human factors and operational factors (e.g. autonomy and information sharing).
    - ❖ In addition, the teachers should improve their skills, knowledge, and be well educated, they can control the TQM practices and provide feedback with their high standards for improving the quality system.
    - ❖ For meeting pupils' needs and empowering staff, the school management, including all aided schools and the government schools, should practise SBM by 2000.

further analysis….

- **Meeting Pupils' Needs and Empowering Staff…**
    - ❖ Lack of satisfaction and selfexpression by teachers, parents and students should affect the quality of learning.
    - ❖ Teachers, parents and students should be empowered to participate in school management to achieve school goals and formulate long-term plans to meet student needs.
    - ❖ Moreover, the school leader should establish and maintain effective communication between the school and the home.
    - ❖ The principal can decide with the SMC, teachers and parents with greater flexibility on how to use and allocate the money or funds according to their student needs.
    - ❖ Besides, more autonomy for schools to decide on personnel management issues, especially regarding decisions for hiring teachers, will enhance the effectiveness of these schools.
    - ❖ Most teachers, all administrators, and a number of parents, responding to a leadership imperative, willingly and actively took responsibility for life at the school, and administrators and teachers were determined to be guided by a capacity-building imperative which required that resources be aimed at promoting learning.

1.2.B. Capability Maturity Model in CS project

Advantages

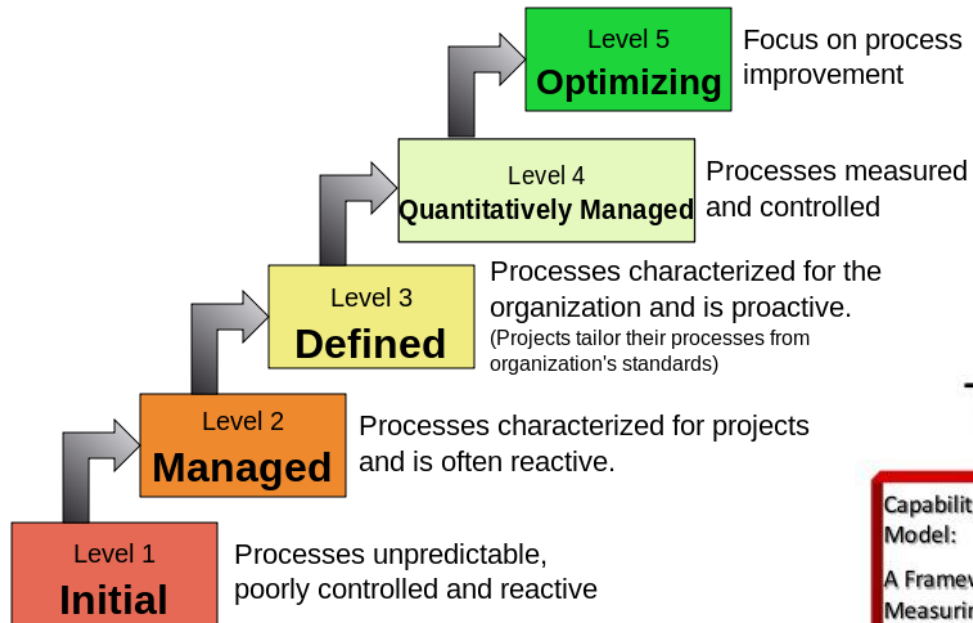Focus on how the teacher is

- Planning
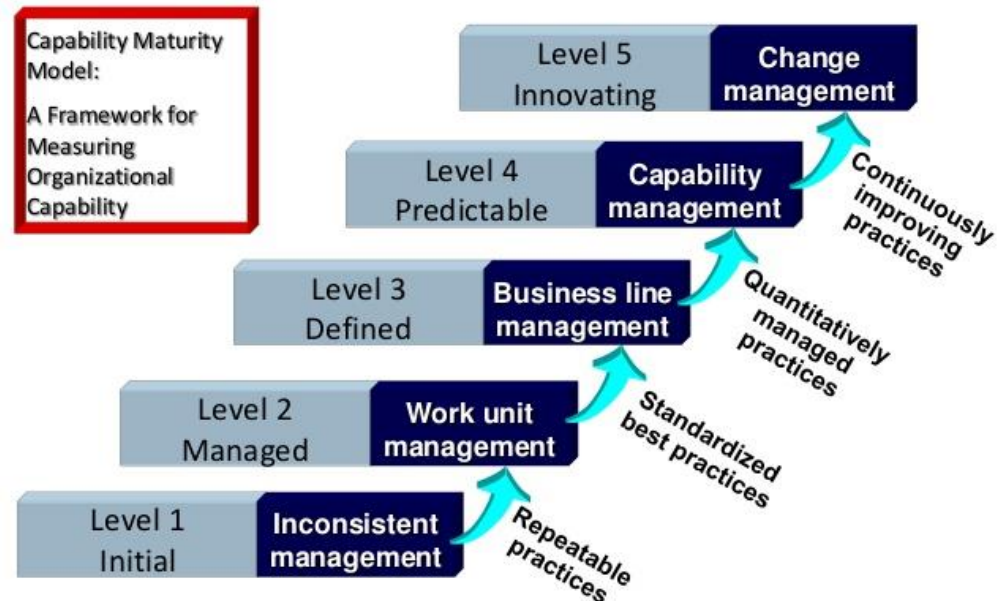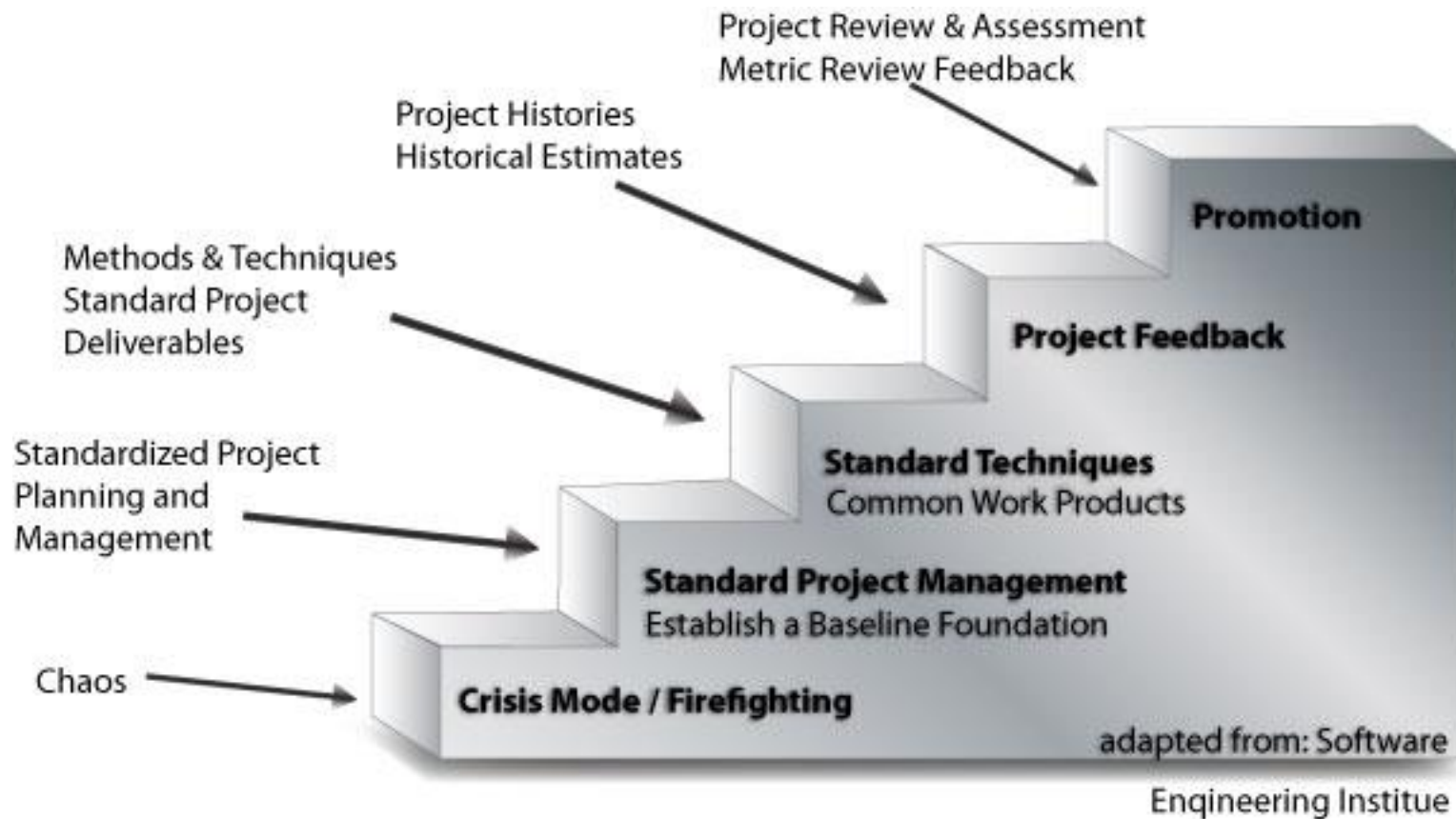- Instructing
- Monitoring
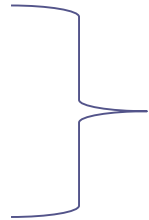
what has been learned

- Teachers' Short Scale Monitoring Plan
  - Action Priorities
  - Put Goals
  - Start Small
  - Work in Stages
  - Plan for the Future
- Short Research before starting up

Iordanides, Tsakiridou & Valasi, 2015; Anastasiadou, 2015

Characteristics of the Maturity levels

Level 5
Optimizing
Focus on process improvement

Level 4
Quantitatively Managed
Processes measured and controlled

Level 3
Defined
Processes characterized for the organization and is proactive.
(Projects tailor their processes from organization's standards)

Level 2
Managed
Processes characterized for projects and is often reactive.

Level 1
Initial
Processes unpredictable, poorly controlled and reactive

The Five Capability Levels

Capability Maturity Model:

A Framework for Measuring Organizational Capability

Level 5
Innovating
Change management
Continuously improving practices

Level 4
Predictable
Capability management
Quantitatively managed practices

Level 3
Defined
Business line management
Standardized best practices

Level 2
Managed
Work unit management
Repeatable practices

Level 1
Initial
Inconsistent management

Project Review & Assessment
Metric Review Feedback

Project Histories
Historical Estimates

Methods & Techniques
Standard Project
Deliverables

Promotion

Project Feedback

Standardized Project
Planning and
Management

Standard Techniques
Common Work Products

Standard Project Management
Establish a Baseline Foundation

Chaos

Crisis Mode / Firefighting

adapted from: Software
Enqineering Institue

Capability Maturity Model – Integrated

Level	Focus	Process Areas	Result
5 Optimizing	*Continuous process improvement*	Organizational Innovation & Deployment Causal Analysis and Resolution	Productivity & Quality
4 Quantitatively Managed	*Quantitative management*	Organizational Process Performance Quantitative Project Management	
3 Defined	*Process standardization*	Requirements Development Technical Solution Product Integration Verification Validation Organizational Process Focus Organizational Process Definition Organizational Training Integrated Project Management Risk Management Decision Analysis and Resolution	
2 Managed	*Basic project management*	Requirements Management Project Planning Project Monitoring & Control Supplier Agreement Management Measurement and Analysis Process & Product Quality Assurance Configuration Management	
1 Initial	*Competent people and heroics*		

A.2. Organizational Culture of all Partner Countries

Differences between modern and traditional educational systems are evident in different educational goals, teaching approaches and roles of all participants in the educational process (QM2).

A.3. Organizational Culture of all Partner Countries

Encoding Basics

CS project = A Business Function
Staff Curriculum & Role = Human Resources Profile
School Classes = Units or Departments
Quality Origin: Property, Quality, Values, Characteristics, Features, Abilities

(QM2)·

CDPE

Will issue in KoM a proposal for:

- Quality Management System
- Records Keeping
- Management Commitment to Quality
- Resource Management
- Production & Measurement
- Analysis
- Improvement

All Partners

are supporting Quality Management by running the Management Plan, including:

- evaluation of others
- Self-evaluation
- all details are available for the public (implementation and assurance details)
- External Assessment & Accreditation

Presentation of the Monitoring Evaluation Plan

Organizational Culture per School Partner

and estimation of organizational culture of all the other Partners implicated in the project

Culture Type	Assumptions	Beliefs	Values	Artifacts (behaviors)	Effectiveness Criteria
Clan	Human affiliation	People behave appropriately when they have trust in, loyalty to, and membership in the organization.	Attachment, affiliation, collaboration, trust, and support	Teamwork, participation, employee involvement, and open communication	Employee satisfaction and commitment
Adhocracy	Change	People behave appropriately when they understand the importance and impact of the task.	Growth, stimulation, variety, autonomy, and attention to detail	Risk-taking, creativity, and adaptability	Innovation
Market	Achievement	People behave appropriately when they have clear objectives and are rewarded based on their achievements.	Communication, competition, competence, and achievement	Gathering customer and competitor information, goal-setting, planning, task focus, competitiveness, and aggressiveness	Increased market share, profit, product quality, and productivity
Hierarchy	Stability	People behave appropriately when they have clear roles and procedures are formally defined by rules and regulations.	Communication, routinization, formalization, and consistency	Conformity and predictability	Efficiency, timeliness, and smooth functioning

Iordanides, Tsakiridou & Valasi, 2015

Greece

Quality Assurance in Early Childhood and School Education

LAST MODIFIED ON 29 DECEMBER 2016, AT 09:06.

Table of Content ▾   This chapter in other countries ▾

An integrated and uniform quality assurance system has been developed in primary and secondary education with the adoption of measures and forms of evaluation which take place on three different levels: system level, educational unit level and individual level.

At **system level**, the establishment of the 'Authority for Quality Assurance in Primary and Secondary Education' (Law 4142/2013), as well as the setting up of the Institute of Educational Policy - IEP (Law 3966/2011) constitute important recent institutional interventions. At this level, the respective laws foresee evaluation of the work provided in schools and other decentralized services and bodies under the Ministry of Education, Research and Religious Affairs; these laws also lay down mechanisms to monitor, study and evaluate the educational policy implementation, as well as to support and meta-evaluate school education evaluation systems.

At **educational unit level** (school/service/body), evaluation is based on **internal evaluation** (Law 2986/2002, Law 3848/2010, Ministerial Decision 30972/C1 /5-3-2013, Law 3966/2011, Law 4142/2013).

The reform initiatives are complemented by the issue of the Presidential Decree on **teacher evaluation** (Presidential Decree 152/2013).

The quality assurance system has a single form regarding pre-primary, primary and secondary education.

On this page

Methodological Approach to be considered in this Activity

- Total Management Quality Model
  - Capability Maturity Model

A.4. CS Project Data

Quality Control in CS project

Educational Model:

CSproject Mission: Social Learning for STEM in Primary Education

teambuilding process

(QM2)·

Country: School:	In Practice	Added Value
Goals	Intelectual Outputs	Development of the Organizational Culture and Quality of Education for Coordinators, Managers, Teachers, Students & Parents
Standards of the System	Educational Institution & Staff	Students' Outcomes
Facilities	Different School Facilities per partner	Check Differences and Apply Adhustments
Program	The same for all school partners	Gaining Skills and Knowledge
Events	Multiplier Events	Project's Dissemination and new cooperations

CS school partner team
 will account

- according to TQM

    Values & Duties

    Systems & Teams

    Resources & Changes

    Meeting Pupil's Needs & empowering Staff (QM4)

each CS school partner
will discuss & identify:

- according to TQM (constancy & high performance)

> Approach
>
> Scope
>
> Scale
>
> Philosophy
>
> Standard
>
> Control(QM3)

CS school partner team
will record

- according to TQM (constancy & high performance)

   Demographic Characteristics

   New Philosophy

   Evaluation (Internal / External)

   Checklists of "before" & "after" each activity (QM4)

Discussion on Levels and Moments for the Evaluation of Project's Progress and Evaluation

Greek Methodological Approach

School Coordinator of Innovative Practices (Eleni's Job)
Introductional Meetings for issuing discussions and solving questions of teachers

September - November

Greek Methodological Approach

Announcement from the Central Office of Ministry concerning

Innovative projects in School Communities

• as a result there are starting conversations between the managerial office and the teachers intertested to be involved and submit a project

• The School Coordinator of Innovative Practices keeps a library. Files and pre-designed programs for **being** applied. He/She also is connecting the School with the authorized public and private authorities that are experts in project manage specific topics; they are usually suggesting projects, activities, actions, symposiums, festivals etc with the precondition of **free of charge services.** This person, supervised by the CDPE Director, is responsible for teachers' knowledge upgrade in innovative practices and organizes seminars, symposiums, festivals, educational visits and other school related activities for enhancing quality of the implemented projects **(Eleni's position).**

• The School Advisors are available to all School Parties for any guidance concerning the paedagogical and scientific supervision. They are the Supervisors of General Quality Assurance per School. 5 Advisors of Primary Education are in the availability of Chania Community. Concerning the CDPE Dept. Of Innovative Practices they are supporting its' services bybeing responsible for the quality of the project and the sufficiency of the staff implicated in the project. They are certifying the quality of the project's content if there is not any available tool authorized by the Institution of Education Policy (Central authority of the Ministry of Education) **(Hara's position)**

• The Director of the local Directorat of Education is supervising the total administration and is officially authorizing the project's eligibility for being accepted. **(Emmanouil's position)**

End of October

Greek Methodological Approach

Submition of a typical form of project description:

DEMOGRAPHIC DATA
• Name, Telephone, Adress, Specialization of
  • the School
  • the Director that will Supervise the Project
  • The Teacher Coordinator
  • The Participatory Team of Teachers and Supportive Staff
• Number of Students (Girls & Boys) + special needs or learning difficulties of a student subcategory

Middle of November

Greek Methodological Approach

Submition of a typical form of project description:

Thematic Topic

• Main Category (health, sustainable environments, cultural issues, career and life skills development)

    •Subcategory (more concrete thematic topic: stem, recycling, daily school hygiene, local history, etc)

        •Title (teachers decide for a title adjusted to the student's hearings and simple / favorite/ funny / paedagogic slogans)

end of October

Greek Methodological Approach

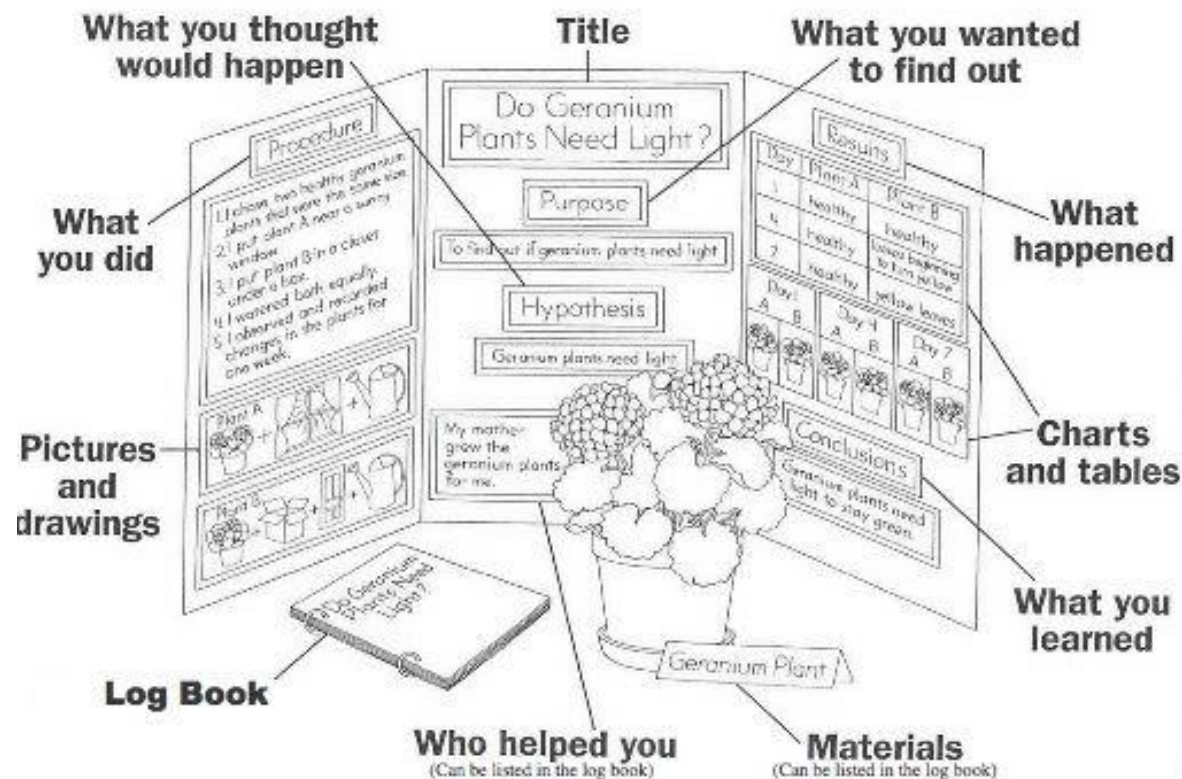**Submition of a typical form of project description:**

Methodology
- Teambuilding
    - Projects
        - Other approaches based on teamwork

end of October

Greek Methodological Approach

Displaying a Science Fair Project

Greek Methodological Approach

Evaluation Process

- Data Collection further Analysis
- Quality Board Team
    - CDPE Coordinator of Innovative Practices is **issuing the list that he proposes as to be accepted.** Acceptance depends in a series of quality assurance criteria (tool availability, quality and accuracy of the design, months of implementation, etc) **Issuing Member**
    - School Advisor is the **President**
    - Director of a CDPE School, **Member**
    - Parent, as Representative of a Parents' Association, **Member**
    - 1 representative of the CDPE administration office, **Member**

End of November, early December

Greek Methodological Approach

Following Announcements

•Published Invitation 3-4 days available for Teachers for applying objections
•Published Decision concerning the Final List of suggested Projects to be implemented

Greek Methodological Approach

PERIOD of Teacher Training, School Support and Students' Indoor and Outdoor Activities

• Training according to issued topics of School Projects
• School Support only if being asked
• Digital and Typical Library Services with Brochures, Toolkits and Guidance Books for Teacher's Support
• Outdoor and Indoor Activities, coordinated by the teachers and co-organized by CDPE by local/ regional/ national/ international thematic networks related to the topics of the School Projects.

Greek Methodological Approach

•**Digital Library enrichement**

http://cepelon.mysch.gr

•**Annual Essay** to the Central Office of School Activities Administration
•**Preparation and Monitoring Plan** of CDPE's School Activities Coordinator

June - July

- Web Meetings
  - Checklists of preparation compliance per partner **before the meeting**
  - Internal evaluation after the meeting **after the meeting**

- Partner Country Visits
  - Checklists of preparation compliance per partner **before the meeting**
  - Internal evaluation **after the meeting**

- Research
  - High Quality Methodology, Tested and standatdized tools, Basic assumptions for statistic analysis, implementation and evaluation by experts in the field (academics)

- End Products
  - Internal & External Evaluation & follow up by interviews

- Trainings
  - Internal & External Evaluation & follow up by interviewing
- Workshops
  - Internal & External Evaluation & follow up by interviewing
- Events
  - Checklists of preparation compliance per partner **before the Event**
  - Internal & External Evaluation **after the Event**
- Data Collection
  - Checklists
  - Ensure Basic Assumptions for further Statistic Analysis
- Reviews
  - Checklists
  - Tactile control by the academic supervisor
- Pilot Studies
  - Checklists
  - Intrerviews
- Reports

Global Action Plan and Calendar

- Who we Are (templates)
- What we'll Do (prepared templates)
- What we expect?

- How we will ensure the quality of the results and its' added value?
- Team-building and cooperative leadership
- A) Monthly Diary & B) Week Diary during the pilot testing of the Toolkit proposed)
- Checklists, Questionnaires, Templates, Interviews
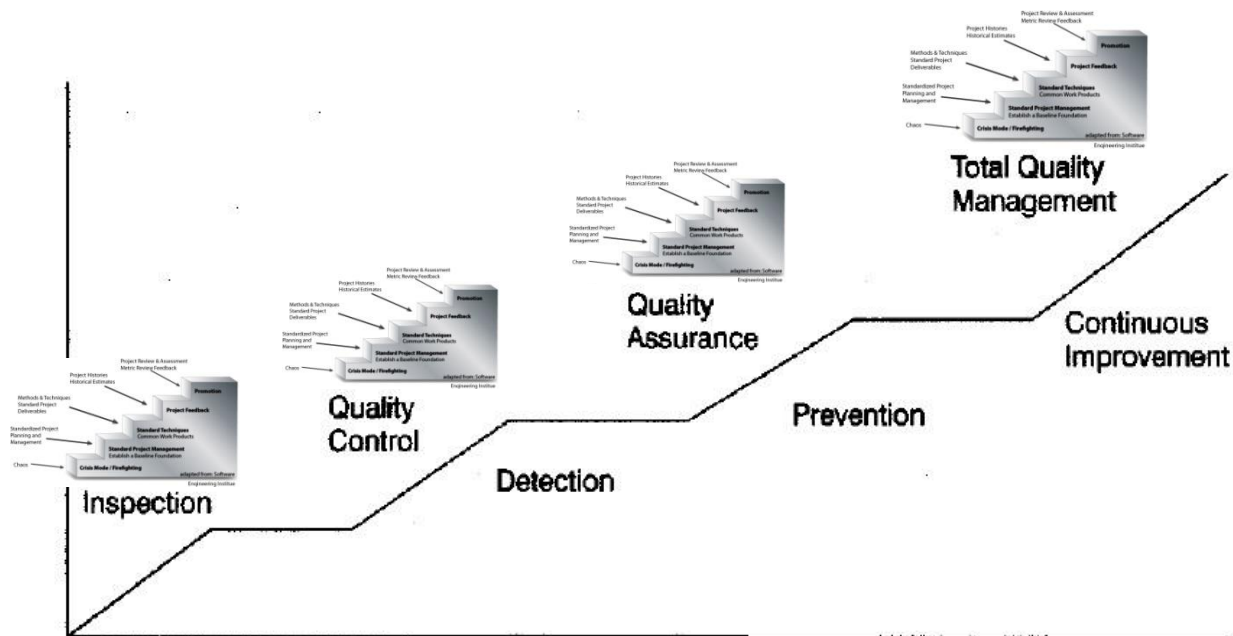
EDUCATIONAL SYSTEM Country: School:	Description	Differences in comparison to the Proposed Model/ Control Group
Organizational Type		
Educational Goals		
Teaching Approaches		
Role hierarchy & variety		

Variables' Categorization

- ## by Type of Activity **Scope and Aims' Variation** (Total Quality Management)
    - ▫ Web Meetings (7)
    - ▫ Partner Country Visits (4)
    - ▫ Research (data collection, pilot testing)
    - ▫ End Products
    - ▫ Trainings
    - ▫ Workshops
    - ▫ Events (conference included)

- ## by sub-projects **Staff/Structure/Activity Variation** (Maturity Capability Model)
    - ▫ Intellectual Output 1
    - ▫ Intellectual Output 2
    - ▫ Intellectual Output 3

Displaying a Science Fair Project
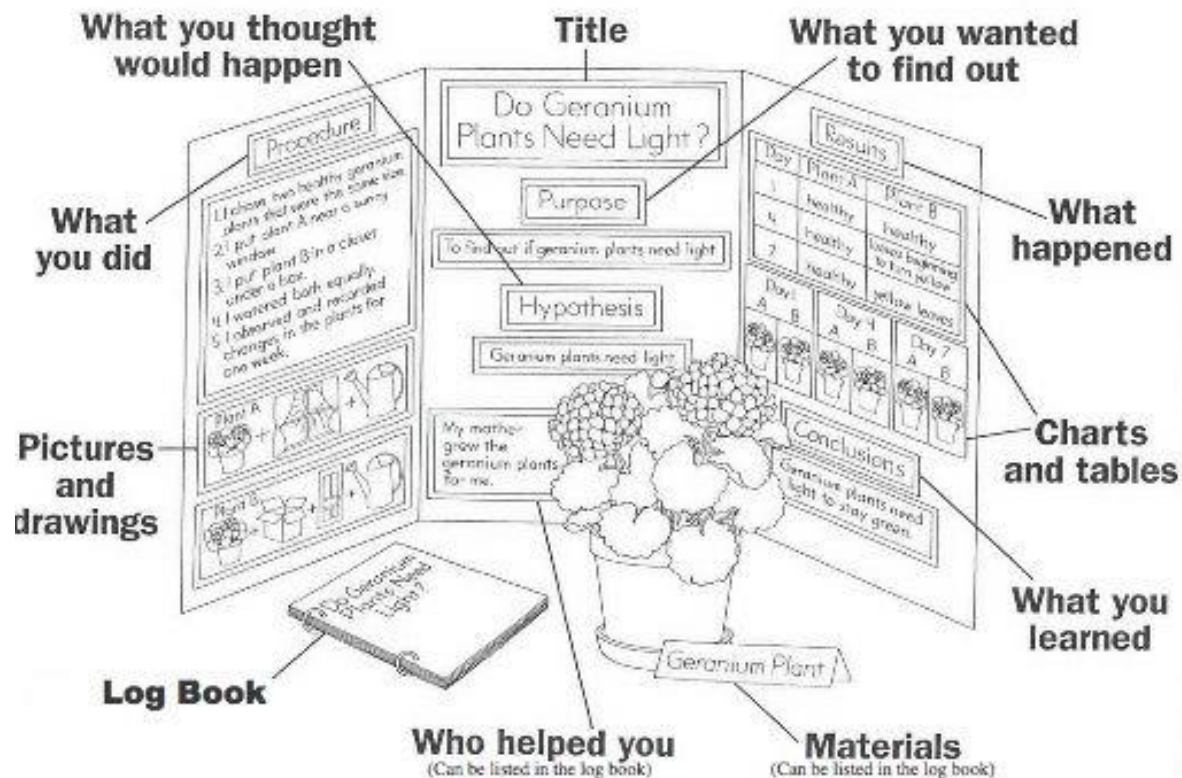
A. Diary's Content

- Curriculum
- Achievements
- Learning & Teaching
- Student's Support
- School Ethos
- Resources
- Management, Leadership & Quality Assurance

Those are indicators of quality in education (QM2)

A.1. "Work Loan" Tools & Outcomes

- Web Meetings (7)
- Partner Country Visits (4)
- Research (data collection, pilot testing)
- End Products
- Trainings
- Workshops
- Events (conference included)

A.2. "Work field" Units

- Intellectual Output' s Procedure (3)
  - Web Meetings
  - Partner Country Visits
  - Research (data collection, pilot testing)
  - End Products
  - Trainings
  - Workshops
  - Events (conference included)

Attached Documents

Find as attached document

- Greek Design of School Projects
- Guide for interview building
- Total Quality Management Questionnaire, adjusted according to educational needs by Patsiaouras et. Al., 2015)
- Articles, supporting the current CDPE suggestions

Monitoring and Evaluation
Conclusion

Success depends on between and within partner-groups
- ethics
- Integrity
- Trust
- Education
- Teamwork
- Leadership
- Recognizability
- communication

Proposed Steps

1. Establishment of Good Communication and Trusting Envorinments

2. Good Project Description to implicated Staff

3. Good Training of Teachers

4. Strict School Programming concerning communalities combined with Creative Leadership in Education

5. Creative Leadership & Creative Education
   - Collaborative Intelligence
   - Co-creativity
   - Team Leadership

…remember

DO THE RIGHT THINKS

right the first time

That's it

Thank you for your time and attention!