

The role of Key Performance Indicators in Higher Education Quality Enhancement

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Middlesex: A Global University



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Outline

- The purpose of Education
- A European Vision : The Bologna Process
- The European Higher Education Area
- Quality an Elusive Concept
- Quality is in the eye of the stakeholder
- Stakeholders in HE
- Quality Assurance and Quality Enhancement
- Self Assessment and External Assessment
- Why Measure and What to Measure?
- Key Performance Indicators
- From Strategic Vision to KPIs
- Culture Change
- Change Management
- Recommendations
- Seeking synergy for Sustainability
- Conclusion

Campuses, Regional Offices and Partnerships



- Campuses in
 - London
 - Dubai
 - Mauritius
 - Malta (2013)
- 18 regional offices across the world
- 100 partner universities in the EU and 40 non-EU
- Extensive links and partnerships with industry at local, regional, national and international levels

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Large and diverse student body and staff



- 40,000 students worldwide (from over 100 countries)
- 22% of our students come from overseas (non EU)
- 10% of our students come from the European Union
- Staff from 50 countries

Middlesex Schools and WBL



- Our Schools are aligned to industry and professional sectors, each with close links to business and practice.
 - School of Art and Design
 - Business School
 - School of Health and Education
 - School of Law
 - School of Media and Performing Arts
 - School of Science and Technology

 - Institute for Work Based Learning

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The purpose of Education



The goal of university education is to help build a fairer, more just society, says Steven Schwartz (Vice-Chancellor, Brunel University)

Twenty-eight years ago, the US educator had this to say about the conflicting views of higher education:

"The outsiders want the students trained for their first job out of university, and the academics inside the system want the student educated for 50 years of self-fulfilment. The trouble is that the students want both. The ancient collision between each student's short-term and long-term goals, between 'training' and 'education', between 'vocational' and 'general', between honing the mind and nourishing the soul, divides the professional educators, divides the outside critics and supporters, and divides the students, too."

(Harlan Cleveland , 1993)

Source:Times Higher 2003

The meaning and nature of education



The act or process of educating or being educated.

The knowledge or skill obtained or developed by a learning process.

A programme of instruction of a specified kind or level

A European Vision - The Bologna Process



"In the decade up to 2020 European higher education has a vital contribution to make in realising a **Europe of knowledge** that is highly **creative and innovative**... Europe can only succeed in this endeavour if it **maximises the talents and capacities** of all its citizens and fully engages in **lifelong learning** as well as in widening participation in higher education."

Ministers responsible for Higher Education in the countries participating in the Bologna Process, Leuven/Louvain-la-Neuve Communiqué, April 2009

{<http://www.ond.vlaanderen.be/hogeronderwijs/bologna/>}

Quality an Elusive Concept

- **Quality is a complex and elusive concept**
- **It is mostly noticed by its absence**
- **It is difficult to quantify/to measure**
- **No scale or instrument available – so we need to measure something else**

What is Quality?

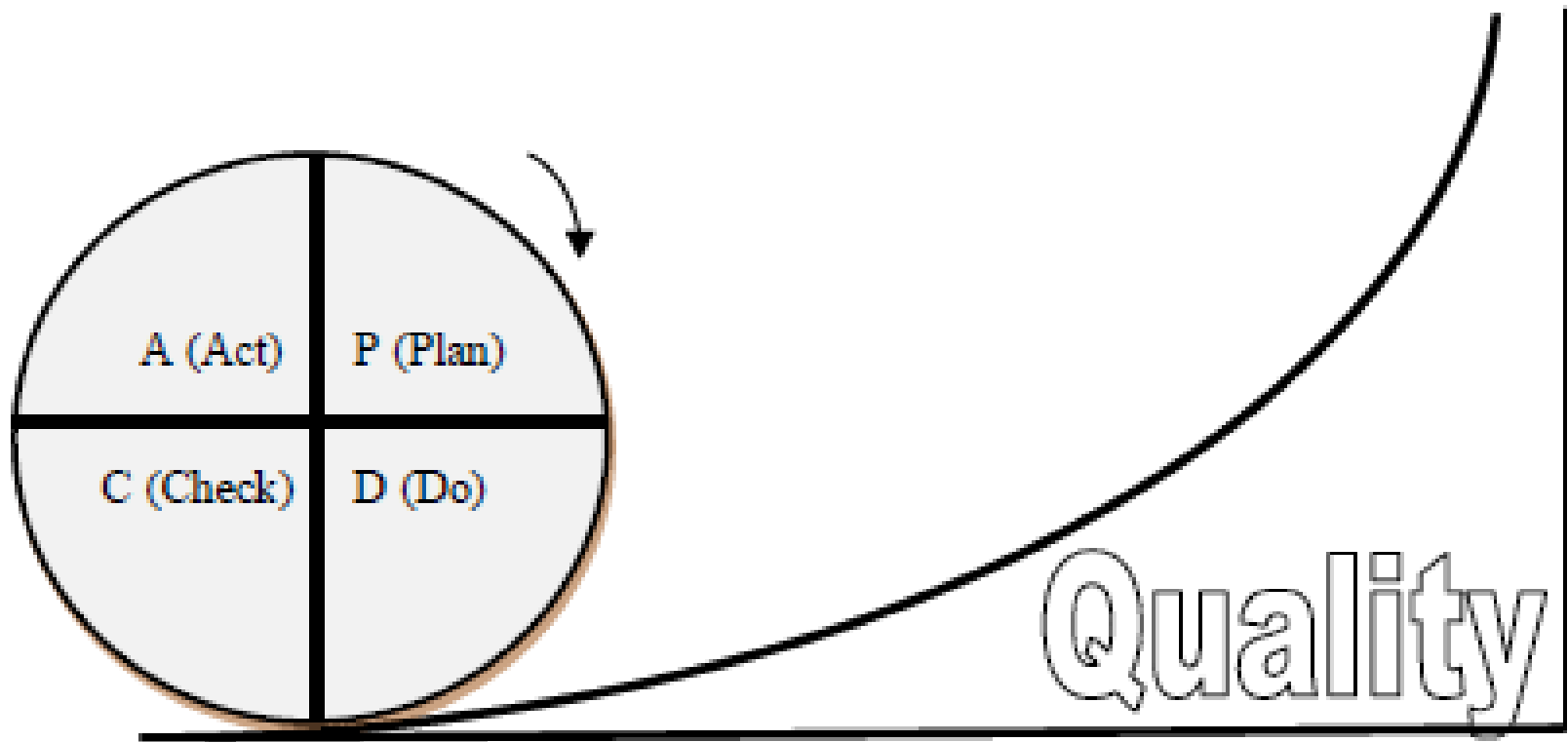
- The transcendental perspective deals with the metaphysical aspect of quality;**
- The user perspective is concerned with the appropriateness of the product for a given context of use;**
- The manufacturing perspective represents quality as conformance to requirements;**
- The product perspective implies that quality can be evaluated by measuring the inherent characteristics of the product;**
- The value-based perspective of quality recognises that the different perspectives of quality may have a different importance, or value, to various stakeholders.**

(Kitchenham and Pfleeger)

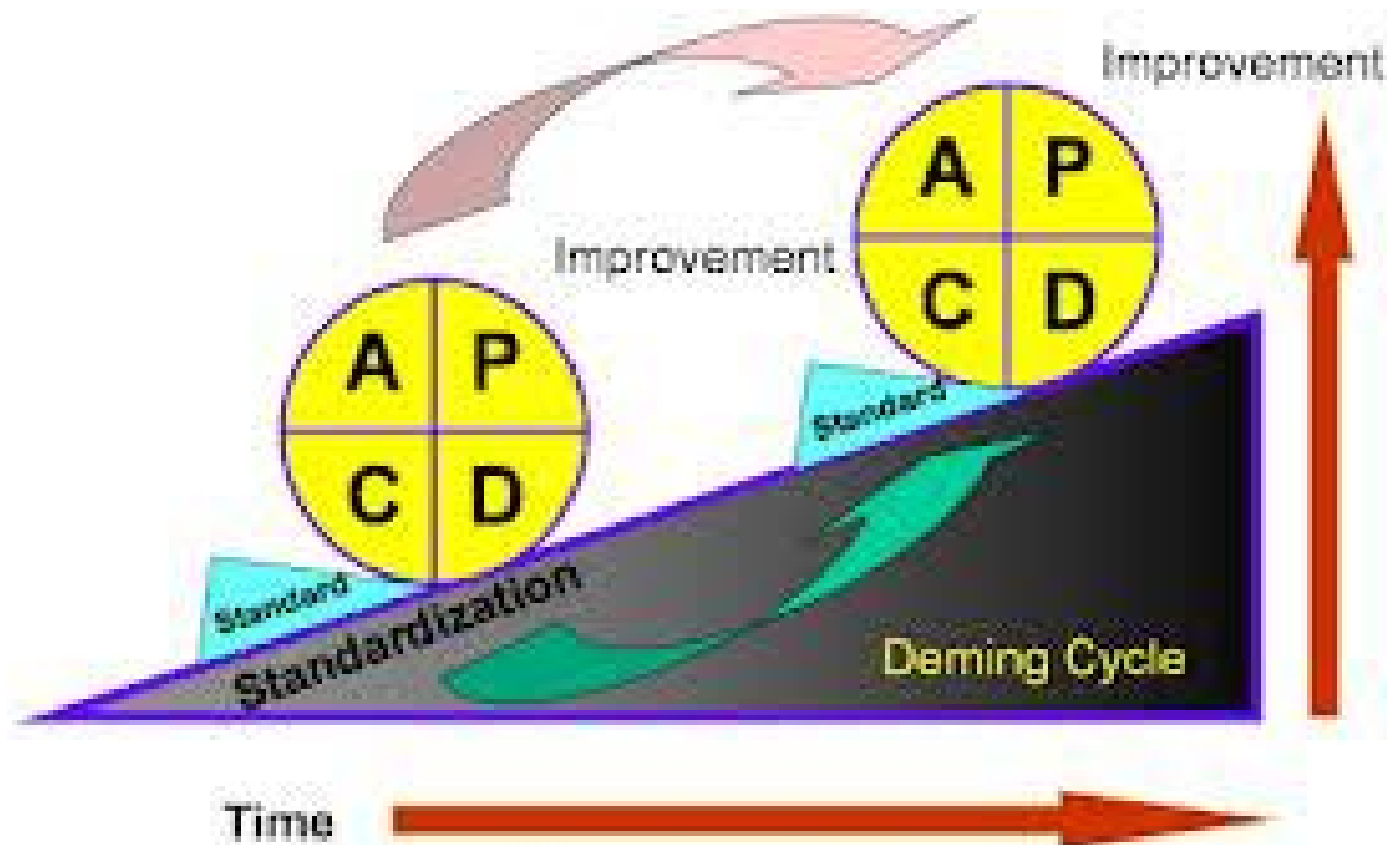
HE Stakeholders

- **The student?**
- **Their family?**
- **The educators?**
- **The University?**
- **Europe?**
- **Society at large?**

Quality Enhancement



PCDA and Standards



Internal Quality Mechanisms



- Dedicated unit/committee (s)
 - At University level (e.g. Centre for Quality Enhancement)
 - At School/Faculty level
 - At department level
 - At programme Level
 - At module level
- Annual Monitoring (problems, best practice)
- Self Assessment

Representation

- Students
- Lecturers
- Technicians, librarians, teaching assistants
- Services
- Senior Management

Self Assessment

An on-going process



What are we trying to do? **Purpose**

What are we doing? **Reason**

How are we doing it? **Method**

Why is this the best way to do it?

Optimisation

How do we know it works? **Effectiveness**

How can we improve? **Enhancement**

Why Measure and What to Measure?

- Why?
 - To understand
 - To monitor
 - To manage
 - To improve
- What?
 - Applicants
 - Student numbers
 - Staff – Student Ratio

.....

Key Performance Indicators

What to measure?



Objective : Perspective *Student Success: Recruit, retain, graduate the best students :*
student *Recruitment Metrics:*

Number of :enquiries, applications, acceptances, conversions, rejections etc

Number of conversions

Graduate Employment within x months

Retention Metrics and Graduate Student Metrics

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Research Profile: Number of Publications

Number of citations

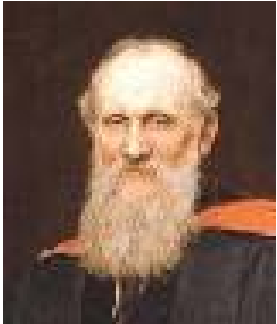
Ranking of journals

Impact (industrial,, Academic)

Staff satisfaction: Retention, promotion

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Why measure?



“When you can measure what you are speaking about, and express it in numbers, you know something about it, when you cannot express it in numbers, your knowledge is of a meager and unsatisfactory kind; it may be the beginning of knowledge, but you have scarcely, in your thoughts advanced to the stage of science.”

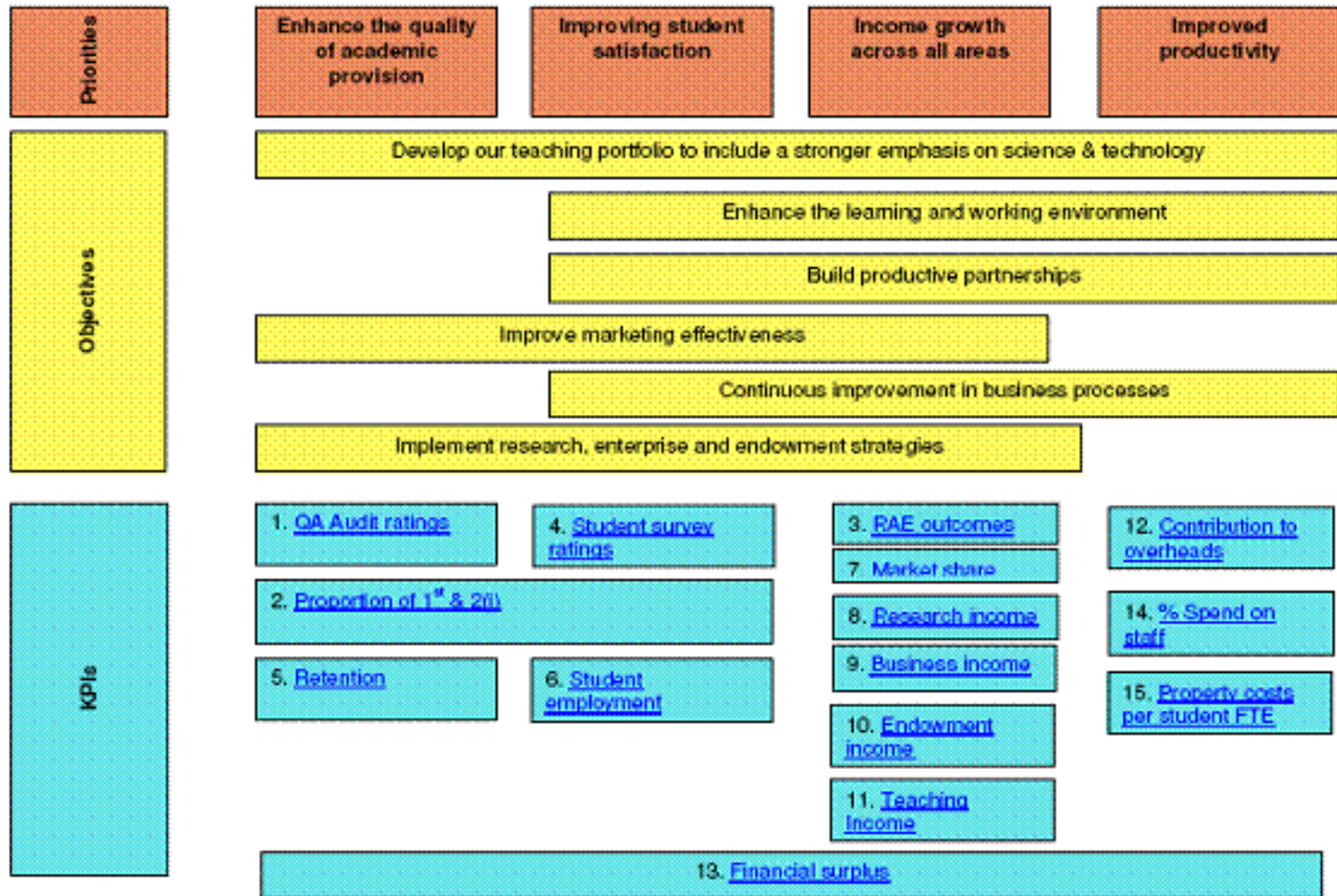
Lord Kelvin [1824 -1907]

Example: Improve the retention rate (vague)

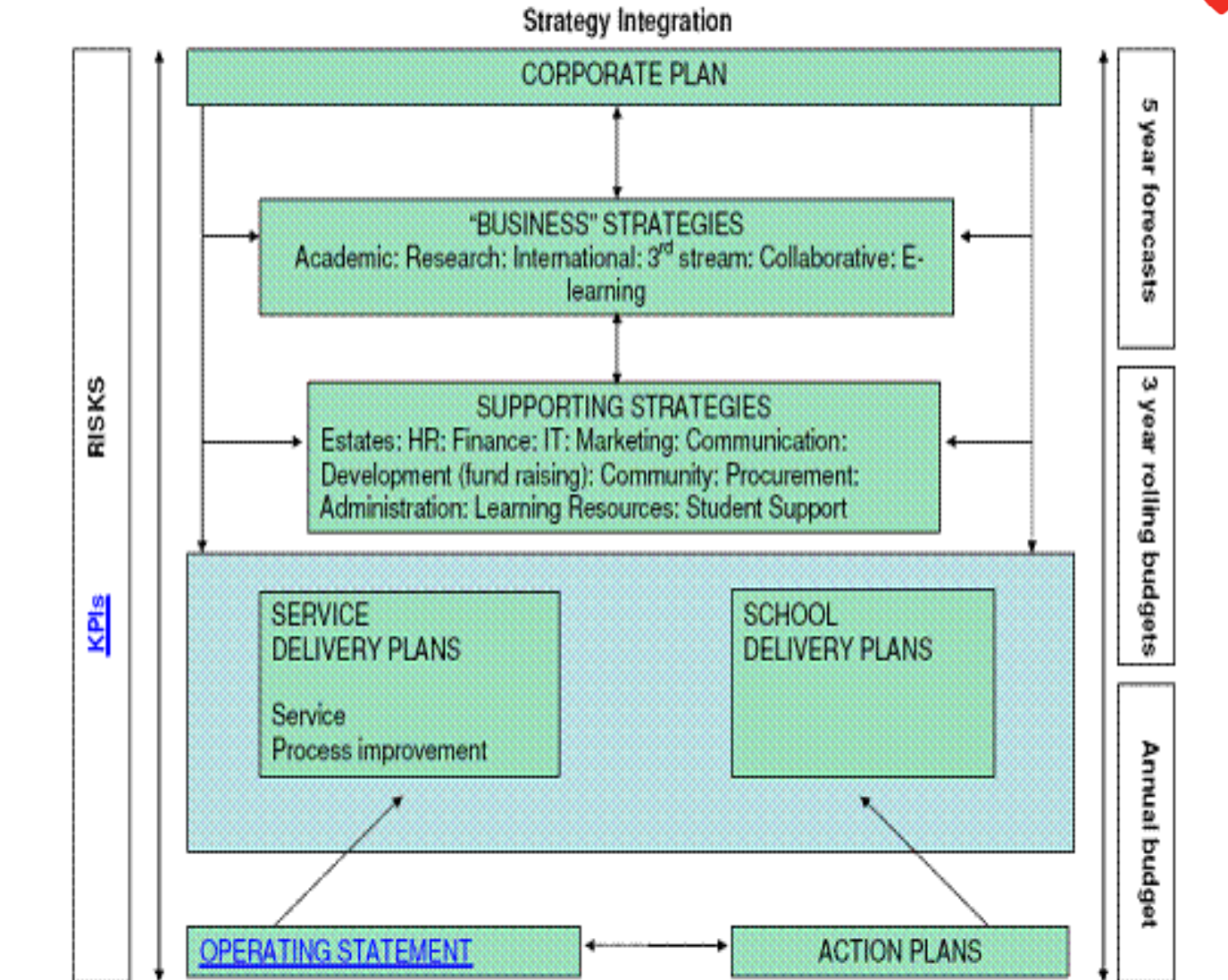
Target to improve retention rate by 20% in 2 years (precise and measurable)

An Example

Priorities, Objectives & Key Performance Indicators



From Corporate Plan to Tangible Actions

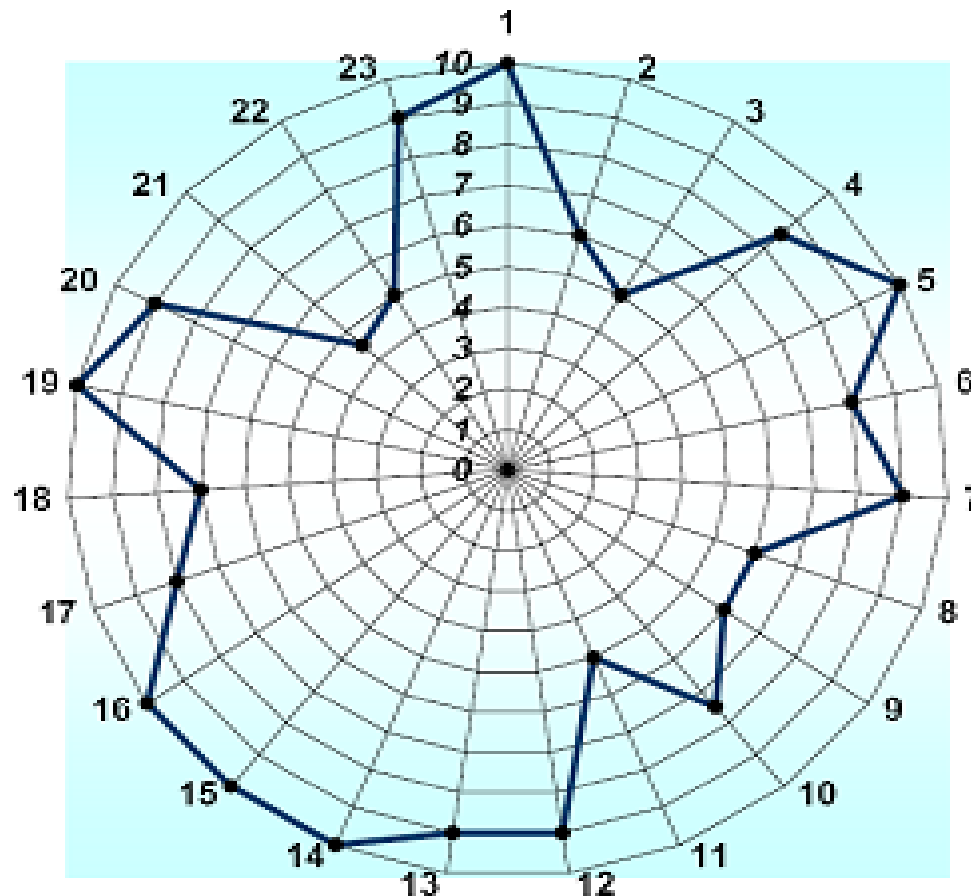


Current Situation + Targets

Qualitative and Quantitative profile

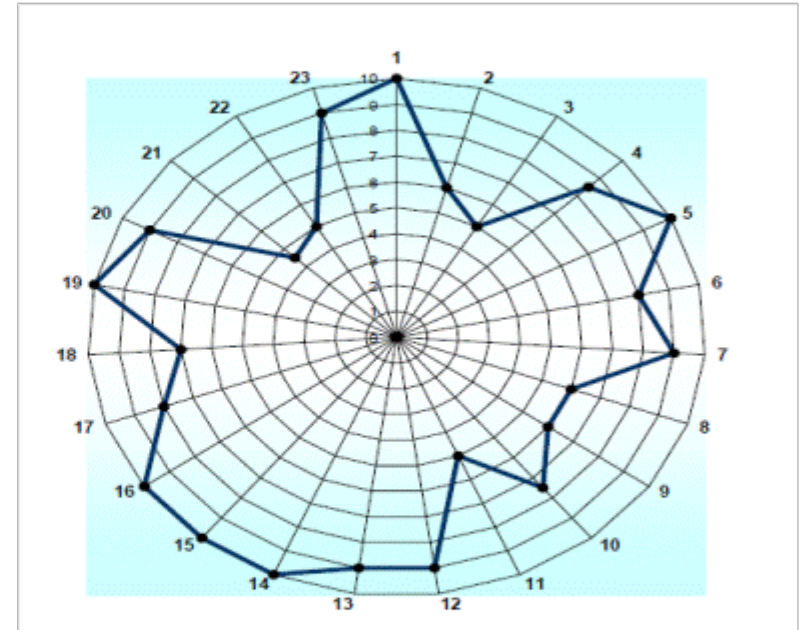
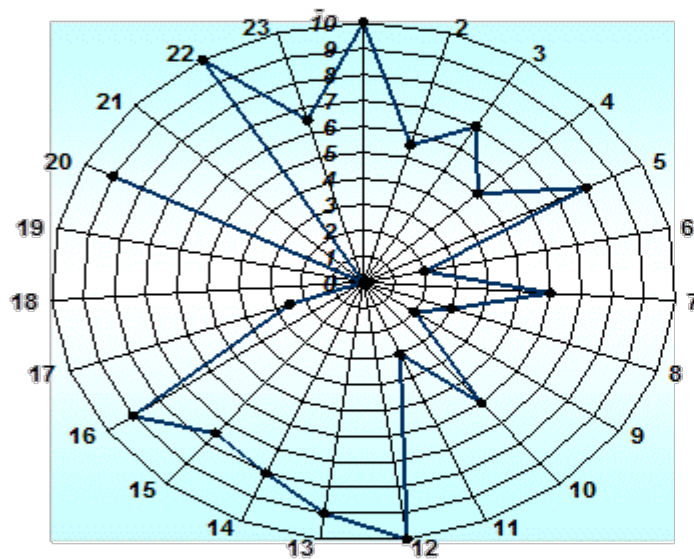


Diagram of Forecasted Results of Education Quality in 2010-2011 years



1. Adequacy of academic plans to the requirements of state educational standards
2. Percent of lecturers with scientific degree (candidate and doctor of science)
3. Average age of the academic staff
4. The number of published scientific articles per academic staff
5. The number of published teaching materials per academic staff
6. Trainings of academic staff
7. Percent of supported teaching materials and literatures
8. Percent of courses supported by electronic teaching materials
9. Percent of computers connected to internet
10. Number of students per computer used in educational process
11. Teaching (classroom) space per student
12. Adequacy of laboratory equipment to the requirements of subject programs
13. Technology enabled classrooms
14. Practical placement availability
15. Adequacy of practical placement work to the requirements of state educational standards
16. Scientific school traditions
17. Participation in the University's research projects
18. Scientific grants
19. Research topics financed from state budget
20. Students average learning achievements
21. Percent of published articles by student
22. Postgraduate and Master's students participation in the University's research projects
23. Adequacy of alumni knowledge and skills to the requirements of employers

Μια οπτικοποιημένη, Ποιοτική και Ποσοτική Σύγκριση (Μια πραγματική μελέτη περίπτωσης – Ένα Πανεπιστήμιο της Αρμενίας)



Που βρισκόμαστε (2008)



Που θέλουμε να βρεθούμε (2011)

Μέχρι πότε;
Από ποιόν (ρόλοι και
ευθύνες;)
Πώς;

What needs to be changed?

- **KPIs reveal**
 - **Strengths**
 - **Weaknesses**

KPIs help us decide what needs to be changed

And first of all the Quality Culture often needs to change

Culture Change



Culture is the integrated pattern of human behaviour in a corporation, which includes the way employees think, speak and act.

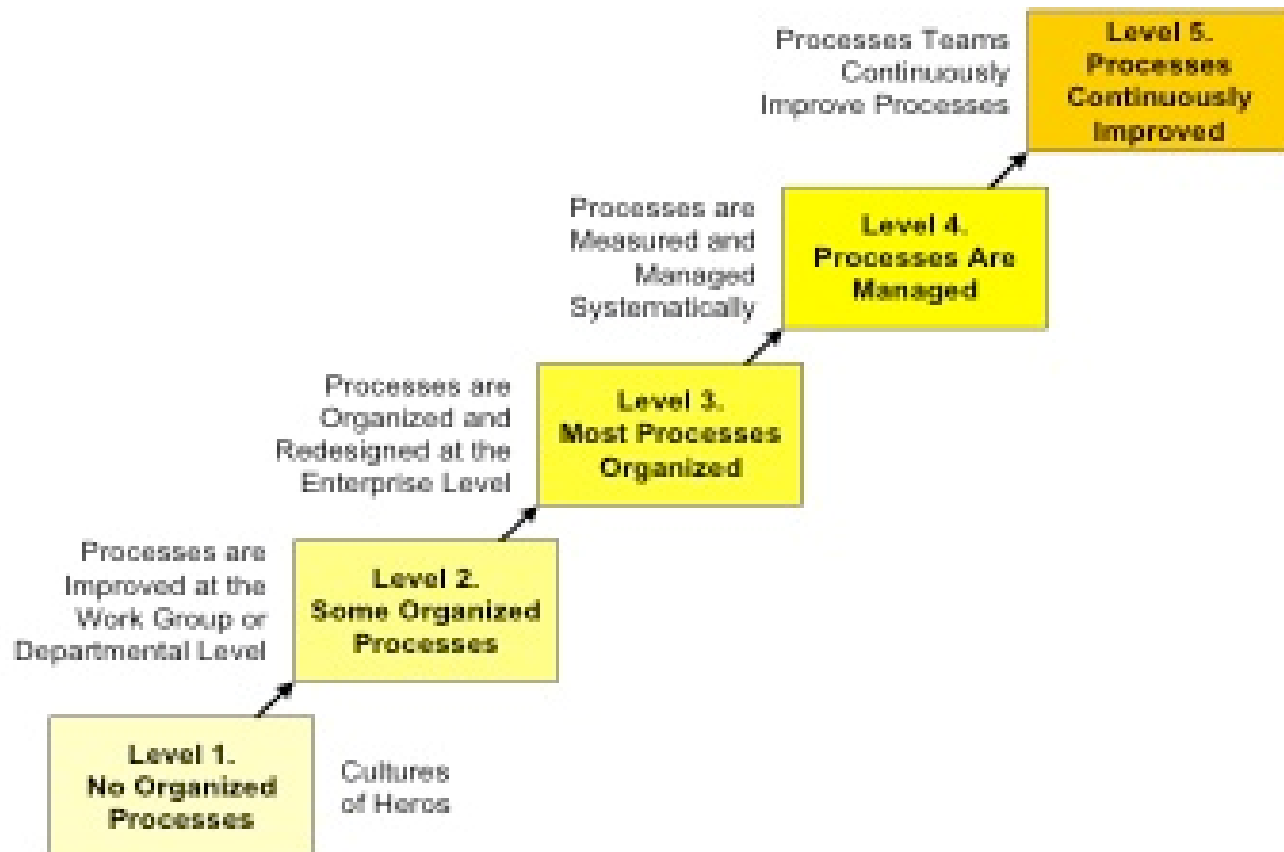
It affects individual behaviour by imposing guidelines and expectations for the members of the organisation, and it links geographically dispersed organisational groups and guides them towards a common vision

Quality Management

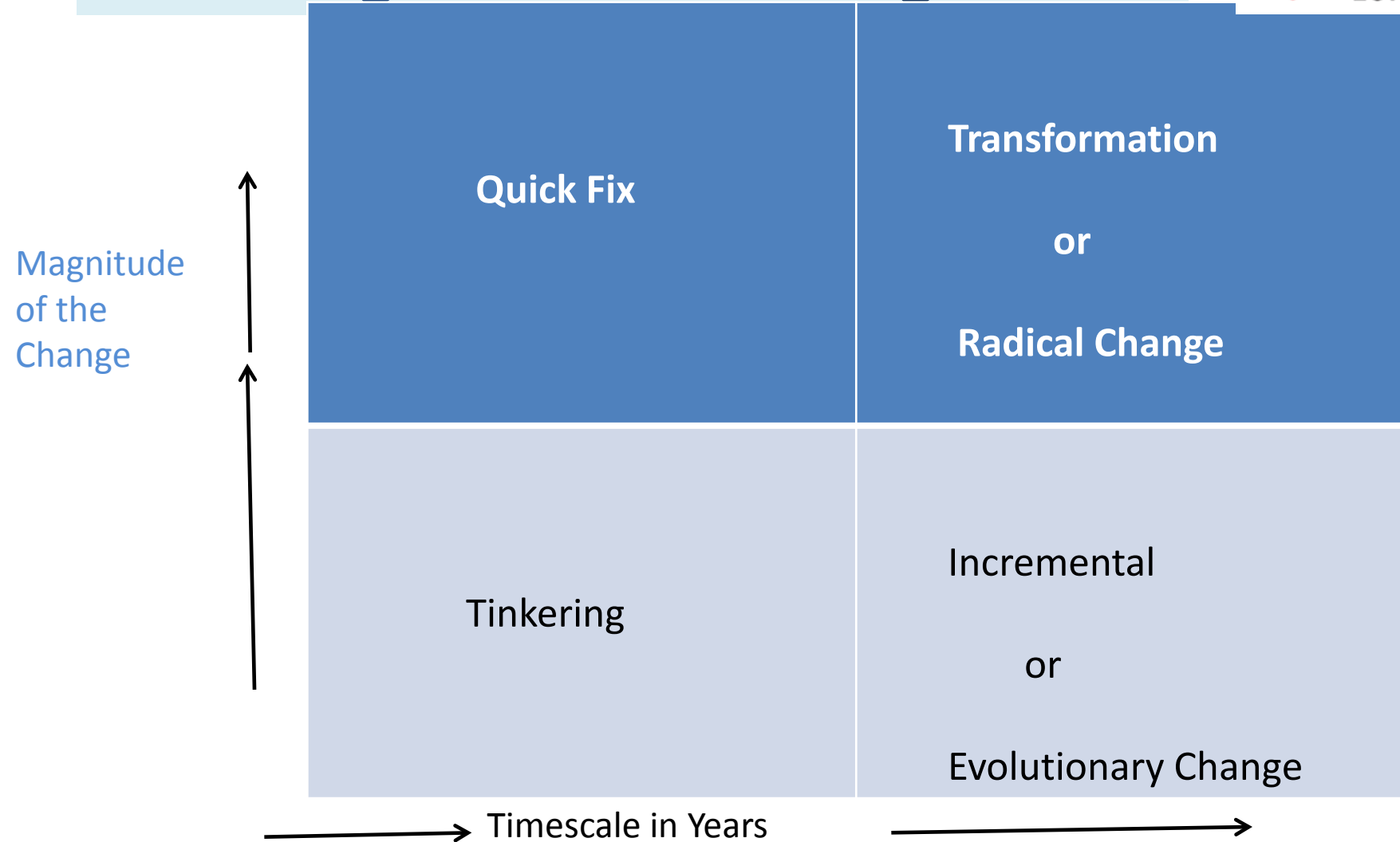
Ellison describes quality management and improvement systems: “ they are all aiming to achieve the same objective. This objective is a well run organisation following repeatable processes within which the employees contribute positively by following the processes and suggesting improvements.”

Management demonstrate commitment to improvement by following defined processes, supporting project teams in difficult times and providing the resources for analysis of process effectiveness and subsequent improvement.

Organisational maturity CMM (by SEI –Carnegie-Mellon)



Types of organisational change



(Source: Managing Change by Philip Sadler, 1996)

For successful Change Management – ask and answer the following?



Why change? For quality and performance Improvements

- Involve all stakeholders (**who**)
- Identify Strengths and Weaknesses (**what**)
- Plan: short term, medium term, long term (**when**)
- Decide on roles and responsibilities (**who, what, where**)
- Decide on methods and tools (**how**)

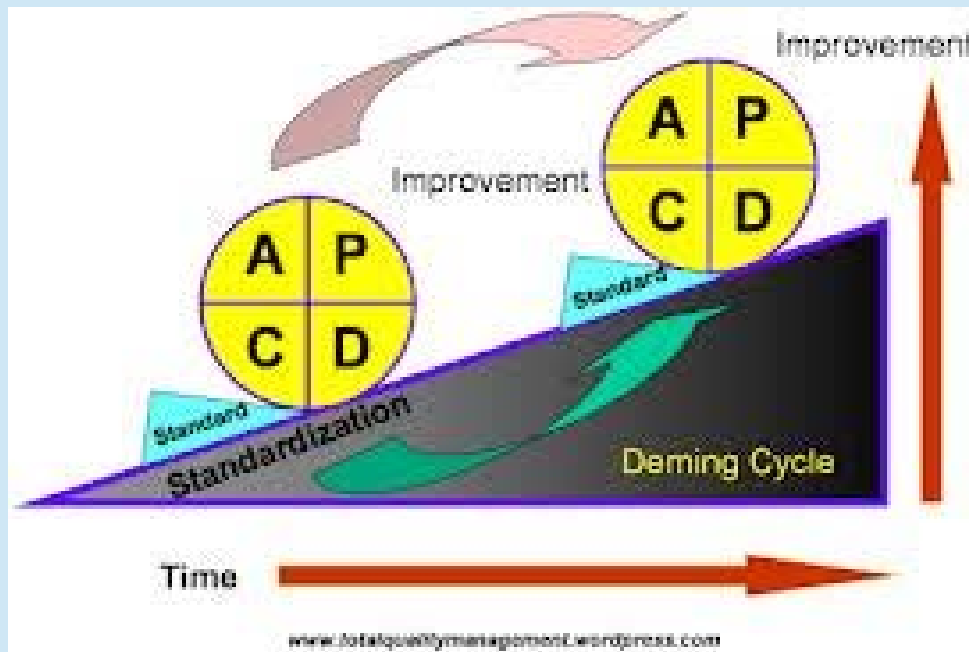
Recommendations



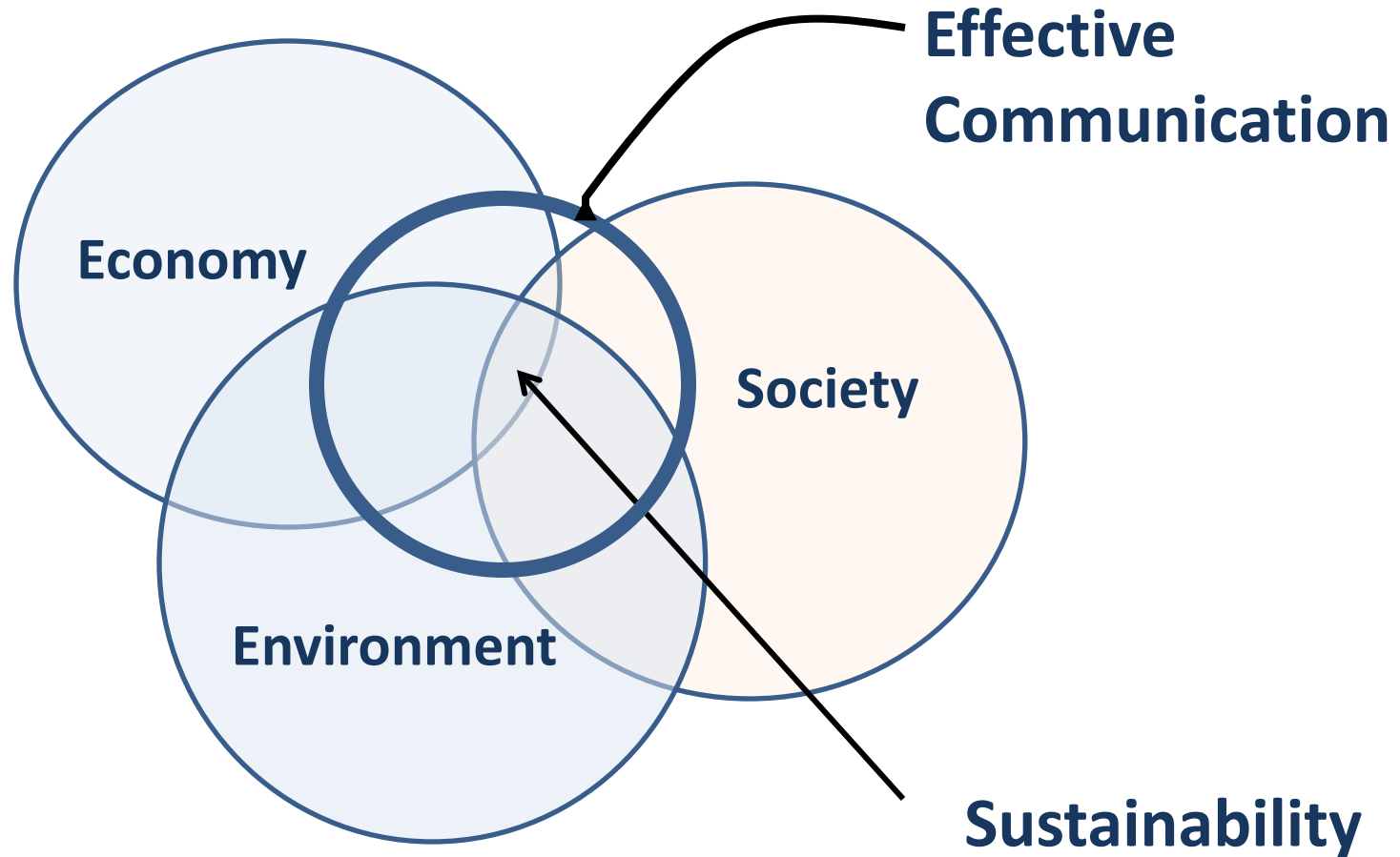
Develop and maintain a quality management system which ensures that the university is able to operate in a reliable, ethical, efficient and quality-oriented way, taking the needs of students and other stakeholders into consideration.

Base University activities and management on continuous assessment and enhancement, and fulfil their mission in ways that promote the well-being of the staff and students.

Τα Πρότυπα Διατηρούν και Βελτιώνουν τη Ποιότητα



Seeking synergy for Sustainability



Conclusions



Education and the education process, HEI institutions and their operation are very complex and difficult to manage.

The contribution of HEIs to a country and to society at large are far reaching, often intangible yet when quality is compromised it is blatant for all to see.

When matters get too complex (and they do) it is always advisable to go back to first principles. Ask the right questions to obtain the right answers.

A extract from a poem by Rudyard Kipling

"I Keep Six Honest Serving Men ..."

I KEEP six honest serving-men
(They taught me all I knew);
Their names are **What** and **Why** and **When**
And **How** and **Where** and **Who**.
I send them over land and sea,
I send them east and west;
But after they have worked for me,
I give them all a rest.

- http://www.kipling.org.uk/poems_serving.htm

Απόσπασμα από ένα ποίημα του Rudyard Kipling

Κρατώ έξι έντιμους υπηρετές...

Κρατώ έξι έντιμους υπηρετές
(Ότι γνώριζα μου το δίδαξαν αυτοί).
Τα ονόματα τους είναι Τι, Πότε, Πως
Που και Ποιος και Γιατί

Τους έστειλα σε γη και θάλασσες,
Τους έστειλα σ' ανατολή και δύση
Αλλά μόλις εργάστηκαν για εμένα,
έδωσα σε όλους τους τη ξεκούραση.

Μετάφραση από http://www.kipling.org.uk/poems_serving.htm

Thank you

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