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**June 22, 2011 (Wednesday) 55th EOQ Congress**

**CONCURRENT SESSIONS**  
**KEMPINSKI HOTEL CORVINUS**

**Wednesday 8:30 – 10:30**  
**Erzsébet tér 7-8, Budapest V.**

**SALON BANDINI/MARZINO**

**9.3. EDUCATION OF QUALITY – QUALITY OF EDUCATION III.**

**8:30 – 10:30**

**Co-Organizer: Óbuda University**

**Session Chair: Gábor Veress, University of Pannonia, Hungary**

**9.10 Soft Skills for TQM in Higher Education Standards**

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Born in Eindhoven in 1953 he studied "Dutch Modern Literature" at the Catholic University in Nijmegen. He started as a lecturer in communication, project management, methodology of research. The second step in his career he was active as an educational technician developing curricula and managing curriculum efficiency projects. From there he got attracted to quality management. He was quality manager of a faculty of Health Care and Social Work for six years. He has been auditor for EFQM and INK (Dutch Quality Institute). In 2009 he took his Ph.D. in business management at Rotterdam School of Management (Erasmus University). His thesis was on "Certification, accreditation and the professional". He has also written a great amount of articles in magazines like Total Quality Management Journal, Quality in Higher Education, Quality Progress, KIZ (Quality in Healthcare) and TH&MA. He wrote several books and chapters on Quality Management. He has been editor of the Method for improving the quality of higher education based on the EFQM-model, that is available in English, Czech, Latvian, Spanish, German, French, Dutch and Vietnamese. He contributed to the Audit Instrument for Sustainability in Higher Education (AISHE) and is senior auditor for this instrument. He is chairman of the Education & Training Activities Group of the European Organisation for Quality.

He worked on several projects concerning the implementation of Quality Management and Quality Assurance in countries all over the world (Rumania, Czech Republic, Syria, India, Vietnam). After long time involvement in external and internal quality management he is now focused on the motivation of professionals for quality and creating a culture in the organisation with passion for quality. His motto is: "because excellence in the end is a personal journey".

# Soft skills for TQM in higher education standards

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**ABSTRACT** The aim of this paper is to explore if higher education considers soft skills to be important for their students and if so which skills are needed. In total quality management it became clear that its hard side of measuring and data analysis can only be successful if it is replenished with the soft side, the people side. This has serious consequences for the education of professionals. Professionals, especially in higher education should be trained in soft skills, trained in managing themselves and their relations with others. In this study first a definition of soft skills is provided with a list of 20 examples out of the literature on this field. These are used to match with the standards for higher education programs from ABET, AACSB, EQUIS, AMBA, AUN and the Dublin descriptors. An analysis is made which of these skills are required in these accreditations and which are lacking.

Keywords: soft skills, TQM, Higher Education, accreditation standards.

## Introduction

Kemenade (2011) conducted an explorative literature review in Total Quality Management (2000-2003) and its follow up Total Quality Management and Business Excellence (2003-2010). This study focused on the question to what extent soft skills are considered to be important for quality professionals and if so, which skills are needed. Six articles were selected for relevance and reviewed. Three mention the 'hard' and 'soft' side of Total Quality Management in general. Sureshchandar et al. (2001) state that HRM and other 'soft' issues play a dominant role in service organizations, unlike in manufacturing where the emphasis is on hard issues like superiority in product, process, technology. Addey (2004) concludes his survey, that companies will need Quality Managers "who are able to understand complex business matters and who can address both hard en soft quality issues in an effective way". (o.c., p. 888). Ali et al. (2010) focus on the soft or people issues. "The 'soft' or HRM aspects in the literature review stand as the fundamental issue of concern for organizational management in quality planning and creating a quality working climate to ensure successful expected performance" (o.c., p.117).

Three articles actually go into soft skills. Yang and Chen (2005) come to the conclusion that: "in addition to 'hard skills' (e.g. statistical quality techniques), there are 'soft skills' (e.g. team learning skills, sharing visions and learning climate development) that should be regarded as important, as well as team-based quality management activities. Soft skills may increase the power of hard skills and together with hard skills, lead to the continuous quality improvement in an organization" (o.c. p. 739). Dervitsiotis (2006) –in the sideline of his research- makes the remark, that a 'soft skill' such as the proper interpretation of language data is not as well or as widely developed as technical skills employed for quantitative variables.

Hagen (2010) pleas in her literature review for training in soft sills in Six Sigma training courses and agrees with Brady (2005), stating that training in soft skills, such as leadership and coaching often take a back seat to more technical skills.

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The review concluded that the need for soft skills is acknowledged, although the subject is either badly defined or not at all. These results lead to a definition of soft skills as those skills: referring to individual development (personal ) and to management of interactions with others inside and outside the organization (interpersonal). Examples of personal skills are: reflection, learning to learn, commitment with the organization, self-criticism, handling emotions (like comfort, resignation, aggression and passion), coping with complexity, ethical responsibility, (including trustworthiness, conscientiousness), self awareness, adaptability, critical thinking and liability. Examples of interpersonal skills are: inspiring people, mediation, coaching, team learning skills/teamwork, sharing visions, creating a learning climate, communication (including proper interpretation of language data), persuasion, negotiation and establishing relationships (see table 1). These two classifications fit with cognitive skills and interactive skills in the taxonomy of Romizowski (1984). If these are the skills needed for quality management in business in the 21<sup>st</sup> century, these should be trained in higher education and be visible in higher education curricula.

1.	Personal /Cognitive skills
1.1	reflection,
1.2	learning to learn,
1.3	commitment with the organization,
1.4	self-criticism,
1.5	handling emotions (like comfort, resignation, aggression and passion)
1.6	coping with complexity
1.7	ethical responsibility, trustworthiness, conscientiousness
1.8	self awareness
1.9	adaptability
1.10	critical thinking
1.11	liability
2	Interpersonal / interactive skills
2.1	inspiring people
2.2	mediation
2.3	coaching
2.4	team learning skills/teamwork, creating a learning climate
2.5	sharing visions
2.6	communication (including proper interpretation of language data)
2.7	persuasion,
2.8	negotiation
2.9	establishing relationships

Table 1: Soft skills for TQM (Kemenade, 2011), before the study.

## Methodology

This study builds on the results of Kemenade (2011) and focuses on the question to what extent the soft skills mentioned in the literature review are recognized in higher education. For that purpose a desk research has been executed on the standards for higher education programs. Higher education programs have considerable autonomy to design their own curricula and choose the knowledge, skills and attitude the graduate should acquire. In countries where higher education is accredited, accreditation standards tend to limit this autonomy and to prescribe at least certain objectives that need to be met. In this study we examined accreditation standards from six sources. Three for management studies from AACSB, the Association of MBA's and EQUIS; one on technical higher education from ABET and two general guidelines for higher education from the Asian University Network and the European Joint Quality Initiative.

AACBS stands for the Association to Advance Collegiate Schools of Business and has its headquarters in Florida , US. It is a accrediting agency for bachelor's, master's and doctoral degree programs in business administration and accounting. From AACSB two program criteria are considered: one for Business, the other for Accounting.

The Association of MBA's (AMBA) is the international impartial authority on postgraduate business education. It accredits Masters in Business Administration (MBA), Doctorates in Business

Administration (DBA) and Masters in Business & Management (MBM) programmes and is located in London. From AMBAs two programs are considered MBA and MBM.

EQUIS stands for European Quality Improvement System and is a system of quality assessment, improvement and accreditation of higher education institutions in management and business administration. The system is developed by EFMD, the European Foundation for Management Development, the Bruxelles' accreditation body of quality in management Education, that has established accreditation services for business schools and business school programmes, corporate universities and technology-enhanced learning programmes.

ABET stands for the Accreditation Board for Engineering and Technology and is the recognized accreditor for college and university programs in applied science, computing, engineering, and technology. It is situated in Baltimore (US). The ABET standards for Applied Sciences, Computing, Technology and Engineering appear not to differ much in their application of soft skills and are combined to one set of criteria.

The Asian University Network (AUN) is a network for universities in Asian countries and has its headquarters in Thailand<sup>1</sup>. They established a working group on quality assurance (AUN-QA). It is a group of Chief Quality Officers (CQOs) who have been appointed by the AUN member universities to be a focal point for coordinating activities in order to move forward the harmonisation of educational standards and continuously improve the quality of universities in ASEAN. The working group produced several documents that the members can voluntarily use. Central within these documents are the QA-Guidelines, that relate to all higher education programs in all fields.

In Europe an informal group called the Joint Quality Initiative designed the so called Dublin descriptors. These Dublin descriptors are a general statement of the expected attributes of a student following short cycle higher education, bachelor, master or doctoral programs. Although these descriptors are not mandatory many accreditation bodies in Europe have used them to define standards on output at program level. The Dublin descriptors for bachelors and masters have been used in the survey. That brings us to the review of in total nine criteria from six different sources (AACSB, 2; ABET 1; AMBA, 2; EQUIS, 1; AUN, 1 and Dublin descriptors, 2).

## Results

AACSB criteria for Business studies cover four areas: three personal skills (reflection, ethical responsibility, analytic skills) and one interpersonal (communication). For accounting only two (the least coverage within the nine criteria).

More skills are needed to comply to EQUIS. EQUIS covers self criticism, coping with complexity, self awareness, critical thinking, teamwork and communication. Interpersonal skills and leadership skills are mentioned as such (but not further elaborated on).

Two sets of criteria from the Association of MBAs are analysed for MBA and MBM. The MBA requires 8 (sets of) skills, the MBM 7. Both mention development of personal skills specifically. The MBM program seems to be more on the personal side and focuses on change management, whereas the MBA is strong on both, mentions interpersonal skills as such and adds more skills on interaction and communication.

ABET standards for Applied Sciences, Computing, Technology and Engineering all mention only four areas: functioning in teams, understanding professional and ethical responsibility, effective communication and recognition of the need for and an ability to engage in life long learning.

General guidelines from the AUN talk about 6 skills: reflection, learning to learn, self criticism, self awareness, critical thinking and communication. Also leadership skills are mentioned (but not further elaborated on). The AUN-QA criteria have the most personal soft skills of all criteria that have been reviewed.

The bachelor Dublin descriptors mention two (learning to learn and communication). On masters level these skills become more complex and handling complexity is mentioned as a third skill. See for an overview table 3.

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<sup>1</sup> Members of the Asian University Network are 22 universities from the following ten Asean countries: Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

## Conclusion and discussion

It is clear that the soft skills are most recognised by two of the accreditation standards in the area of business management programs (EQUIS, AMBA for MBA and MBM). In technical education they seem less important (ABET). For higher education in general the Dublin descriptors see far little necessity for soft skills than the AUN guidelines. The AUN-QA guidelines are advanced in prescribing eight skills for all professions. This can be caused by cultural influences. Dahlgaard (1999) states that: “the long history of Japan shows that they have had an extraordinary capability to import foreign elements, whether it is a system, a language, techniques, a philosophy or whatever”. This surely goes for the development of quality management. The same capability might be available in other Asian countries and visible now in what they want graduates to be able to.

When we look at the whole picture, communication is covered by seven out of the nine criteria. However, still nine of the twenty skills mentioned in the quality management literature are not mentioned in any of the standards: 3 personal and 6 interpersonal skills. For some, the reason for this absence can be that it is questioned if these skills can be trained at all in a higher education context. Handling emotions or establishing relationships might require psychotherapy-like sessions not fit for education. Some skills might be too difficult to assess. How can you measure a person's liability or his commitment to the organisation? On the other hand skills like inspiring people, sharing visions, mediation, coaching, and negotiation can be trained and assessed and still are lacking in the criteria. Based on that we propose a new set of sixteen skills to use for further study and exploration (see table 2).

<b>1.</b>	<b>Personal /Cognitive skills</b>
1.1	reflection
1.2	learning to learn,
1.3	self-criticism,
1.4	coping with complexity
1.5	ethical responsibility, trustworthiness, conscientiousness
1.6	self awareness
1.7	adaptability
1.8	critical thinking
<b>2</b>	<b>Interpersonal / interactive skills</b>
2.1	inspiring people
2.2	mediation
2.3	coaching
2.4	team learning skills/teamwork, creating a learning climate
2.5	sharing visions
2.6	communication (including proper interpretation of language data)
2.7	persuasion,
2.8	negotiation

Table 2: Soft skills for TQM (Kemenade, 2011), after the study.

The results of this study do not say anything about the actual programs in the universities. These can go far beyond the guidelines and standards. It only shows the way these programs are guided or directed. However, it is a strong recommendation to e.g. the Joint Quality Initiative to reconsider its criteria and question why reflection, self criticism, ethical responsibility, self awareness, adaptability, inspiring people, mediation, coaching, team learning skills/teamwork, persuasion and negotiation are all lacking.

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		AACSB		ABET	AMBA		AUN	EQUIS	Dublin descriptors	
		Business	Accounting		MBA	MBM			bachelor	master
1.	<b>Personal /Cognitive skills</b>				Purpose: to encourage personal development	Purpose: to encourage personal development				
1.1	reflection	Reflective thinking skills				Be adaptable and demonstrate originality, insight and critical reflection in problem situations	The essence of higher education is to transform students to become reflective			
1.2	learning to learn,			Recognition of the need for and an ability to engage in life-long learning	Purpose: to encourage life-long learning Take responsibility for continuing to develop their knowledge and skills	Purpose: to encourage life-long learning Take responsibility for continuing to develop their knowledge and skills	Commitment of life-long learning; Study and information-processing skills, learning how to learn		have developed those skills needed to study further with a high level of autonomy .	study in a manner that may be largely self-directed or autonomous..
1.3	<i>commitment with the organization,</i>									
1.4	self-criticism,						Able to critique their own experiences and themselves	The development of a structured personal culture and a related set of values		
1.5	<i>handling emotions (like comfort, resignation, aggression, passion)</i>									
1.6	coping with complexity				Develop the ability to apply previous and newly acquired knowledge and experience to complex business issues in a range of contexts Be able to analyse, synthesize and solve complex unstructured business problems.	Make decisions in complex and unpredictable situations Deal with complex issues systematically and creatively		To analyse, synthesize and critically assess complex material		demonstrates the ability to integrate knowledge and handle complexity, and formulate judgements with incomplete data





		<b>AACSB</b>		<b>ABET</b>	<b>AMBA</b>		<b>AUN</b>	<b>EQUIS</b>	<b>Dublin descriptors</b>	
		Business	Accounting		MBA	MBM			bachelor	master
2.	<b>Interpersonal / interactive skills</b>				Leadership and entrepreneurship, Develop interpersonal and group-working skills	Leadership and entrepreneurship	Leadership skills	Interpersonal skills, leadership skills		
2.1	<i>inspiring people</i>									
2.2	<i>mediation</i>									
2.3	<i>coaching</i>									
2.4	team learning skills/teamwork, creating a learning climate			Ability to function (effectively) in (multidisciplinary) teams (to accomplish a common goal)	Have well developed interpersonal skills including the ability to interact with groups and individuals at all levels		Operate effectively in a variety of team roles, taking the lead where appropriate	Teamwork		
2.5	<i>sharing visions</i>									
2.6	communication (including proper interpretation of language data)	Communication		Ability to communicate effectively	Have well developed interpersonal skills including the ability to communicate effectively		Key skills: communication	To communicate effectively in writing and orally, Presentation skills	Ability to communicate information, ideas, problems and solutions	Communicate their conclusions and the underpinning knowledge and rationale (restricted scope) to specialist and non-specialist audiences (monologue)
2.7	persuasion,				Consultancy skills	Consultancy skills				
2.8	<i>negotiation</i>									
2.9	<i>establishing relationships</i>									

Table 3: Soft skills for TQM in higher education standards