Introduction

The main goal of occupational safety courses is to teach hazard identification and subsequently risk prevention. Risk prevention is by large a management responsibility, and its principles are rather simple, at least in theory. Apply management tools based upon a Deming circle, the well-known plan – do – check – adjust model, be sure all parts of the cycle are filled in adequately by applying well established safety techniques, and make the circle go round [1]. One cannot deny the merits of this message, and its pleasant simplicity. For some time now, courses on occupational safety are teaching these management tools to control occupational safety risks. And occupational risk prevention programs in companies, organisations, and workshops are largely based upon this model. There is a general believe this managerial approach towards safety is responsible for the steady decline in occupational accidents, and fatalities, at least in the so-called Established Market Economies [2]. But it is questionable whether or not this decline is the result of a successful application of these tools, or due to the phenomenon known as ‘export of hazards’, of exporting hazardous industries to developing countries [3].

In a free market system transparency of administration, quality and quality systems have received increasing attention over the last decades. Transparency implies openness, communication and accountability. The driving force for this attention can be found in the need for defining quality in objective terms and to ensure that a defined quality level can be reached and maintained on a continuing basis. Quality is always placed in relation to a specific intent, for instance quality measures the fitness of a product, a service, or a work process for its purpose [4].

Quality of educational programs in occupational safety, and more specific the quality of the trainers and teachers of these courses is seen as a tool in ensuring a sufficient and transparent level of education in this field. The question remains to be asked whether a separate certification system for these teachers and trainers is serving a purpose.

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3.6 Teachers and trainers of occupational safety courses, is certification necessary?

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Quality and standardisation as a ticket to markets

Attention to quality and quality control goes back to the early decades of the last century, when the building industry used collective experience to achieve a high quality through...
repeatability in work processes. After the Second World War quality assurance for products and work processes was introduced into Japanese management thinking by American pioneers as Deming. Later concepts as Kaisan and Total Quality Management were developed, which were used extensively in the Japanese car industry. The quality thinking was adopted gradually in the rest of the world through quality associations and the use of quality circles. It is now a well established concept through the various ISO series of standards. Many companies and organisations today have certified their quality systems, also including services like education and training. Certification to ISO standards has been the fastest growing certification practice of all times, and is increasingly seen as a ticket for entry into important markets. Distinct from mandatory systems, the success of private certification is caused by the voluntary participation of the parties involved [5].

**Different forms of certification**

Certification is one of the instruments of quality assurance, and can be applied to persons, systems and to objects. Certification of persons contains a framework for peer review of professional activities and achieved standards. Furthermore, continuous improvement must be an important aim of quality insurance, which involves efforts to improve teaching methods, and to keep professional knowledge up to date.

Certification is the process by which a certifying body officially tests and declares that an object, a system, or person satisfies fixed criteria and standards and will continue to do so. These criteria and standards can be formulated internationally, nationally, or formulated by a board of experts, which includes all relevant stakeholders. Two different forms of certification are relevant for teachers and trainers; First party – based on self auditing against a standard, and third party – based upon a qualified national or international certifying agency. There also exists a second party certification – based upon vendor or supplier assessment, and even a fourth party – based upon a governmental assessment. Most likely, second and fourth party certification will not be relevant for teachers and trainers of courses in occupational safety.

First party certification is characterized by self-regulation. Certified professionals make up a professional body that assures the credentials of persons in the same profession. It usually has a system of self-initiated monitoring from within and from outside consultants. This type of certification has an obvious disadvantage when the group of professionals is limited to hundreds or a few thousand members. The circle might become too small to guarantee anonymity, and independence. Third party certification refers to a formal scheme that is no longer self-regulated. National organisations have been created that monitor the certifying body. Peer review by independent experts constitutes an important element in procedures to approve third party certification schemes [6]. An example of a third party certification is the certification of safety managers by the Dutch SKO (Foundation for the Certification of Professional Competence). Third party refers to the independence of the board of experts, with representatives from unions, employer organizations, educational institutions, certificate holders, Dutch Society of
Safety Science, research institutes, and the Ministry of Social Affairs and Employment. All these parties have an equal opportunity to include relevant elements in the standards and criteria for certification.

Certification of professional competence is not new and existed long before official certification schemes became effective. Professional societies already had their systems of examination in place to guarantee the competence and quality of members. And one of the oldest institutions, the universities, already use examinations and diplomas to guarantee the quality of their graduates. In The Netherlands educational programs on occupational safety, organized as post graduate programs at universities or at schools of higher vocational education, are subjected to certification.

Certification also seems to enter in the educational domain outside universities. Certification of teachers and trainers in occupational health and safety is considered a primary instrument for assuring the credentials of these teachers. It creates accountability to school managers and also to students (on this see Güler Kici as well as Michael Steig in this report).

**SWOT analysis of certification of teachers and trainers**

Certification of teachers and trainers has quite some advantages. It has effect not only on the teachers and trainers, but also on the education they have to follow, as well as the programs they are going to offer. In general certification will increase the transparency, and the coherence of these educational programs, as well as the comparability of different programs. The quality of these teachers must be assessed on a regular basis, e.g. every 3-5 years, since momentary compliance with quality standards is not enough. And this repeated assessment will control the improvements of the professional knowledge of the person certified.

A major disadvantage of all systems of certification is the tendency to widen the gap between certified experts. So far no system encourages the cooperation between professionals, by means of common parts in their education, or mutual knowledge of their fields of expertise. An integrated, efficient and flexible education of teachers and trainers in occupational safety is therefore hampered. And a rigid application of these systems will stimulate the conservation of the present state of the art, which is reactive by definition.

When regarding the certification of teachers and trainers in relation to other certification systems, there is a real danger of certification upon certification. It may seem logic to close all gaps possible, but this can end up in a situation pictured in figure 1, an example of ‘certification madness’.

This situation does not represent some far away future and similar elements will be assessed two, three or four times. This raises the question if we cannot reduce the bureaucratic burden of certification without paying for quality [7; 5].

It will be clear that large problems will occur to organize and to develop a system which is cost efficient and payable. Recertification is an important tool of the certification process and ensures an up-to-date level of
knowledge of the teachers and trainers. But is also has a severe downside. Who is going to judge the activities, which can be used for recertification purposes?

In Holland the certification process of occupational hygienists and safety managers has created an extensive administrative burden in assessing a point system for seminars, presentations, meetings and the like, which are recognized as a valid contribution to recertification. Such systems stimulate an attitude where people ‘go for the points’, meaning that the collection of sufficient points is

Figure 1: Certification madness

Certified teachers follow certified educational programs delivered by certified educational institutes using certified instructors and assessed by certified auditors.

Figure 2: Results SWOT analysis, certification of teachers and trainers in occupational safety

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<thead>
<tr>
<th>Strengths</th>
<th>Transparency of educational goals</th>
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<td></td>
<td>Increased coherence and comparability of educational programs</td>
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<td></td>
<td>Increased mobility of teachers and trainers within Europe</td>
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<td></td>
<td>Ticker to important markets</td>
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<td>Weaknesses</td>
<td>Administrative burden, costs</td>
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<td></td>
<td>Focus on procedures instead of content, on input instead of output</td>
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<td></td>
<td>Restricted educational freedom</td>
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<td></td>
<td>Certification represents a frozen state of the art, and restricts cooperation between different experts</td>
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<td>Opportunities</td>
<td>Enhanced rationality in teaching</td>
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<td>EU standard is a tool for mainstreaming occupational safety practice</td>
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<td>Certification identifies demands and generates consensus between countries</td>
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<td>Threats</td>
<td>Limited acceptance of additional standards</td>
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<td></td>
<td>Reactive instead of pro-active</td>
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<td>People only ‘go for the points’, and not for the content</td>
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more important than content, and activities related to the profession are only undertaken when sufficient points can be earned.

Security and trust amongst clients and the general public is the main goal of certification. It separates the sheep from the goats, creates employment for those who are certified, and puts fences around the fields of activity. Therefore it seems that quality is ensured by reducing freedom. An overview of the results of the SWOT analysis on certification is summarised in figure 2.

**Conclusion, Anglo-Saxons versus Rhinelander's**

The debate on certification is a logic follow-up of a rather strong influence of free-market thinking, which has entered the public domain. Not only in education, but also in health care, in day care centers, in youth welfare, and in public transport, to name a few, the duties to register, the protocols and guidance notes has lead to an endless list of data to show a required level of accountability. We seem to live in a world of formalized distrust, and suffer from the terror of transparency. And the discussion in the public domain on cost-effectiveness is filled with the familiar jargon of managers with their standards, indicators, controls, and quality tests.

After the fall of The Wall the private sector became unrestrained, and the Anglo-Saxon’s interpretation of the economy, as well as their concepts of organizations and management has been adopted in almost the whole of Europe [8; 9]. This Anglo-Saxons’ model is strongly based upon the notion of a maximum control of the environment, through an extensive planning and control cycle and reporting systems. Certification of systems, like quality systems and the like is a good example of this control. The Anglo-Saxon approach is dominated by so-called ‘soll-thinking’, by concepts how the world should look like, and managers’ interest is similar to the interest of shareholders. Consequently, the influence of employees on organizations is marginalized and mainly approached instrumentally. The impact of this transformation on the private sector has its influence on the public domain from the 1990s onwards. And the call for a quality assurance of trainers and teachers of occupational safety by means of certification is one of many manifestations.

In reaction to the Anglo-Saxons’ model of organizations the Rhinelanders’ model makes an appeal to the ‘task maturity’ of employees, and to their craftsmanship. Achieving predefined goals is considered to be more important than a strict obedience to rules leading to these goals. Also, shareholder value is not a prime objective, instead stakeholder value is the main orientation of management. Organizations are managed less rigidly, leaving more room for independent judgments, and for discussions, which will increase the companies’ flexibility in times of developments unforeseen. As a consequence rules and procedures play a less prominent role in these organizations. After all, more rules may lead to more control, but also to more demotivation amongst rule followers. The Rhinelanders’ model is a European answer to the dominance of the Anglo-Saxon model. The model is not meant to be superior, but only as an example of the other end of the scale of business and management models.
Back to the teachers and trainers, the two organizational models presented will provide different answers on the necessity of certification of teachers and trainers in occupational safety. In the Anglo-Saxons’ model, certification is a logic step. It will increase control and accountability. From the perspective of Rhinelanders’, certification will be an option, once it is clear the quality of teachers and trainers in occupational safety is creating a problem, and other methods to assure the quality of these persons have failed substantially. Certification within the Rhinelanders’ model will be a possible alternative to decide, once other systems have failed.

In case the decision is in favor of certification, both models will put emphasis on so-called output criteria. This means safety management systems, as part of a risk prevention program, does not need a detailed introduction into its elements, or its implementation within companies and organizations. Instead the focus will be directed towards the effects of such a system, what should be achieved by a safety management system [10]. Which contribution can be expected from such a system in reducing which types of (major) accidents? These questions will be more important than classical input criteria as, for instance, long lists of topics teachers and trainers have to master, including the hours spend.

Discussion on the necessity and the content of the certification of teachers and trainers of occupational safety is the main purpose of this article. And hopefully some arguments are presented to counter an over-enthusiastic view on the benefits of certification.

References:
Section I: Development and implementation of educational standards


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