

**Title** Competence: Redefining the Matrix of Authority

**Event:** Past, Present and Future

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## **Competence - the Conception Principle**

Is there anything so elusive or thought provoking as defining competence? Let's start with this thought; "every worker is competent". In fact let us go one stage further and say that everyone is competent. We can explore definitions later, but it important to acknowledge this fact.

Now why would you imagine that to be so when the debate up to now has been about taught competence? However what of reasoning, integrity, honesty, creative thinking, visualising. Are these natural attributes not also an essential element of competence?

From the point of its conception a child has the ability and the instinct to survive. For that to happen effectively he needs to find nourishment, warmth, comfort and protection, which he gets from his mother. In those early days through to some period of months after its birth the child is totally dependent on his mother to provide for all of his needs, but eventually there comes a time when the child starts to talk, walk and develop the skills needed to survive as an independent person. As the child grows the degree of dependence he has on his parents, his teachers and his mentors diminishes. And so the journey is one from total dependence through to complete independence of thought and of deed.

In order to accept this it is necessary to acknowledge some basic truths about competence. The authors are happy to explore the skills, knowledge and ability aspect of the competence definition but first let's get to the core.

Is it possible that the natural instinct to survive is a core tenet of competence?

And if this is so then at a point where individuals do not possess all of the skills and resources needed to survive there is a level of dependence on others to provide assistance; the child and his mother; the new student and his teacher; new employee and her colleagues.

But as the individuals' skills, knowledge and ability grow their level of competence grows to a point where they can perform fully in their chosen occupation with confidence. And it is just as essential that as this journey progresses that the dependency on others will and must be allowed to diminish. Creating a false degree of dependency affects an individual's ability to achieve their full competence potential.

Just for one second consider how well an animal reared in captivity would survive in the wild.

## **The 'What' in Competence**

HSE UK<sup>1</sup> states that; "Competence is the ability to do the work required to the necessary standard". This is a fairly simple statement that would appear to make sense of a complex issue. Yet the fact that the debate of what constitutes competence arises time and again serves to illustrate that the concept is neither agreed nor one that in many instances is fully understood.

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<sup>1</sup> Approved Code of Practice for the Management of Health & Safety at Work Regulations (1999), HSE UK

When asked to define competency from a psychologist's perspective Dauphin<sup>2</sup> stated;

“Competency must be defined quite broadly and eludes any concrete or overly specific definition...Competency means possessing the requisite capacities and knowledge base to undertake one's agreed upon functions with those whom a psychologist works. It means that one is able to perform in a professional manner.”

In the *Mind the Gap* report, IOSH 2004 it was stated that “competence results from the overlap of three attributes: knowledge, skills and experience”.<sup>3</sup> The paper went on to state that knowledge may be gained through formal education, training or on-the-job learning, skills are developed and honed through practical application and experience, like knowledge, needs to be current, relevant and specific.

The courts have also looked at the matter and as far back as 1977 the Supreme Court in Ireland, commenting on the qualities of a competent person, held that “having due regard to the age, skill and experience of a worker, he or she will know the hazards associated with their work and be able to apply the controls necessary to prevent harm”.<sup>4</sup>

The concept of competence may appear to have been well thought out and a definition long established, but unfortunately it remains a poorly understood concept, fraught with multiple interpretations that ignore the natural aspects of competence and the impacts of imposed dependency. This in turn leads to many absurd requirements and negative assumptions about workers who do not meet these requirements.

For example, a narrow definition of competence, based on a requirement that a person be formally trained, requires evidence that that person has attended and received a ticket or certificate for attending specific courses albeit that they may have to be properly examined before obtaining their certificate. Such an approach detracts from the fact that training, formal education etc. is not and should never be conflated with competence. They are simply routes to developing a person's degree of competence and not always a necessary route, at that.

There are two sides to competence, the route by which it is acquired, inputs, and the observable qualities that determine that it has been acquired, outputs. Much of what is sought as evidence of competence, such as the certification at the end of an educational or training cycle is in fact evidence of input and often fails to take account of the actual capacity of the worker to apply such inputs in a competent manner.

Training or teaching cannot take place without learning occurring as a result. Where-as learning can occur without a teaching or training input. However, where learning occurs as a result of a teaching process, it does not necessarily follow that what was learned was what was intended of the teaching<sup>5</sup>. The examination and/ or assessment process goes some way

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<sup>2</sup> Letter on Competency for Psychologists, Barry Dauphin, Ph.D. [www.mspp.net/dauphincompetency.htm](http://www.mspp.net/dauphincompetency.htm)

<sup>3</sup> *Mind the Gap*, IOSH Research Workshop, 2004.

<sup>4</sup> *Dalton v Frenco* (1977), Irish Supreme Court

<sup>5</sup> For further exploration see also Ivan Illich *Deschooling Society* (1973)

towards addressing this issue, but often it measures what wasn't learned rather than what was, and then certifies on the basis of the proportion of intended learning that the candidate demonstrates. Training or teaching inputs may satisfy the requirements towards the acquisition of competence; however as stand-alone components they are not necessarily essential nor in some circumstances are they sufficient.

In a number of Latin American countries there have been remarkable developments in how technical institutions certify their students. Labour and Education Ministries are looking towards certification processes that recognise the real and proven capacities of workers regardless of how they were acquired.<sup>6</sup> In this perspective the outputs of the worker are the critical factors in determining competency, rather than the inputs.

A similar case may be made in respect of those who contend that competence development comes through experience and no matter how many certificates and degrees a worker has; it is no substitute for time served. Certainly experience has importance in competence growth but experience alone is not competence. If a worker spends 25 years on site doing the wrong thing time and again, can we rationally argue that he is competent simply because he has had 25 years experience?

Training and experience are both routes to competence; they are not in themselves competence.

In their consultation document *Managing Competence for Safety-related Systems*<sup>7</sup> the HSE stated that "competence involves much more than technical training, including attitude and behaviour as well as experience and knowledge of the application domain", and this is something that can be agreed upon because it includes a recognition of the capacity of the competent worker in actual situations. In quoting from the '*Hazard Forum Guidelines*'<sup>8</sup> they listed what they believe competence includes, such things as "qualifications, experience, and qualities appropriate to their duties", including;

- "Such training as would ensure acquisition of the necessary knowledge of the field for the tasks which they are required to perform;
- adequate knowledge of the hazards and failures of the equipment for which they are responsible;
- knowledge and understanding of the working practices used in the organisation for which they work;
- the ability to communicate effectively with their peers, with any staff working under their supervision, and with their supervisors;

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<sup>6</sup> International Labour Organisation/ CINTERFOR report on recent developments in competency based training in Latin America and the Caribbean, Jan 2003.

<http://www.ilo.org/public/english/region/ampro/cinterfor/temas/complab/observ/index>

<sup>7</sup> *Managing Competence for Safety-related Systems*, HSE (UK) consultation document, 2005

<sup>8</sup> *Safety-related systems: Guidance for engineers* (Issue 2, 2002) The Hazards Forum, ISBN 0 9525 103 0 8

- an appreciation of their own limitations and constraints, whether of knowledge, experience, facilities, resources, etc., and a willingness to point these out.”

However useful a list this may be it does not in fact construct an adequate working definition of what competence is. Three of the bullet points concern knowledge, the absence of which may or may not negatively impact on a persons’ competence but the possession of which does not necessarily confer competence. A fourth relates to the ability to effectively communicate up and down the hierarchy, but here again there is no necessary connection between the ability to communicate and the competence of the individual. It will all depend upon the circumstances as to whether it is a relevant criterion or not. And finally, being able to appreciate your own limitations is a negative factor and, though important, defining what competence is should not fall down to an ability to recognise what we cannot do when the ability to recognise what we can do does not feature in the list.

The Law Society in Scotland<sup>9</sup> believes that competence in respect of practicing lawyers can be defined as the combination of:

- Technical knowledge;
- Commerciality, which comes from general commercial awareness and sector knowledge;
- Core skills; and
- Experience, or the opportunity to gain experience under supervision.

Whereas the legal test for [mental] competence is set out in Justice Thorpe's decision in *Re C (Adult: Refusal of Medical Treatment)* (C was a patient at Broadmoor Hospital suffering from schizophrenia who refused amputation of his gangrenous foot), describing it as:

“First comprehending and retaining information, secondly, believing it and thirdly, weighing it in the balance to arrive at a choice.”

In 2004, Expert Ease International developed a workable definition of competence that asserted that it is the ability to skilfully perform repeatedly to specific standards.<sup>10</sup>

As with the ACoP definition (above) this definition went to the core of what competence is, namely that it is about performance, the ability to do something and moreover to do it consistently to a required standard.

It says nothing about how the competent worker gains his competence which, although relevant it is not always necessary to know the answer to the “how” question. What is central and necessary is the workers skilful ability to perform a task. It entails not simply knowledge

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<sup>9</sup> Law Society Scotland – (<http://www.journalonline.co.uk/article/1004318.aspx>)

<sup>10</sup> “A more appropriate definition of competence would be *the consistent skilful application of skills and knowledge to any specified work operation* (at whatever level that may be within the company), where the use of the term skilful implies conducting the operation to the highest standards within the field”. *Safety in Design – A Risk Assessment Approach*, McAleenan and McAleenan 2004, presented to NSC June 2004.

and understanding of the task and the work processes into which the task fits, but it demands the ability to exercise control over the task performed<sup>11</sup>.

The competent worker is more than someone who performs skilfully. A well designed machine can do that. Notwithstanding the alienation that results from the modern mode of production the worker is not a machine although processes and systems, such as those espoused by Henry Ford and FW Taylor, have driven him to being treated as such and into feeling that he is merely a cog in it.

Definitions of competence, at their most basic, can be developed whilst ignoring that which is essentially human about the worker, namely that he is a conscious, self-aware, decision-making being. That he is so is recognised in the previously referred to developments in Latin America, INTECAP (Instituto Técnico de Capacitación y Productividad) in Guatemala for example recognises three types of competency;

- Basic, including the ability to read and interpret texts, apply numerical systems and express oneself;
- Generic including analysing and evaluating information in particular occupational fields, working as a team, contributing to the maintenance of safety and hygiene, planning work etc; and
- Specific, including technical knowledge and skills associated with executing particular production functions.<sup>12</sup>

To disregard this fundamental facet of humanity is to reduce workers to being no more than automatons. Therefore to avoid such a repugnant conclusion the competent worker must be regarded as having both the resources necessary to carry out his tasks and the authority to decide on the appropriate action he must take.

The resourcing of workers and production appears non-problematic in theory, and legislatively there is a requirement that workers are indeed adequately and sufficiently resourced in order to carry out what is required of them. However, the latter concept, that of decision making authority resting with the worker, is one that features little in the theoretical debate on and the practical application of arrangements for competence.

Even in the sources referred to above, the competent worker, as someone being appreciative of their own limitations and being willing to point them out; is not the same thing as being able to make authoritative decisions on whether and how to carry the task. What is inherent in that point is that the competent person may still be required by a higher authority to carry out the task irrespective of what he has said about his limitations. And that higher authority may be based on ownership of the means of production, on supervisory and managerial ranking, or on a functional overlap between departments or perceived roles of individuals. In other words,

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<sup>11</sup> The meaning of competence is explored further in *Prevention – A Universal Responsibility*, McAleenan & McAleenan, 2005, presented to the World Safety Congress, September 2005

<sup>12</sup> <http://www.ilo.org/public/english/region/ampro/cinterfor/temas/complab/observ/ii.htm>

authority in the hands of the competent worker is negated by hierarchical mechanisms for decision-making that have little to do with competence.

**What then does it mean to be competent?**

The ILO has welcomed the analyses of competencies in Latin America and the Caribbean “as a breath of fresh air in the pedagogy of training” and recognises that along with knowledge and skills, competence includes the capacity to analyse, to solve unforeseen problems, and a commitment to the objectives of the job.

Competence is more than the ability to repetitively carry out an activity with skill and to a specified standard. Properly resourced and with knowledge and understanding of what is required, it is the ability to control the work task and the environment within which it takes place to achieve a desired outcome.

Remove any of the above elements and competence is compromised, even negated.

In his letter to the Department of Community Health regarding competency for psychologists, Dauphin advanced our understanding further by arguing that competency is individual in nature “since every individual psychologist brings unique skills and personality characteristics to every situation in which he functions...To set a uniform definition for all psychologists is meaningless, since competence can only be considered in terms of the individuals and situations to which one is applying one’s professional expertise”.<sup>13</sup>

In saying that where does it take us? What difference will it make to current practice to adopt another definition of competence?

A competent workforce effectively engaged in any project redefines the matrix of authority such that any superfluous functions are identified and discarded. Such functions serve only to neuter the effectiveness of the worker/ group through confusion, acting to cross-purposes, engendering unnecessary hierarchies and fundamentally abstracting authority from the worker/ group.

By way of an example, management is often placed in a hierarchical relationship to operatives with operatives being the subordinate players. There is no necessary logic for such a hierarchy but we have it nonetheless. Straight away the hierarchy creates dichotomies between the operatives who produce the end product and the managers who are tasked with ensuring that the operation proceeds apace.

The first dichotomy is that management and operation are discrete functions. In making this separation between operation and the management of the operation a class of abstraction has been created that on its own is an irrelevancy, is superfluous. Management needs the operative to rationalise its own existence, but in the process must negate the idea that the competent worker is capable of managing what he is doing, either individually or as part of larger work units, and in so doing denies his/ their competence.

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<sup>13</sup> Barry Dauphin, Ph.D., <http://www.mspp.net/dauphincompetency.htm> June 2005.

A second dichotomy is one of authority; the operative defers (by imposition not choice) to the authority of the manager. This is a logical corollary of the negation of the worker's competence to manage; the 'non or lesser' competent person must defer to the 'more' competent. As a result key decisions about the way in which the worker carries out his activities, (as determined by a safety manager), how, and how sufficiently he is resourced, (as determined by a finance director), when he carries them out (as determined by a contracts manager) and whether he should or should not proceed, (as determined by an operations manager), are taken by persons who are not only not carrying out the work but are not necessarily competent in the work activity itself.

Without the authority to make these critical decisions, with his capacity to analyse negated and the power to resolve unforeseen problems annulled an imposed dependency on external decision makers is reinforced. The competent worker is neutered.

A further dichotomy is one of status; the manager has a higher status than the workers who carry out the task. Such status follows on from having authority over how and when workers perform and with that comes the perks of status, higher incomes, offices, separate eating areas and white coats. These are the building blocks of the wall that separates workers from management and reinforces the separation of operation and management of the operation. And with this barrier arises discontent, absenteeism, 'insubordination' and a whole sleugh of other conscious and unconscious behaviours that result in output failures, including accidents and injury.

This separation of functions from the competence necessary to carry out any given work operation often consigns those functions to being a mere adjunct to the operation that can be ignored, even discarded when circumstances warrant. This is the cry all too often heard; when finances are tight, health and safety resources are cut. Indeed in the 1990s when re-engineering and downsizing were the buzzwords for corporate management it was the ranks of middle management that were decimated and industries continued with the two tiers of senior management and workers. What could be a more telling indictment of the superfluity of a disconnected management function?

### **Reservoir of Talent**

But in these early years of the 21<sup>st</sup> century, the lessons have not been learned and the dichotomy between management and operation continues to be problematic. However, one company, Semco in Brazil, turned the economic crises of the 1990s to their advantage and, re-engineering in a way unlike everyone else, were able to create new business models and work structures that took the company from near liquidation to being one of the most successful businesses in Latin America.

Semler, President of Semco<sup>14</sup> (2003) stated that "Accepting that there is no such thing as a 'special worker' perfectly suited for one company means accepting worker individuality. And

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<sup>14</sup> *The Seven-Day Weekend*, Ricardo Semler (Dr), 2003

once you do that, you set the stage for making the most of that individuality by encouraging workers to tap their inner reservoir and find a balance between their aspirations and the company's."

Two things worked for Semco. Firstly after working with traditional departmentalised management structures, the company gave engineers their head and allowed them to explore and develop new product lines. This extended to setting up satellite units to develop, produce and market the products.

Secondly, in the face of bankruptcy, workers and managers agreed to wage cuts in exchange for a greater share of the profits on condition that they too were given a free hand in approving every item of expenditure. This led to the workforce performing many roles compared to what they traditionally played; they became knowledgeable about all aspects of the company, including its finances; they made decisions about who to employ, what to buy in the supply chain, when to buy, who from, even what to manufacture, to what standards, and how it should be marketed. The company succeeded.

The success of the company was due to the second innovation, the recognition that the workforce are competent to receive and understand information about all aspects of the company, are competent to make the critical decisions about how the company is organised and run, are competent to make decisions about what is produced and how it is produced, and finally the competent workforce does not require, in fact may only succeed in the absence of a multi-layered hierarchy and its concomitant redundant functions.<sup>15</sup>

It is a universal requirement that companies of all sizes appoint competent persons or bring them to the required level of competence before assigning them tasks within the workplace. Vassie, (2004)<sup>16</sup> in the above-mentioned IOSH paper presented findings from a number of research papers that increasing competitive demands on businesses have resulted in new ways of working and greater emphasis on competence throughout the workforce. Whilst advising caution regarding the limitations on the various studies, the issue of individual OSH competence was considered a necessary (though not a sufficient) factor in organisational OSH competence.

By extrapolation the competence of workers to organise and manage their work activities individually and collectively may similarly be regarded as a necessary factor for the competence of the organisation/ company. Michael Albert<sup>17</sup> a leading US economist and author of the theory of participatory economics posits self-managing decision making as a viable alternative to top-down management structures and cites examples of projects in Argentina. In his model workers having balanced job complexes replace the superfluous functions inherent in hierarchical management structures. This is akin to the Semco experience. In the Parecon model organisations too combine tasks into jobs so that the

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<sup>15</sup> *Maverick*, Ricardo Semler, 1999, Random House Publishers, ISBN 0712678867

<sup>16</sup> Dr Louise Vassie, University of Leicester, contributor to "*Mind the Gap*"

<sup>17</sup> *Parecon, Life After Capitalism*, Michael Albert, 2003 Verso Books ISBN 1 84467 505 X

overall empowerment effect of each job is like the overall empowerment effect of every other job. The worker exercises his competence through authority and control of his work activity and in conjunction with other workers in the same workplace. In the OAC model this means that each functional role has a sphere of control and a sphere of influence. Individuals operating within the necessary functions must have the competence to manage within their sphere of control interacting with neighbouring functions to the extent necessary to co-ordinate their activities and communicate essential information, within each contributor's sphere of influence.<sup>18</sup>

**Conclusion...**

In these models of competence, and in the way the courts view the competent worker, there lies a map for the future development of the workforce. When applying the logic to OSH it can be concluded that OSH practitioners would gradually work themselves out of jobs as workers and management became sufficiently competent and resourced in OSH.<sup>19</sup>

What then is the future role of the safety professional? To facilitate their clients/ employers getting to a point where they no longer need assistance and they have the confidence and autonomy to get on and do the job themselves.

If we accept that the competent worker is skilled, authoritative and in control of his work then we must too look to new social mechanisms that support him in that function...

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The authors invite readers to submit comment or critique of this paper or suggestions for new social mechanisms to;

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<sup>18</sup> *Prevention – A Universal Responsibility*, McAleenan & McAleenan, 2005

<sup>19</sup> *Mind the Gap*, IOSH Research Workshop, 2004.