

# The concept of competence: blessing or curse?

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## Introduction

The concept of competence has inspired organizational (Pralhad & Hamel, 1990), psychological (Bartram, 2005) and educational professionals (Mulder, Gulikers, Biemans & Wesselink, 2009; Biemans, Wesselink, Gulikers, Schaafsma, Verstegen & Mulder, 2009) to a great extent, and simultaneously it has been the object of severe criticism.

Advocates of the concept (Dubois, 1993; Spencer & Spencer, 1993) have stressed its powerful function in debates about competence development, critics have pointed at the negative properties like standardization (Hyland, 2006) and lack of measurability.

While both parties have a point in case, it cannot be denied that the concept has a long and strong history (Mulder, 2007), and that it has achieved a solid position in common language, professional practices and institutional regulations (Mulder, in press).

## Historical accounts

Nowadays the concept 'competence' is used a lot in daily language and refers to for instance an aircraft type license, an approved medical officer, an accredited laboratory, a competent authority, a competent witness, a judge entertaining jurisdiction, a licensed teacher, or a qualified person.

The earliest accounts to the concept known until now date back to the Persians in the 17<sup>th</sup> century BCE. In the Code of Hammurabi this ruler was named a competent King, which was

translated in French and English as a capable, rightful and wise King. Via Greek and Latin the concept entered various languages. Competence and competent entered the French, English and Dutch language in the 16<sup>th</sup> century. More recently, in a report of a delegation of Reading University which visited the United States of America and Canada to review the developments in agricultural education the concept was used several times, referring to the competence of farmers, teachers and even educational institutions (Childs, 1910). Half a century later White (1959) published his paper in which he defined competence as basic motivation, a need of young children and adults to master certain skills, like walking and speaking. This view became popular in later psychological research on performance-motivation. During the next decades a lot has been written about competence in various contexts, such as in testing, selection and placement (McClelland, 1973), performance Improvement (Gilbert, 1978), management development (Boyatzis, 1982), conflicting values, management roles and team competence (Quinn, Faerman, Thompson & McGrath, 1996), training and development (Zemke, 1982), professional standards and self-assessment (McLagan, 1983), work-process related competence (Nordhaug, 1993), the development of professional knowledge (Eraut, 1994), critical success factors in organizations (Lucia & Lepsinger, 1999), competence in work settings (Sandberg, 2000), cross-cultural competence (Hampden-Turner & Trompenaars, 2000), and vocational and professional education (Biemans, Nieuwenhuis, Poell, Mulder & Wesselink, 2004; Du Chatenier, Verstegen, Biemans, Mulder & Omta, 2010; Lans, Biemans, Mulder & Verstegen, 2010; Mulder & Gulikers, 2010; Sturing, Biemans, Mulder & De Bruijn, 2011).

### **Competence as capability to perform effectively**

The meaning of the concept is mostly defined as being able to perform effectively. For instance: can a car mechanic change Summer to Winter tires according to the standards in the car maintenance sector? That does not only imply the right knowledge and skills, but also the right professional attitude. The same holds for traders at auctions, entrepreneurs who want to develop their business, forensic researchers who need to make DNA profiles of evidence in crime scene investigations. Important characteristics of competence statements are that they are situation-specific and have social meaning, they represent core responsibilities, are oriented towards performance, but also development-orientated, are dynamic and role-oriented. So they do not represent generic characteristics of professionals, since such competence statements (like 'flexibility' or 'communication') can mean very different things in different contexts. The meaning of competence is social because there are different stakeholders involved who can have different views on what desired performance, and thus related desired competence entails. Competence statements need to be limited in number and address core components of jobs or professions, since long over-detailed lists with competency specifications are being generated which are not instrumental for designing competence development trajectories. Competence needs to be

related to performance because the use of skills, knowledge and attitudes in professional action expresses the possession of competence. Competence can also be developed, although the extent to and costs at which this can be done is different for competence domains and personal general abilities and talents. The development of numeracy skills in persons who have no affinity with numbers is time-consuming and expensive, and organisations which have to hire workers for jobs with high levels of numeracy skills tend to select on these skills rather than try to develop these. Competence statements are robust for dynamic change because they are related to roles of people instead of to static functions. Large job frameworks (sometimes referred to as function buildings), are a big obstacle in realising improvement, change and transformation, because typical responses in change processes in these inflexible structures are stemming from feelings of (false) security specific job descriptions give.

### **Competence as legal authority**

The concept of competence has a second meaning which is also included in the education system. This meaning refers to authorization, certification or licensure. Educational institutions are authorized to provide graduates with proofs of successful completion of programs, also referred to as proofs of competence or capability. These official diplomas can imply certain rights or licenses to perform. This is most visible in the occupations and professions with high risks for people, the environment and goods. These risks, for instance in health professions, the nuclear industry and engineering, were the reason for many professional associations, such as medical specialists, to develop standards for professional practice and the mastery of specific knowledge and skills (Frank, 2005). This is serious business. When human errors are made or calamities happen, insurance companies in certain lines of business, such as the airline industry, check whether the persons involved did have current and approved licenses to perform.

### **Competence defined**

Given the considerations described in the previous section we define competence as:

- the set of integrated capabilities
- which consist of content-related clusters of knowledge, skills, and attitudes,
- which are conditional for sustainable effective performance (including problem solving, realizing innovation, and creating transformation)
- in a certain context, profession, organisation, job, role and situation.

### Three perspectives of competence

As said, the concept of competence entered the professional literature during the last century. As mentioned as well, there were all kinds of aspects of competence which were elaborated in the literature. To create a bit of structure in the use of the concept of competence we distinguish three perspectives on competence. These are: 1. Behavioural functionalism; 2. Integrated occupationalism; 3. Situated professionalism.

1. Competence as behaviouristic functionalism means that competence fields are decomposed in detailed competency-formulations, often referred to as 'competencies'. These competencies are trainable skills and knowledge elements, which were used in education and training programs, such as in teacher training. For instance, in the field of classroom-management a competency could be that teachers should attract attention from students by walking up and down in front of the classroom, or when explaining subject-matter problems to not stand with the back to the class. It appeared that this competence-movement was not particularly successful because training results did not have lasting effects, because they were not related to the professional epistemologies of teachers, which have a much stronger influence on teaching practice. This approach, which was popular during the 1970s and 80s in the USA was difficult to maintain in education as it was too fragmented, and actual behaviour of professionals did not really change when they were trained in very many isolated skills.
2. Competence as integrated occupationalism means that competence is seen as the integrated capability of persons to achieve results. It comprises of knowledge, skills and attitudes. All these three elements of competence need to be present in an integrated view on competence, and there needs to be balance between the elements. Educational programs which are based on a competence-based education philosophy often overemphasise the self-managed application of skills whereas the introduction to accompanying or prerequisite knowledge or the attention to essential attitudes for performance are disregarded. An example of a competence statement from an integrated occupationalistic perspective is the following. A forensic laboratory assistant has to make a DNA-profile of a piece of evidence which was found at the crime scene. The person has to have the knowledge about the content of the work, the procedures, the materials and the instruments which are used, the skills to make the profile (handling artefacts and instruments), and the attitude to do this accurately, efficiently, reliably and with integrity. This approach is very popular amongst educational policy experts who want to warrant that the outcomes of education are up to the current standards as defined in national competency-based qualification frameworks. Pushed to the extreme this perspective leads to performatism, which means that all competence development is linked to performance targets, neglecting that there is a lot of valuable competence development which is not directly related to performance standards.

3. Competence as situated professionalism means that competence only gets meaning in a specific context, in which professionals interact with each other. It is closely related to the theories and practices of professional development which show that personal epistemologies have a stronger influence on professional behaviour than isolated skills training. It also touches upon the notion that competence is heavily influenced by what important stakeholders expect of the professional in terms of wishful professional action. As said, professional associations (such as associations of medical specialists or pilots), but also local players (such as hospital directors, chefs de clinique, and airline executives) have a strong influence on the desired competence fields and the extent to which the professionals need to be proficient in these fields. An example of competence as situated professionalism is that an accountant can make a financial report for a specific hospital that has budget challenges, heterogeneous quality levels between clinics and specialists, and tensions in the executive board. Making such a report in a context like this is more than a mere technical routine. It requires a combined set of knowledge, skills and attitudes which can be applied in this specific situation to make the job a success.

### **Five levels of competence**

Competence as defined in this contribution is related to effective performance. The effectiveness of the performance is often judged by a professional community, clients, colleagues, and other stakeholders. For instance, a car mechanic repaired a flat tyre, fixed it to the car in the proper way, and explained what he did to the client. After the repair, the pressure of the tyre is good and there is no imbalance in the tyre when driving. Or a social worker has analysed a problem situation in a broken family and has identified the necessity of deprivation of parental authority. She has done this according to the protocol for these situations, thereby respecting the interests and possibilities of the different persons involved and has reported the analysis properly. Many of the vocational or professional work processes are like these. There are guidelines, regulations or agreements by which certain work has to be done, and the worker needs a minimum level of competence to do this work well.

Seen in this way, competence is a level of mastery of performance requirements, i.e. knowledge, skills and attitudes. This is nothing new, since in education and performance appraisal there is always an assessment of performance, which implies the judgement of the level of mastery of competence, since competence itself is invisible; it gets visible and measurable in actual performance.

Much has been written about the stages of development of competence, professional knowledge or expertise. Dreyfus & Dreyfus (1982) have differentiated levels of mastery. We

place the concept of competence on the continuum of ignorance of novices to brilliance of stars.

5. Brilliance – great talent of superb performance; star
4. Excellence – delivering outstanding performance; expert/specialist
3. Competence – capacity of independent work; professional
2. Nascence – work under guidance; apprentice
1. Ignorance – work by instructions; novice

The competence level is thus the middle level of professional expertise, which defines the minimum level of mastery of knowledge, skills and attitudes of workers in real practice. This level of expertise should enable acceptable level of job performance. As is clear there is large room for further professional development beyond competence, which is related to excellent or outstanding performance. Excellent performance exceeds competent performance in that certain problem situation may require knowledge and skills levels which go beyond the expected or agreed mastery level of certain job holders. Still, individual may be able to solve those problems, which differentiates them from the 'average' workers. Brilliant performance is performance at the highest level which is only reachable for those individuals who have a strong talent in the given field, such as in performing arts and sports, but also in for instance science. Brilliant performers are often known in their community or even by the public (at local, national or international level, depending on the levels of performance).

### **Incompetence**

It is interesting to note that the term incompetence is also often used. In May 2011 a Google search on incompetence yielded 22,1 million hits ... The meaning of incompetence is of course the opposite to competence, and the equivalent of ineptitude. It is the inability to perform, lack of ability or lack of power. There are quite some hilarious quotes on the internet regarding incompetence: 'He's two raisins short of a fruitcake'; 'Having him show up is like having 2 good men call in sick!'; 'A Forest Killer – Somebody's who's able to produce paper, but no answers'; 'He must have donated his brain to science before he was done using it'; Not only is he not the sharpest knife in the drawer, but he is the spoon in the knife drawer'. And then there is the notion of Lawrence Peter who stated that everyone rises to a level at which they will be incompetent, which is known as the 'Peter principle'.

### **Competence in organisations**

Many organisations have integrated competence management in their human resource management repertoire. This is based on the findings from reviews of practice which showed that competence management pays systematic attention for life-long learning, it enables vertical alignment of HR related policy processes as well as horizontal alignment of HR related instruments and practices, yields flexibilisation of HR Development, provides tools for HR Professionals and helps in expectations management and assessment of job performance. There are various strategies organisations use for competence management and development.

*Core competency of the organisation:* core competencies are a limited set of key capabilities of organisations which essentially represent their strengths in terms of production technology or service provision. Core competencies are interwoven in all major business processes and encapsulated in the know-how of the workforce. They deliver a significant part of the business results and are difficult to copy by competitors.

*Facilities for learning:* facilities for learning are conditions and affordances for learning. Organisations can create these facilities by budgeting resources for learning such as funds, time and space. The kind of learning that is facilitated can be diverse, and range from formal education and training to non-formal and informal learning. It can also comprise the smart design of workplace as powerful learning places.

*Personal development plans;* personal development plans are documents in which employees formulate activities to develop certain competencies. These activities can be participation in various forms of education and training, coaching and mentoring, workplace learning, doing learning projects or participating in learning networks. The personal development plans are most often the results of performance and development interviews and approved by direct supervisors.

*Competence profiles of job families:* these are descriptions of competencies which are required in groups of related jobs in organisations. These jobs have a large proportion of competencies which are generic. Examples are competence profiles of production personnel, marketing and sales professionals, engineers or quality controllers. For individuals jobs specific adjustments can be made, but in general the competence profiles of these jobs are similar with those of the related jobs in the job family.

*Competence based personnel management:* this is a kind of management in which the department of human resource management (or in small and medium-sized enterprises the officer who is responsible for human resource management) provides competence profiles of all job categories in the organisation and assessment tools by which employees evaluate themselves or can be rated by colleagues, supervisors, subordinates or internal or external clients. These assessments are to be used in self-reflection about development or in performance and development meetings with superiors. In these meetings agreements can be made about the development of certain competencies which need not to be the weakest developed ones in a kind of curative way; on the contrary, these meetings may also be concluded by agreeing to further develop already well-developed competencies.

*Competence profiles of job holders:* these are competence profiles of individual employees in the organisation. In large organisations there are a number of similar or even identical jobs (see job families above), but in specific work unit or teams a individual job can have tasks which have a specific meaning in the given context. That implies that in certain circumstances it is worthwhile to have

individual job competence profiles like there are individual job descriptions. But also from a feeling of ownership individual competence profiles are important. Bottom-up development and agreement on the specific competence profiles is raising the feeling of ownership of the profile.

*Competence centres:* competence centres are units in organisations which have a specific field of expertise. They can be IT service desks, sales teams, or procurement units for instance. Competence centres may also have an external function and serve as a unit in a value chain or as a service or even training centre. In the latter case organisations sometimes use the term competence centre for these units for marketing reasons.

*Competence assessment in selection process of new employees:* employee selection has been and still is an important function of human resource management. Costs of employee selection is often high, not only because of the selection process itself, but also because of the period of subsequent employment and the ultimate productivity of the candidate. Assessment of competence has come in because of the value added in the selection process. The most elaborate form of competence assessment is the assessment centre. This is a process which regularly takes a day (or two) in which a candidate has to perform a series of simulated tasks which are as much authentic as possible. In certain cases professional actors are involved in actual role plays. Task performance is observed and analysed using specific behaviour dimensions. Feedback reports are given to the candidates, who are the owner of the reports, but who may want to share the information with their supervisors.

*Acknowledgement of informally acquired competence:* this is also known as the accreditation of prior learning. The process also comprises of an assessment of competence but for a different reason as the previous instrument. In this case the result is being used to compose a study program in which the experience and prior learning is being taken into account to avoid overlap between the expertise of the candidate and the content of the study programme. Using this instrument results in more efficient study programs for the participants. The final goal of the accreditation is that candidates receive an official qualification of a certain education or training institute which gives recognition to the candidate. This is especially rewarding for lower educated employees.

*Competence assessment for employee evaluation:* there are many different kinds of employee evaluations. A very common method is the annual performance appraisal. This consists of comparing last year's performance with job descriptions and the attainment of results agreements. The assessment of competence can be included in the performance appraisal cycle. This is regularly done by self-assessment of competence, multi-rater feedback or 360-degree feedback.

*Marketing products/services with competence on the label:* this is done in advertisements or other marketing expressions. There are countries in which it is not unusual to see lorries with announcements of competence fields of the products being transported. The intention of marketing products and services by using competence phrases in texts or other media presentations is to suggest that the producer of service deliverer has a high level of expertise in the respective field. This of course only makes sense if the product or service really is of high quality.

*Coaches to employees for competence development:* organisations can appoint or contract coaches to assist employees to develop certain competencies. A basic level of motivation and an open mind to development is required to make coaching effective. Coaches can confront employees with elements of their performance, behaviour or personal beliefs which may not be productive or consistent with their core values and aims. Coaches may or may not participate in work processes in which they can observe the employee.

*Competence managers:* organisations can also appoint special professionals who take care of the assignment of certain employees to certain units, teams or working places. They are responsible for the optimal management of competence of employees in organisations. This is regarded as being important because general managers or supervisors may have competence management responsibilities, but they are inclined to put more emphasis on short-term results of employees and the retaining of very productive employees, regardless the more general interests of the larger organisation. Competence managers can avoid the disadvantages of competence usage in work-unit related thinking.

*Competence assessment in remuneration:* fixed or variable salaries can partly be made dependent on competence assessments. If competence development based on competence assessments and agreed personal development plans yields a higher level of competence proficiency this can be expressed in monetary rewards. Agreements can be made about the financial value of incremental improvement of competencies. The implementation of competence-based remuneration goes along with precise measurement of competence gain.

It is interesting to see which effects organisations report regarding the use of competence-based human resource management and development instruments. In research which we carried out in Europe in 2005 we distinguished various possible effects at organisational, human resource management and training and development level. The results of this are depicted in tables 1, 2 and 3.

Table 1. Perceived effects of working with competence management and development instruments on organisational factors (1=no effect; 5=strong effect)

<b>Rank</b>	<b>Organisational Factors</b>	<b>Mean</b>	<b>Sd</b>	<b>N</b>
1	Improvement of customer orientation	3.54	1.06	444
2	Improvement of quality management	3.53	1.12	435
3	Raising the level of customer satisfaction	3.45	1.09	434
4	Performance improvement of the organisation	3.42	1.01	462
5	Improvement of efficiency	3.39	1.06	450
6	Improvement of communication	3.38	1.03	454
7	Increasing flexibility	3.33	1.13	437
8	Decrease in number of malfunctions	3.13	1.13	395
9	Improvement of corporate governance	3.11	1.13	425
10	Decrease in number of customer complaints	3.07	1.12	397
11	Integrating cultural differences	3.05	1.20	419
	<i>Total mean</i>	3.31		

Table 2. Perceived effects of working with competence management and development instruments on human resource management factors (1=no effect; 5=strong effect)

	<b><i>HRM Factors</i></b>			
1	Improving performance of employees	3.45	1.06	441
2	Offering better development opportunities	3.45	1.10	442
3	Increasing motivation of employees	3.37	1.08	440
5	Improving assessment structure	3.35	1.12	423
4	Increasing employee satisfaction	3.32	1.15	438
6	Increasing employability of employees	3.27	1.13	422
7	Making expectations regarding employees more clear	3.27	1.19	432
8	Improving the integration of organisation and personnel policy	3.25	1.16	407
9	Improving selection practices	3.24	1.17	422
10	Improving recruitment practices	3.15	1.17	420
11	Alignment of personnel instruments	3.14	1.14	402
12	Improving career management	3.12	1.21	430
13	Reduction of absenteeism due to illness	2.51	1.18	388
14	Improvements in the structure of salaries and remuneration	2.43	1.20	432
	<i>Total mean</i>	3.17		

Table 3. Perceived effects of working with competence management and development instruments on training and development factors (1=no effect; 5=strong effect)

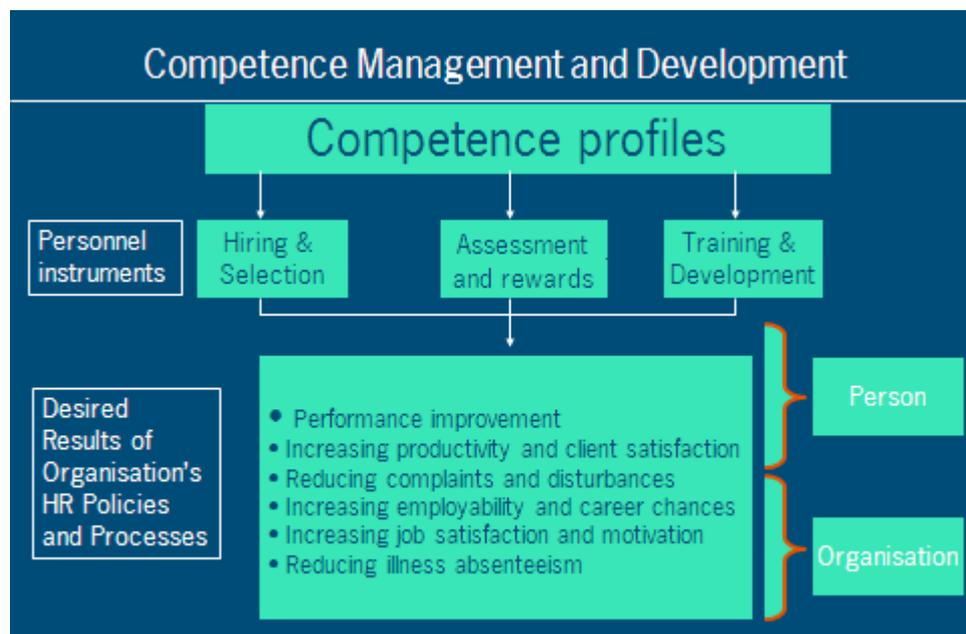
	<b><i>Training and Development Factors</i></b>			
1	Improved added value of training and development	3.48	1.09	464
2	Improving learning culture in organisation	3.45	1.12	458
3	Stimulating learning and development of employees	3.44	1.11	465
4	Better basis for selection of training activities	3.42	1.12	463
5	Improved basis for training and learning programs	3.40	1.07	469
6	Better alignment with organisational strategy	3.40	1.10	468
7	Improved advice on participation in training	3.37	1.11	462

8	Improving employee willingness to learn	3.33	1.09	451
9	Better alignment with personnel management	3.32	1.11	464
10	Optimising the learning potential of the workplace	3.28	1.09	462
11	Making better use of informal learning	3.25	1.16	449
12	Defining assessment criteria for result measurements	3.17	1.20	447
	<i>Total mean</i>	3.36		

The results included in these tables are corrected for errors in the data analysis which was done earlier (based upon which no publications appeared yet). The correction are that only data was included for analysis from countries which had 20 or more respondents and from respondents who stated that their organisations were working with competence management and development instruments.

As generic model for competence management and development we developed a conceptual framework which is presented in Figure 1.

Figure 1. Generic framework for competence management and development in organisations



The model expresses that competence management and development are aimed at realising desired human resources results, which can be defined by the organisation, and related to the organisation's mission and strategic plan. There needs to be an alignment with the intentions of persons in the organisation to realise the achievement of targets and change. Competence profiles can be used as a tool in the various personnel management

domains, such as higher and selection, assessment and reward systems, and training and development. Competence profiling is an art in itself. Various organisations have developed generic competence frameworks (e.g. Bartram, 2005). Examples of recent competence profile development studies can be found in Lans (2009) for entrepreneurial competence, Du Chatenier (2009) for open innovation competence, and Karbasioun (2007) for extension.

The big advantage of have competence profiles as a basis for human resource management is that the various HR instruments which traditionally are being used by different categories of professionals (such as in selection, direct supervision and training) can be better aligned.

### **Competence-based vocational education**

As mentioned above, there are strong advocates of the competence-based vocational education philosophy, whereas there are also strong critics. Those who are in favour of this philosophy tend to point at the benefits for the linkage of educational programs and labour market needs, the increased relevance of education and training, the transversal nature of competences, the added value of learning to apply knowledge and skills in practice, and the inclusion of the affective domain and emotions.

In many countries there are now competence-(or outcome-)based qualification structures. Educational institutions however have been and are still struggling with the translation of these qualifications structures in day-to-day education. Crucial planning levels in this process are the institution curricula and courses. Staff of educational institutions are expected to make the translation of the national frameworks to the institution's programs at various levels. This is by no means easy to say the least. Furthermore, pressure on organisations and educational staff is high and the risk is that stakeholders involved claim that they are implementing competence-based education whereas that implementation may be only at the surface level, or even worse, management and staff merely pay lip-service to the implementation of this educational philosophy.

To support the development and implementation process of competence-based education we developed a so-called matrix of competence-based education, which can be used to assess the actual level implementation of certain principles of competence-based education and to decide on the ambitions regarding further or deeper implementation. We started to call this the measurement of the 'competentiveness' of educational programs, with which we mean the extent to which educational programs comply with, originally eight (Wesselink, 2010) but now, ten principles of competence-based vocational education (Sturing, op cit).

The ten current principles of competence-based vocational education which emerged from various theoretical and empirical studies are reworked into the following list (after Sturing, op cit):

1. The curriculum is based on core tasks, working processes and competencies (thus based on a qualification profile);
2. Complex vocational core problems are the focal point of curriculum development.
3. Learning activities which are defined take place in different concrete, meaningful and practical situations.
4. Knowledge, skills and attitudes are integrated around core tasks and learning tasks.
5. Students are regularly assessed by a mix of authentic, formative and summative assessments.
6. Students are challenged to reflect on their own learning by which they further develop their competence.
7. The curriculum is structured in a way that self-managed learning of students continuously increases.
8. The educational program is flexible.
9. Study and career guidance is adaptive to the learning needs and learning preferences of the students.
10. The program pays balanced attention to learning, career- and citizenship competence.

Teams of educational staff members who are responsible for a certain program can use these principles to assess and discuss the curriculum of the program by scoring each principle on an elaborate rubric with five levels. This leads to two profiles: one for the perceived present competentiveness of the program and one for the desired competentiveness. By using the matrix in this way it serves as an empowerment tool. Educational institutions and teams themselves can decide on the policy regarding the desired competentiveness of the program, of course within the given national conditions.

Research of Wesselink (op cit) and Sturing (op cit) have shown that teachers and students recognise the implementation of the principles to a certain extent and that they are pleased with this. By participating observations we have learned that the matrix sparks interesting and in-depth teams discussions about the programs for which they are responsible.

## **Conclusions**

What can we conclude based on the review of the innovations in the competence management and development philosophy? Is the concept of competence a blessing or a curse?

First of all we should not forget that the competence-based education movement in the USA and the 1970s went broke! Are we making the same mistakes that made this happen? Or are we smarter and using the concept in a more intelligent way nowadays? It is obvious, the price is very high if we fail to implement the competence-based management and development philosophy well...

First of all we saw that the concept of competence has a long history, and we could conclude that there is nothing new in this respect. Thinking in terms of 'how good' people are in what they do is probably of all times. But new is the institutionalized use of the concept. Making the competence-based development philosophy a corner-stone of educational policy and practice makes the stakes even higher.

We have observed that there are (many) different definitions on competence. We have presented ours, but other scholars and practitioners have their own understanding of what competence entails. Where does that leave us? We argue that unless there will be more convergence of definitions of competence educational practice will be in even greater trouble implementing competence-based education than it is already.

We have to take the further critiques on competence theory and research serious, although we should not get stuck in negativism. On the contrary, there are various answers to problems that have been raised (see e.g. Biemans et al, 2009).

We believe there is no real way back on the track. Especially in vocational and professional education competence frameworks have been developed and legally approved at national level. A lot of improvement is still needed in the practical implementation and disproportional attention to certain elements (e.g. the overemphasis on skills application or independent problem-based learning) need to be redressed.

A complicated issue is authentic competence-assessment, which is needed to do justice to the principles of competence-based education. Research has shown that this is a big challenge for educational staff and that it implies intensive professional development.

Authentic assessment is related to actual performance. We have seen that competence development in organisations and educational institutions needs to be linked to intended performance results. An important advantage of the competence development philosophy is that it stresses the importance of focusing on the strengths of people and organisations. This notion is related to the importance of core competence for defining the direction of development. It provides focus, and can be used in educational program and intervention development and implementation.

Therefore, our final conclusion is, if used well, competence development is fruitful and desirable – and thus: a blessing.

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