



Institut for Economic  
Promotion,  
Austrian Economic  
Chamber,  
Vienna, Austria



T.E.I. Thessaloniki  
Greece



Department of Tourism  
Management

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## COMPETENCE MODEL IN EDUCATION AND TRAINING PROCESS

**Darko Kovac**

The College of Hospitality and Tourism, Bled, Slovenia<sup>1</sup>

**Abstract:** Traditional learning processes in contemporary management practice, especially in global business environment, are being challenged by new approaches. They can not be avoided in the hospitality and tourism industry. Kolb's experimental learning model is a solid base to build on. Experimental learning theory uses personal and group experiences while taking participants through various stages of learning associated with the theory. However, when talking about concrete experience, reflective observation, abstract conceptualization, and active experimentation as stages of experimental learning, student variations in attitude, motivation, and style as well as ability have to be understood. The model of competences as underlying characteristic of a person could help to clarify this issue. We comprehend competence as a broader concept than skills. Affective and motivational factors should be added as well as personality traits next to different kinds of skills. Moreover, we could claim that cognition is only one aspect of the human mind. The other two aspects: affection and conation have often been neglected in education. Due to that reason we will decompose competences into cognitive, behavioural, and conative. While the first two are increasingly present and included in education programmes, conative ones are scarcely the subject of training programmes, because they are inborn and can be only encouraged, but their role should not be neglected.

*Key words:* tourism and hospitality, education and training process, personal traits in education, competences, conation.

### INTRODUCTION

The existing education system and learning process is being challenged. Massive changes and turbulences within last decade due to changes in economy especially in transition economies are taking place. They can not be avoided in

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<sup>1</sup> **Darko Kovac**, M.Sc., The College of Hospitality and Tourism, Bled, Slovenia.

education system and learning process. Teaching and learning methods should be adapted not only to market requirements, but also to learners as end users. The influence of change on education is described by several authors (Gleeson, 1993; Robertson, 1994; Davies, 1995). Word customization is penetrating into contemporary education system.

Industrialization which required repetitive tasks and the need to memorise procedures and Taylorism are still casting shadow into education system. Education was largely devoted to reading writing and arithmetic, using methods such as rote learning and copying with the emphasis on accuracy and uniformity. The emphasis on rote learning, breaking a task into individual parts, and learning by imitation lasted well into the mid-twentieth century (Downs, 1998). Increased needs to understand systems and social skills are taking place instead of previous training of physical skills and procedures. Traditional apprenticeships and industrial skills training had to change and trend goes towards modular training and vocational qualifications. What a person could do became more important rather than only what they knew (ibid). Considering the mentioned premise, experience became important.

Experiential learning theory uses personal and group experiences while taking participants through various stages of learning. Kolb in his experiential learning theory focuses on the transaction between the internal characteristics and external circumstances, between personal knowledge and social knowledge. It is the process of learning from experience. This learning is a social process: and thus, the course of individual development is shaped by the cultural system of social knowledge (Kolb, 1984). Learning styles are categories developed by educational researchers to classify learners based on their customary approach to perceiving and processing information (Kolb, 1984).

Specific of the hospitality and tourism industry is close connection with customer service. Customer service is based on interaction between provider and customer to satisfy customer's needs (Kwan, 1997; Lovelock, 1985). Service requires customization. Service providers must match available services with personal needs and desires, which leads to higher variability in the quantity and quality of service. Customers are involved either directly or indirectly in the service delivery process. They are both co-producers and judges of the service. And finally, the process of delivering service is emphasized. Customers judge not only the final product of service, but also the process of receiving service (Wongchai, 2003, p.39). Thus customer service requires special provider's competence.

There is a shift towards "post tourist" which is promoted by Urry (1990) and understood as set within a wider framework of emerging ecological values associated with a green consumer – creativity, health, new experiences, human relations and personal growth. Its consequence is a demand for differentiated "tailor-crafted" tourism products. Market segmentation is intensifying and travellers increasingly seek an "individual approach".

The interest of this article is vocational qualification which emphasises the concept of competence on the workplace. A growing demand by organisations for increased skills of the workforce implied a need for a qualification that addressed

workplace competence (Morgan, 2002, p 90). Vocational qualifications were seen as a means of establishing individual competence without the traditional periods of academic study, which was often prolonged and not sufficiently focussed upon competences required in the workplace (ibid).

The question arises: can all competencies be learned?

## 1. COMPETENCE MODEL

There is a debate amongst researchers about the term “competence”. Mansfield (2004) offers explanation of its use of term in the UK in five different ways:

1.- *Competent (adjective)*. As in “a competent person”. In this context, competent means the ability to perform to the requirements of employment. Particular sectors and industries often have an implicit concept of what competent performance means to particular occupational groups. Consequently, “competent” is often taken to imply a minimum level of performance across a very narrow range of activities, such as in the use of the terms “barely competent” or “threshold competence”. By contrast the concept can also mean the ability to meet “best practice” requirements.

2.- *Competence (noun)*. The state of being competent – in English usage, can only be used as part of a noun phrase – e.g. “management competence”, “the competence of a manager”.

3.- *Competence/s (noun)*. A task which someone performs (US usage).

4.- *Competence/ies (noun)*. An underlying characteristic of a person that results in effective or superior performance. This refers to specific behaviour and may be expressed as a motive, trait, skill, aspect of self-image, social role or body of knowledge that is applied. Widely used in American and UK literature on management training.

4.- *Competence/s (noun)*. The term originally used to describe an element of competence (a competence ...) in the UK. Superseded by the terms “outcome”, “standard” and “element of competence” – but still used.

There is differentiation about the notion of “core competences” as paramount to explaining competitiveness of the firm and individual competences. This article is interested in individual dimension of competences.

Competence is, according to Mansfield (1999), the underlying characteristic of a person that results in an effective or superior performance. There is no single factor but a range of factors that differentiate successful from less successful performance, including personal qualities, motives, experience and behavioural characteristics (Boyatzis, 1982). Cheetham and Chivers developed a model of professional competences (Cheetham and Chivers, 1998) with meta competences (communication, self-development, creativity, analysis, problem solving) and with four core components at the heart of the model, all of which were considered to be important to effective performance:

1. knowledge/cognitive competence;
2. functional competence;
3. personal or behavioural competence; and
4. values/ethical competence.

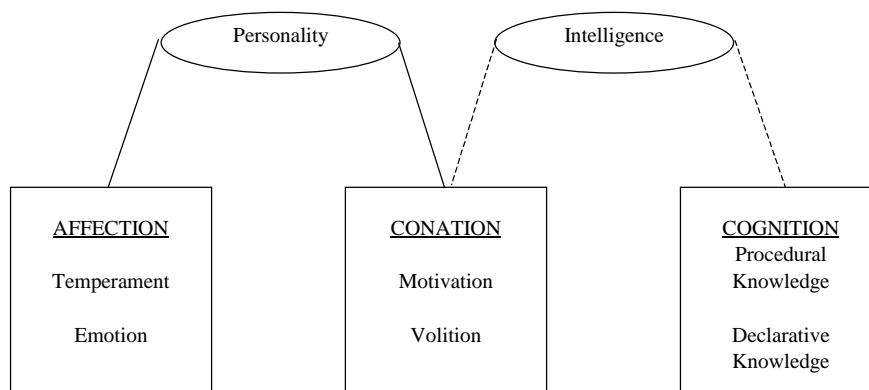
Miller et al. (2001) divide competences into behavioural (“soft”) competences - how people should behave to complete the work successfully - and technical or functional (“hard”) competencies - what people should know and are able to do to complete the work successfully.

It could be claimed that soft competences represent the behavioural side of mind, and hard competences the cognitive side of mind. We are adding conative competences, which represent the conative side of mind. This division of competences is based in the tripartite dichotomy of mind: cognitive, affective, and conative (see figure 1).

Kolbe identifies the following characteristics of each domain (Kolbe, 2003):

- Cognitive: thoughts, intelligence, learned behaviours, knowledge, recall, skills;
- Affective: feelings, emotions, personality, preferences, desires, attitudes, beliefs; and
- Conative: actions, drives, urges, natural abilities, inclinations, patterns of doing.

**Figure 1:** Taxonomy of individual difference constructs



Source: Adapted from Snow, Corno and Jackson, 1996.

The conative side as such is an important part of the tripartite competency dichotomy (figure 1). We understand conation as a part which is not teachable.

In researching competences, the conative side was omitted because the concept of behaviourism and cognition prevailed in the mid-20th century. Some authors (Snow, Corno & Jackson, 1996; Huit 1999; Kolbe, 1997) have renewed interest in the concept of tripartite theory of the mind.

However, when explaining conation, the problem we face is that conation is difficult to separate from cognition, emotion and behaviour (Snow, 1989). Moreover

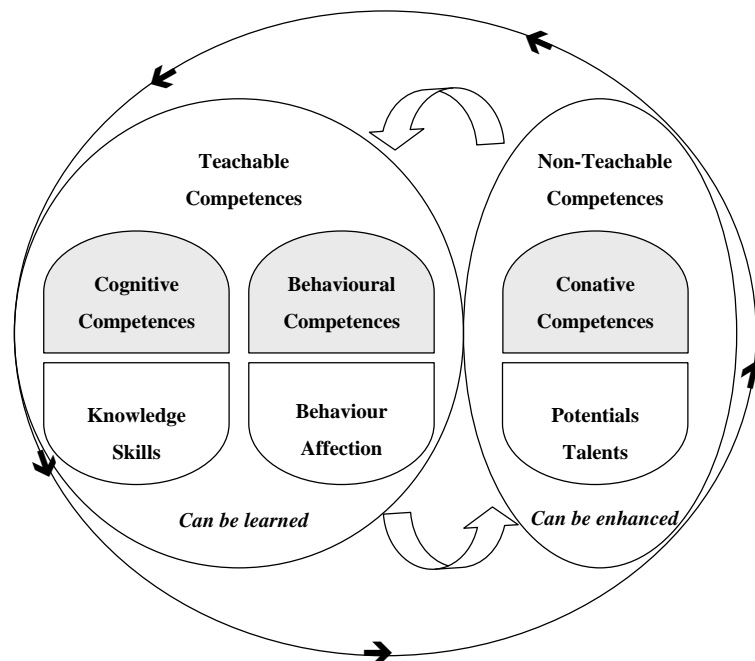
when measuring cognition or emotion, conative components are often interweaved. For example, the Wechsler scales of intelligence include a conative component (Cooper, 1997; Gregory, 1998). The Goleman's construct of emotional intelligence includes both affective (e.g. empathy, optimism, managing emotions) and conative (e.g. setting goals, self-regulation) components (Goleman, 1995). On the other hand, some authors claim that conation has cognitive and affective, as well as volitional, components (Gollwitzer, 1990; Snow & Swanson, 1992).

Conation as an emerging concept can help to clarify the competence model. There are several definitions of conation:

- as the use of will, or the freedom to make choices about what to do (Kane, 1985; Mischel, 1996);
- as a proactive aspect of behaviour (as opposed to reactive or habitual), which is the personal, intentional, planful, deliberate, goal-oriented, or striving component of motivation (Baumeister et al., 1998; Emmons, 1986);
- as "the tendency to take and maintain purposive action or direction toward goals" (Snow, Corno & Jackson, 1996: 226);
- and as "the achievement aspect of ability, the process through which we fulfil our goals" (Kolbe, 1997: 10).

To summarize several definitions, conation could be defined as the volitional steering of action toward some goal.

**Figure 2:** Competence Learning Model



Source: Author

Tripartite competences dichotomy is important in understanding the competences learning process (figure 2). We believe that such holistic approach can help in achieving this goal. Holistic concepts of style allow a deeper study of human uniqueness by providing a normative description of a personal style across individuals and an idiographic profiling in an individual of the style in relation to the other styles in the holistic model (Boyatzis, Kolb, 1995).

So the question arises: are conative competences instinctive, unteachable - meaning that some individuals have a natural knack toward certain occupations? On the other hand, educational practice faces the challenge how to measure competences.

Cognitive competences (knowledge and skills) are usually measured. Bloom's taxonomy (Bloom, 1956) as a system is used for categorising the various types of learning/achievement within the knowledge domain. Whilst the taxonomy has been criticised over the years, it continues to have a pragmatic and heuristic value. In an attempt to obtain a very general overview of the cognitive expectations expressed in the subject benchmark statements, the six-level Bloom's (1956) taxonomy of educational objectives in the cognitive domain was used as a framing device (1. knowledge, 2. comprehension, 3. application, 4. analysis, 5. synthesis, and 6. evaluation).

There are many psychometric tools to measure behavioural competences. Myers-Briggs Type Indicator® (MBTI®) is widely used all over the world for assessing psychological type (Myers, McCaulley, 1985). Lipicnik et al.(2006) claim that relative constancy of behaviour patterns of any individual makes it possible to predict how he/she will react in a given situation. Lipicnik et al. (2006) recommends the following three assessment methods: Ichak Adizes ([www.adizes.com](http://www.adizes.com)), R. Meredith Belbin ([www.belbin.com](http://www.belbin.com)) and Kathy Kolbe ([www.kolbe.com](http://www.kolbe.com)) though we believe that Kolbe™Index is a measure for conative competences.

Using and measuring conative competences is not so common in practice as it is for cognitive and behavioural. However, conative competences can be measured as well and some tools have been developed for measuring conation. Atman (1987) developed an instrument to assess goal accomplished style, called Goal Orientation Inventory (GOI). Atman (1987) in her "taxonomy of conative domain" shows five stages through which individuals go while exercising their conative capability: perception, focus, engagement, involvement, transcendence. Atman developed 12 behavioural steps called the "conation cycle of goal accomplishment". These 12 steps are divided into three categories: acting (A), planning (P), and reflecting (R).

Kolbe (Kolbe, 1997) developed the Kolbe Index™ which is based on Dewey's (1938) experiential learning theory and Jung's (1946) personality theory. She identifies four actions or conative modes through which we act, but with different intensity:

- Fact Finder (instincts to probe, refine and simplify),
- Follow Thru (instincts to organize, reform and adapt),
- Quick Start (instincts to improvise, revise and stabilize),
- Implementor (instincts to construct, renovate and envision).

Kolbe (1997) believes that human behaviours are results of the interaction between cognition, affection, and conation.

## 2. EXPERIENTIAL LEARNING THROUGH COMPETENCE LEARNING MODEL

Talking about competence system a parallel with organizational learning can be made. There are two basic learning approaches to learning in organizations: behavioural and cognitive. The behavioural adaptive learning approach asserts that learning is directly linked to some action that follows it. Learning is also viewed as the process of adjusting behaviour in response to experience (Yeo, 2002). The theory is based on the premise that is if no behavioural change is recorded, then no learning can be said to have taken place (Cole, 1995; Skinner, 1972; Buckler, 1998). Cognitive learning approach assumes that learning is more than just applying rules or responding to small-scale problems and making basic elements to subject. Learning is believed to be a complex process involving skills, using intuition and imagination and problem solving (Yeo, 2002, Cole, 1995, Sadler, 1994). Assimilation theory argues that humans learn specifically by connecting new information with complex cognitive structures in the brain (Ausubel, 1968).

Kolb's learning cycle can be used as a model for understanding the process of competence development in practice (Drejer, 2000) because it is via individuals involved in a competence that cause competence development. Moreover, it can be claimed that everybody has his own learning style. Learning styles are categories developed by educational researchers to classify learners based on their customary approach to perceiving and processing information (Kolb, 1984). According to the model of experiential learning, there are two processes for grasping information (concrete experience and abstract conceptualization), and two processes for transforming experience into learning (active experimentation and reflective observation). These four processes combine into four learning styles:

- (1) *Convergers*: Those who prefer abstract conceptualization and active experimentation.
- (2) *Accommodators*: Those who prefer concrete experience and active experimentation.
- (3) *Divergers*: Those who prefer concrete experience and reflective observation.
- (4) *Assimilators*: Those who prefer abstract conceptualization and reflective observation.

Divergers have been described as having good imaginative abilities and highly developed values. They are interested in people, sensitive to others' feelings, tend to be open-minded, and good listeners, and to perform well in situations that call for the generation of ideas, such as brainstorming.

Assimilators have been credited with possessing well-developed thinking skills, and tend to be good at organizing information, building and testing theories, and designing experiments. They tend to be less concerned with people than with ideas, and are good at inductive reasoning.

Convergers, on the other hand, prefer deductive reasoning. They have well-developed decision-making skills and tend to be interested in the practical application

of ideas. Convergents tend to be controlled in their expression of emotion, and prefer dealing with technical tasks and problems over social and interpersonal issues.

Accommodators tend to solve problems in an intuitive, trial-and-error manner, and are very adaptable to changing circumstances (Kolb, 1984).

Critical reflection on one's own experiences influences on learning (Marsick and Watkins, 1993) more than formal training and classical learning with remembering dull theories. This understanding is not new. Dewey (1938) stated that education must address the notion of reflective thought. Reflective thought begins with uncertainty and dilemmas to an individual. In some way it represents the problem which individual locates and defines. This leads to seeking of solution based on analysis of its many angles. Observation and experimentation help to find solution and experimentation and, finally, it leads to a decision to act or not on these possible solutions. It seems obvious that Dewey's notion of reflective thought is similar to the way we normally perceive the general scientific method (when applied to everyday problems) (Drejer, 2000).

Kolb (1984) suggests that people apprehend and transform their experiences differently. Some apprehend them through concrete experience and others through abstract conceptualisation. Some transform them through reflective observation and others through active experimentation. These two dimensions interact, both resulting in a typology of learning styles and an experiential learning cycle, that moves from experiencing to observing to conceptualising to experimenting and back to experiencing.

Moreover, Marsick and Watkins (1993) emphasise informal and incidental learning as a contrast to formal learning which is a minor part. Furthermore, Polanyi has discussed the "object" of learning – knowledge – and proposed that all knowledge is tacit and impossible to express explicitly (Polanyi, 1967). By paying attention to Polanyi's conception of the tacit dimension we can begin to make sense of the place of intuition and hunches in informal education practice - and how we can get a better understanding of what might be going on in different situations.

Based on the above mentioned styles as individual differences those learning environments that are not consistent with an individual's style are more likely to be rejected or resisted by the individual (Buch, Bartley, 2002). Moreover we believe that it is not only environment but cognitive, behavioural, and conative competences, which determine individual's attitude towards learning.

For instance, Dreyfus (1989) compared those skills to the Myers-Briggs Type Indicator (Myers, McCaulley, 1985) which is a tool for assessing a person's style in terms of eight traits. The "intuition versus sensing" orientation reveals an interest in abstractions and insights imagined in the future as compared to perceiving objects, events, and details of the present moment. The intuition-sensing scale shows a positive relationship to information analysis, planning, quantitative analysis and technology management skills. These skills represent reflective and abstract orientations in terms of the underlying learning styles framework. The "perceiving versus judging" orientation reveals a preference for observing and understanding events of the outside world rather than seeking to organize or control them. The perceiving-judging scale



showed a positive relationship to the planning, quantitative analysis and technology management skills, and a negative relationship to the action taking skill. These skills represent abstract orientations in terms of the underlying learning style framework (Boyatzis, Kolb, 1995)

This is especially important in Hotel and Tourism vocational education which is based on the notion of competence within the workplace. Academic studies on the contrary are not so focused on competence required in the workplace. Mansfield (2004) maps vocational schools in two “ideal types” – traditional, school-based systems and competence-based systems.

However, the competence of vocational school’s graduates should possess real work skills in order to satisfy employers` standard requirements. Hence in competence based system the focus is on students`, learners` and employees` needs (Mansfield, 2004). This is especially interesting in transition economies where people were (in previous system) used to comply and follow rules and procedures without asking question. However, the realities of economic change requires people to take more responsibility within the work environment – variously described as “flexibility”, “adaptability”, “multi-skilling” and “versatility” (ibid). So it is our understanding that the competence based systems are a better answer to market changes.

A relationship between conation, goal accomplishment style, and psychological type is interesting to investigate. Davis (1995) investigated distance learners at West Virginia University. She used five instruments to collect data: a self-developed questionnaire for demographic and background data, the Goal Orientation Index for conation, the Myers-Briggs Type Indicator® (MBTI®) for psychological type, daily journals for behaviours related to participants` motivation and goal accomplishment, and structured interviews for other types of information such as goal setting activities, distractions, course goals, and teachers` influence.

As Wongchai (2003) reported she concluded that the relationship between conation, goal accomplishment style and psychological type was essential in designing and delivering distance education programmes. Students with a high conative capacity could manage their goals, monitor their progress, and overcome distractions and difficulties better than those with low conative capacity (ibid). Students with different psychological types also performed differently. Introverts favoured distance learning. For extroverts first learning in isolation caused uncomfortable feelings, but eventually they grew more comfortable after they once experienced the medium.

Harper (1997) researched learning strategies of high school students with Kolbe™A Index. Her findings show correlation with learning strategies and Fact Finder and Follow Thru action mode. No findings were related to Quick Start and Implementor.

The Kolbe Corporation suggested learning styles of individuals who initiate in each of action mode (table 1) means that their result in action mode is higher than 7 (on the scale of 10).

**Table 1:** Kolbe Corporation suggestion of learning styles

	Fact Finder	Follow Thru	Quick Start	Implementor
Learning Style	Studies books on the subject to see how it's been done in the past	Learns the theory or formula	Experiments with radical ideas and innovations	Works with models or prototypes

Source: Kolbe Corporation, 1999, pp. 16-17

Decomposing competences into three parts (cognitive, conative and behavioural) is important when talking about “custom tailored” learning process. Moreover, it should be the corner stone of vocational education. We claim that cognitive competencies can be learned. Through formal and informal education, as well as experiences, new knowledge and skills are obtained. We can influence behavioural competences so that a student can adopt behaviour according to desired one. There are usually no short cuts to acquiring new behavioural patterns, but long-term we are adapting towards required ones. Conative competences, however, can not be learned. They can only be enhanced. Decomposing competences into the mentioned three parts can help to answer the question whether the competences can be learned. The answer could be: cognitive by all means, behavioural: yes, but not easily and quickly, conative: probably no. Holistic approach to education should consider that. Kolbe™ Index and Atman`s GOI are two possible ways to measure conative competences. It is not about selection, it is about efficiency. Some trials were already made into the direction of considering the conative side of mind into learning process (Giles, 1999; Davis, 1995; Lingard&Berry, 2000&2002; Bailey, 2002).

Above mentioned approach helps to overcome standardized education systems which are based on memorising what was taught until it is externally tested.

## CONCLUSION

The competence based learning process is important in domains where qualification addresses workplace competence. Vocational schools for hotels and tourism are certainly amongst them. Market demands are increasingly going in the way of “tailor crafted” tourism products and “individual approach”. The tripartite competency dichotomy based on taxonomy of individual differences helps to understand approaches towards holistic learning process. Cognitive, behavioural, and conative competences should be differentiated. We understand conative competences as un-teachable, inborn, and can be only enhanced. This should be considered when designing an educational process. The development of programmes based on competence based framework provide higher employability in graduates. We believe that intrinsic motivation in acquiring knowledge, skills and behavioural patterns which are consistent with one`s natural talents (the conative side of mind) is accelerated. It can increase the participation of students in designing their learning process. On the other hand it can help to satisfy employers` stated requirements for graduates to possess “real work” competences. The research in conative competences is scarce; it offers, however opportunities for scholars and practitioners for further analysis and development.

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