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The Concept of Competence in Education: Definitions, Approaches, Dilemmas

Abstract: The treatise shows that the term competence has been defined in different ways in the theoretical discourse. We highlight two of them, the understanding of competence as the underlying cognitive-epistemological ability of an individual to produce an infinite number of effects (competent judgements) on the basis of finite epistemological means, which is a definition that is primarily found in the linguistics field in Chomsky's early works and with authors who subsequently developed the concept of competence on that basis. On the other hand, competence has also become established within economics and management, where it is understood as an ability to perform particular operative tasks or to adjust to needs in specific business environments. In this sense, this is a distinctly utilitarian concept, related to the neoliberal economic paradigm. The fact is that, primarily in the last two decades, this utilitarian concept of competence has also entered the field of education where there are tendencies to establish it as a goal of education not only in vocational but also in general education. This is shown by the efforts of many international organisations and interest groups, from the OECD, EU, British RSA, World Bank etc. – which certainly raises a number of questions, particularly about the relationship between competence and knowledge, especially in general education programmes.

Keywords: competencies, skills, linguistics, management, general education, trends in the education field.

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1 Introduction

In the last three decades, the concept of competence has become one of the most influential concepts in educational theory and in implementing curricular models. We are interested in which *definition* of competence prevails here or, in other words, what is the prevailing understanding of competence as the principal concept in the curricular planning, implementation and evaluation of education. The reason is that the way in which competence is understood substantially influences both implementation in curricular planning.

In the theoretical discourse, the concept of competence is burdened by the fact that it is established by a multitude of both explicit and implicit particular definitions. In their contributions, many authors frequently use the term competence quite ambiguously and without a clear definition as to its contents; consequently, some believe we are seeing the inflated use of this term (cf. Weinert 1999; Lum 1999). According to Weinert (1999), this 'notional ambiguity' is also being contributed to by the fact that this is a term that is not only present in the scientific language but in everyday speech: 'Thus, the same term may have both a precise, scientific meaning, embedded within a theoretical context, and a more variable and vague meaning, stemming from everyday use. This can lead to ambiguity when the vocabularies of everyday language and social science terminology are exchanged and assimilated, which, of course, is the usual case!' (ibid., p. 3).

The analysis of discourses, an element of which is use of the term competence, shows that there are at least two specific definitions of this term, differing essentially on certain points. Conditionally, by referring to Witt and Lehman (2001) one could call them the *internal* and *external* definitions of competence although, as we will show below, our delimitation will not go entirely along the lines set by these two authors. They follow the general presumption that in the philosophy of science it is possible to formulate a definition of a term either by reference to a certain external entity or by explaining a set of characteristics that may be ascribed to the entity the term refers to. The external definition of competence is thus based on the presumption that there is a series of tasks, requirements or results (T) that an individual (or group) must satisfy, with the 'ability to do T' is the (external) definition of competence, while the internal definition of competence is based on theorisation on the *internal structure* and its properties, the activation of which is believed to lead to certain (expected, logical) effects. As they emphasise (ibid., p. 4), this is merely a general, formal distinction between different definitions of competencies, which may be very different in terms of contents.

The differences seen in the definitions of competence as to its contents, along with the dilemmas and questions they raise will be at the forefront of this article.

The starting points for the detailed analysis are based on three fundamental theses:

- 1. The theoretical arena of the social sciences developed two substantially different concepts of competence, originating from entirely different theoretical presumptions and, as such, they also have different effects in specific scientific, expert or specialised discourses. Within the first concept, competence is understood as a knowledge-based underlying ability to produce an unlimited number of effects on the basis of limited cognitive-epistemological means, while according to the second concept competence is seen as an ability to perform operative tasks and adjust to any specific requirements of the economic market.
- 2. Based on the above distinction, the concepts also differ in their understanding and definition of knowledge. While the first concept builds on the presumption that a preliminary split into functional and non-functional knowledge is neither possible nor productive, the second one is based on the immanent presumption that it is sufficient for the establishment of competence to compile specific knowledge which is recognised as functional in advance and is also only legitimate as such.
- 3. In the field of vocational education, and recently also increasingly evidently in compulsory general education, the understanding of competence is an ability to perform operatively formulated tasks, which is closer to the second concept of competence. This is shown in the systematic reduction of competences to assessable and executable tasks (operative goals of education), connected with the specific requirements and expectations of the labour market.

Grounding the above-mentioned theses via an analysis of different theoretic discourses, in the last part of the article we will point to certain backgrounds and trends in education policies which, in our opinion, have substantially contributed and are importantly maintaining the specific understanding of the concept of competence within education.

2 Competence as the knowledge of language in the field of linguistics

In the 1960s the concept of competence appeared as one of the principal concepts of the theory of transformative-generative grammar, later also becoming part of the sociolinguist discourse. The concept of competence introduced to linguistics by Chomsky (1964a; 1965) was relatively undefined in his first essays and was, as such, subject to different interpretations. In one of Chomsky's first references to competence, he wrote:

'On the basis of a limited experience with the data of speech, each normal human has developed for himself a thorough competence in his native language. This competence can be represented, to an as yet undetermined extent, as a system of rules that we can call the *grammar* of his language. To each phonetically possible utterance /.../, the grammar assigns a certain *structural description* that specifies the linguistic elements of which it is constituted and their structural relations (or, in the case of structural ambiguity, several such structural descriptions).' (Chomsky 1964a, p. 51).

It is impossible to conclude from this quotation how exactly Chomsky defines the notion of competence as regards its contents – after all, it follows from his words that it cannot be clearly defined, although he simultaneously claims it can be understood as a *system of rules* forming the grammar of a language¹. Nevertheless, it was already clear at that time that Chomsky introduced the concept of competence as part of language theory with an immanent antibehaviourist position, which among other things means that competence itself was grounded on mentalist and not behaviourist presumptions.²

In his work *Aspects of the Theory of Syntax*, Chomsky further developed the concept of competence (Chomsky 1965). He called it *linguistic competence* and defined it as the knowledge of language, placed in relation to empirical linguistic performance:

'We thus make a fundamental distinction between *competence* (the speakerhearer's knowledge of his language) and *performance* (the actual use of language in concrete situations). Only under the idealization set forth in the preceding paragraph³ is performance a direct reflection of competence. In actual fact, it obviously could not directly reflect competence' (ibid., p. 4).

¹ It should be stressed that one must distinguish between the so-called universal grammar and grammars of particular languages. The relationship between the two is relatively complex and an explanation in this direction would require a long excursion into linguistics, which we cannot afford here. To the extent needed to explain the linguistic concept of competence, we will indicate the basic features of this relation below.

² One of the influential texts on whose basis cognitivism in psychology became one of the leading paradigms is Chomsky's polemics with Skinner and his behaviourist explanation of language learning. With this text, first published in 1959, Chomsky clearly showed his rejection of behaviourism, which had previously also been the prevailing theoretical position within linguistics (cf. Chomsky 1964b).

³ The reference to the preceding paragraph concerns one of the basic presumptions about the subject of the research of linguistic theory. Chomsky believes that the linguistic theory should primarily be concerned with 'ideal speaker-listener, in a completely homogeneous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance' (Chomsky 1965, p. 3).

Chomsky thus established a clear distinction between competence and performance, while insisting that competence as an *underlying ability* to creatively use a language without limits cannot be reduced to the level of external manifestations of individual performances. In other words, this is a presumption embedding a thesis that any objectification of competence, appearing as an empirical performance, is necessarily particular and can as such only be its *incomplete reflection*. This fact, that *competence cannot be captured in its own objectification*, is one of the major characteristics of the definition of this term produced within (psycho)linguistics and it seems that it could – appropriately taken out of the specific context of linguistic theory – also play a productive role in the processes of implementing competence in curricular theory and practice.

It is important to mention that, particularly in his initial definitions, Chomsky largely built on linguistic presumptions already developed by Humboldt; and the latter also left records showing that he did not think linguistic performance was the same as the concept he called *linguistic power*, being the basis of the formation of words and thus for the conceptualisation of a person's internal thoughts. According to Humboldt, the essential feature of linguistic performance itself is its creative potential leading to, as we have already mentioned, the conclusion that it cannot be descriptively objectified in a definite way. Humboldt thus also noted: 'Language cannot be viewed as a substance existing here and being entirely manifest or somewhat transferable, but must be seen as a substance producing itself continuously, where that laws of production are determined, but the volume and to a certain extent the nature of the product remain totally indefinite' (Humboldt 1988, p. 118, emphasis added). This is closely connected with one of Humboldt's fundamental linguistic positions, claiming that language is not a final product [Ergon] but an activity [Energeia], i.e. an organ that produces thoughts, therefore its true definition can only be genetic or developmental: '... (language, author's note) is a continuous repetition of mental work enabling an articulated sound to express thoughts' (Humboldt 1988, p. 109). The basic distinction between underlying ability and the external manifestation of this ability has therefore been present at least since Humboldt, and Chomsky again made an issue of the theses prevailed over by the so-called descriptive paradigm in linguistics in the 19th century and the first half of the 20th century, and developed this further in the direction of his universal grammar theory.

The distinction Chomsky establishes between *underlying* linguistic competence understood as part of the cognitive-epistemological structure of an individual and the *external* linguistic performance manifested as linguistic behaviour does not constitute a delineation between what is biological and what is social: within the universal grammar theory, competence should be interpreted as an *internalized* (and as such *socially transmitted*) *ability* of the creative use of a particular language. Certainly, one should not deny that the linguistic theory developed by Chomsky is nativist in its essence; after all, its basic presumption is that the ontogenesis of language is essentially determined by the cognitive structure of an individual determined by the genetic dispositions for language

development. Therefore, although it is true that, in its essence, language is not something that can exist without innate disposition structures, it is also true that the knowledge of a specific language only gets established through meanings communicated to the child since their birth by important Others. Or to put it differently, only by entering the socially formed and maintained 'network of symbols' does the child activate biologically-given dispositions by acquiring the meanings communicated by important Others. Of course, this is not terminology Chomsky would use, but the possibility of such interpretation is based on his subsequent works, when he explained and analysed his presumptions in more detail; he developed concepts such as initial and final states (S₀ and S_s) and I-language and E-language. Using this terminology he explained the relationship between biologically and socially communicated language structure, as follows from the quotation below:

The language faculty is a distinct system of the mind/brain, with an initial state S_0 common to the species /.../ and apparently unique to it in essential respects. Given appropriate experience, this faculty passes from the state S_0 to some relatively stable state S_s , which then undergoes only peripheral modification /.../. The attained state incorporates an I-language (it is the state of having or knowing a particular I-language). UG is the theory of S_0 ; particular grammars are theories of various I-languages. The I-languages that can be attained with S_0 fixed and experience varying are the attainable human languages /.../. The steady state has two components that can be distinguished analytically, however, they may be merged and intertwined: a component that is specific to the language in question and the contribution of the initial state. The former constitutes what is »learned« – if this is the appropriate concept to employ in accounting for the transition from the initial to the mature state of the language faculty; it may well not be.⁴ (Chomsky 1986, p. 25–26).

The difference between competence and performance can therefore not be uniformly interpreted as a difference between what is biological (innate) and social (learned, acquired), as it follows from the above explanation that linguistic competence⁵ is not *fixed* in itself, but passes from an initial state (indicated by

⁴ In his texts, Chomsky several times expresses his scepticism of the presumption that language is learned (although he does not seem to be entirely consistent, as he nevertheless uses this term himself). However, it should be stressed that this scepticism implies the thesis that knowledge of a language (i.e. I-language) is innate, but that it is acquired. There is therefore the terminological pair learning vs. acquisition. The difference between the two is explained by Y. R. Sole: 'Acquisition is a subconscious process, similar to the one operant among first language learners. Learning, on the other hand, refers to conscious attention to what is presented.' (Sole 1994, p. 100).

⁵ 'Language faculty' in the above quotation. It is correct to point out that here 'linguistic competence' is our interpretation of Chomsky's 'language faculty'. The thing is that when Chomsky develops the concepts of I- and E-languages, and defines the relations between different above-described 'language states' and universal grammar, he starts to increasingly abandon linguistic competence as a concept on which he based his earlier works (Chomsky 1964a, 1965); in the index of the book 'Knowledge of language' there is no entry under 'linguistic competence' at all (cf. Chomsky 1986). It seems that what used to appear as 'linguistic competence' in Chomsky's early papers later becomes part of the wider concept of 'language faculty'.

 ${\bf S}_{_0})$ to the final, steady state $({\bf S}_{_s}),$ which means that an individual has learned the I-language, i.e. its grammar.

Instead of the initial division into linguistic competence as language knowledge and linguistic performance as the use of language in specific circumstances, Chomsky now distinguishes between at least three stages at the theoretical level: S_0 (biologically-given principles and parameters of universal grammar), S_s (S_0 -derived and simultaneously socially transmitted knowledge of rules and principles of a specific I-language) and, in the final instance, specific linguistic performance manifested as E-language. Instead of the dyad linguistic competence – linguistic performance, we are now dealing with the triad *universal grammar – linguistic competence – linguistic performance*; and in the words of Chomsky: 'What we 'know innately', are the principles of the various subsystems of S_0 and the manner of their interaction, and the parameters and the elements of the periphery (along with the lexicon, to which similar considerations apply).' (Chomsky 1986, p. 150).

Linguistic competence in Chomsky's theory is also interpreted in this sense by Cook and Newson, who wrote: 'Grammatical competence is a mixture of universal principles, values for parameters, and lexical information, with an additional component of peripheral knowledge.' (Cook and Newson 1998, p. 87).

The criticism Chomsky faced concerning the concept of linguistic competence highlighted the thesis – which could in fact be the subject of polemical debate – that his concept of linguistic competence is *too narrow as to the contents*, only referring to the syntactical aspect of language.⁶ This criticism led to the formation of the concept of *communicative competence* within sociolinguistics, developed by Dell Hymes (cf. Hymes 1972; 1992, also see Cazden 1996) at the end of the 1960s. One of the basic points Hymes (1972) brought up in a treatise introducing the concept of communicative competence is that the linguistic competence of an individual in a linguistic community cannot be limited to the production and understanding of grammatically correct sentences. 'Such a theory of competence posits ideal objects in abstraction from sociocultural features that might enter into their description,' stated Hymes (ibid., p. 271) among others. Besides the *knowledge of grammar* or grammatical rules of a language, it is essential for an individual to have *knowledge of communication*, where it is also necessary to distinguish between the *underlying (communicative) competence*,

⁶ This characteristics of the concept of linguistic competence is also pointed out by Cook and Newson (1998). According to Chomsky, the subject of linguistic research is in fact grammatical rules and not 'language' in general. He himself emphasises that the notion 'language' itself 'is derivative and relatively unimportant. We might even dispense with it with little loss /.../ the fundamental concepts are grammar and knowing a grammar...' (Chomsky 1980, p. 126). On this basis Cook and Newson (1998) in their interpretation of Chomsky emphasise that 'what the speaker knows is a grammar, not a language /.../ Hence UG theory tends to use the term 'grammatical' competence rather than 'linguistic' competence.' (ibid., p. 74). The reason that we nevertheless use the term linguistic competence results from the fact that this term was also used by Chomsky himself (cf. 1965), and subsequently a number of authors using and interpreting his theses.

which is essentially determined by the social context in which the individual is placed, and *communicative performance*, which means the objectification of this competence in specific, empirical circumstances.

With a similar intention, although analysed slightly differently, the issue of linguistic competence was raised by O. Kunst Gnamuš (1987) in Slovenia. In principal, she also used the basic definition of linguistic competence as developed by Chomsky but expanded it in terms of its contents and pointed to its more complex structure. She built on the fundamental sociolinguistic presumption that linguistic form and speech production do not exist for their own sake, but are learned by an individual as a means of communication and for the transmission of data and information. The consequences of this thesis are clear: if the communication and transmission functions of language are put at the forefront, this implies the existence of inter-personal relations in which communication and transmission are implemented. But since inter-personal relations are always socially determined and can therefore also be interpreted as social relations, they are subject to the laws of these relations. One of these laws is their hierarchical structure which, according to Kunst Gnamuš, is also a component of linguistic competence. As it appears as an entity in the *function* of the production and understanding of language, i.e. in the function of interpersonal communication and transmission, this among other things means that it is itself substantially determined by the laws governing the relations it enters. She thus understood linguistic competence as being 'multidimensional'. composed of five competence elements: grammatical, semantic or cognitive, social or pragmatic, normative, and creative or metaphoric element (ibid., p. 159ff). She emphasised that linguistic competence composed in this way is not a simple sum but a synthesis of all the competence elements listed, which are in a mutual dialectical and hierarchical relationship, reflecting social reality. The author believed that the top hierarchic position is taken by the social or pragmatic competence element which overdetermines the other four, emphasising particularly that the cognitive relation (constituted by the semantic competence element) is subordinated to the social one: 'The relation between social and cognitive is instrumental: the first is the goal and the latter the means' (ibid., p. 163). Certainly, it should not be interpreted that the 'content' or semantic competence element is of marginal importance, however, it means 'that the social and cognitive development are inseparably connected, and that the development of the semantic competence depends on social relations' (ibid.).

In short, the above leads to the conclusion that linguistic competence is in essence established by *knowledge of language* (as far as Chomsky is concerned, it would be more accurate to say knowledge of *grammatical rules*, but also knowledge of language in a wider sense), which is to a large extent acquired, i.e. socially transmitted and socially determined knowledge. This epistemological component is essential to the understanding of competence and here, in fact, lies the core of the paradigmatic turn that Chomsky carried out in the field of linguistics. The surplus of psycholinguistics over behaviouristoriented descriptive linguistics lies in the fact that it introduces the theory of competence which, in the words of Pylyshyn, 'does not describe how people go about doing things (e.g. solving problems)', but 'is being addressed to the epistemological side of cognition rather than to its execution' (Pylyshyn 1973, p. 36). The author transferred the theory of competence understood in this way to the case of understanding and resolving of algebraic problems and showed that, if that is to be a productive concept, competence is only actually established by transmitted knowledge which is entirely the knowledge of contents and related understanding of concepts and not direct learning of how to perform processes which is logically only possible on the basis of the knowledge gained. If you show pupils a set of signs like '(x -)(y + z) = w' and ask them if this is an appropriate form of a mathematical equation, they will know that the answer is negative on the basis of 'intuitive judgement'. But what is such a judgement based on? Let us suppose, said Pylyshyn, that a series of increasingly complex sets are shown to the pupils who for each of them must assess whether they represent an algebraically sensible unit or not – when is their judgement competent? 'If the student has learned the concept correctly (by whatever method of teaching that was used) he can surely keep coming up with more principles which describe the critical characteristics on which he based his decision in each particular instance' wrote Pylyshyn (ibid., p 37). Or, in other terms, the difference in this sense between a *competent* student who makes the judgement and a student who has not yet developed the competence is not in the correctness or incorrectness of their answers. An incompetent student may, like a competent one, also answer the question correctly but that does not mean that his answer results from a competent judgment – the latter can only take place (and in this competent judgement differs from correct answer) when it is grounded on the conceptual knowledge gained which considerably exceeds the range of any particular problem. Such knowledge is also an indispensable condition for its creative application as only this enables an 'infinite use of finite means'. Or, again in the words of Pylyshyn:

'What makes it possible for him (the student, author's note) to be creative in developing such (heuristic, author's note) procedures must be that he has mastered a concept of well-formedness (e.g. of a mathematical equation, author's note) quite independent of all these procedures. What the student knows is *what enables him to creatively generate appropriate heuristics* as these are needed. And, if he has learned his algebra correctly, 'what he knows' is described precisely by the recursive definition, which may then be taken as defining his underlying competence' (ibid., p. 38).

This is an emphasis that should also be part of any treatise on competencies in the field of education if they are to hold a productive position in curricular solutions.

However, it seems that in the current tendencies in this field a view of competence based on different presumptions is prevailing. As we will see below, this is partly explicable by the fact that competence was not introduced in the field of education as a cognitive-epistemological concept but rather as an *antithesis of this concept*, with a predominant behaviourist connotation. This is actually not surprising if we consider that, first, it became established as part of the solution to the problem of *providing (economic) efficiency* of education in the Anglo-Saxon and, particularly, in the American system and that, second, it has become an important conceptual tool for the provision of this efficiency, particularly in the field of vocational and professional education where a close connectedness with the labour market is immanent and which is to a large extent (co)created by the interests and expectations of this market.

3 Competence somewhat differently defined or concept under the pressure of requirements for economic efficiency

According to L. Carrell (1992), at the beginning of the 1970s the USA faced quite a critical situation in the field of education in public secondary schools. It happened increasingly frequently that secondary school students were unable to finish their education as they did not achieve even the basic knowledge standards which, understandably, led to critical responses from the public: 'Pressure from outside the educational arena mounted as parents and legislators asked: What are students learning? What are we getting for our invested tax dollars?' (ibid., p. 2).

Certainly, the two questions imply the requirement for a more detailed public insight into the efficiency of the education system or the actual educational output produced by individual publicly-financed schools. It should be stressed that establishing the efficiency of the education system is itself all but problematic, as the quality of education (not only, but nevertheless also) depends on such control mechanisms. However, this also means that the philosophy embedded in the supervision of education efficiency significantly reversely influences the curricular concept and implementation of the teaching process. And, as Wise put down in one of his treatises, at the time a need for the establishment of accountability appeared there was no suitable conceptual framework and it seemed that competence-oriented education indicated a good solution: 'The generalized notion of accountability evolved into competencybased education because accountability did not have a sufficient technology to be usable. Competency-based education seems to provide the needed technological base and purports to accommodate all the goals of education - all the goals, not just reading, writing, and arithmetic' (Wise 1979, pp. 546–547).

In the same period, a short article by David McClelland entitled 'Testing for Competence Rather Than for »Intelligence«' (McClelland 1973) was published in America, with the author listing several critical arguments against the then strongly established measurement of intelligence and its consequences, and alternatively proposing the testing of competencies or an individual's competency. As we have already published a comprehensive analysis of this article (cf. Štefanc 2005), we will not repeat it here. However, it is worth highlighting that McClelland emphasised so-called criterion sampling as one of the essential principles in the testing of competence or, in other words, the tasks set in tests should reflect the actual tasks that students will supposedly perform in 'real' life situations. Or as he graphically illustrated it himself: 'If you want to know how well a person can drive a car (the criterion), sample his ability to do so by giving him a driver's test' (McClelland 1973, p. 7). Besides, the checking of competences should be designed so that it enables the detection of any changes in an individual's behaviour, experience and abilities to perform a certain task emerging through the education process (ibid.). McClelland's definition of competence, which could be summarised as the ability to efficiently perform specific tasks, encountered a favourable response within economic theory and management. At the beginning of the 1980s, Richard Boyatzis, one of the most frequently quoted authors in the field of competence in management, published the results of an extensive study with which he showed that top managers differ from average ones at the very level of competencies shown (cf. Boyatzis 1982). Rather than the empirical, the theoretical part of this study is interesting to our treatise, with the author conceptually defining competencies as the characteristics and abilities of an individual that can be expressed as motives. values, individual aspects of self-image or social roles, different skills, or the body of knowledge that the individual uses (ibid., p.23). This term thus covers a relatively wide area, reaching from an individual's value orientation to general and vocation-specific know-how, which implicitly leads to the conclusion that an individual's competence is manifested through all of their personality. In other words, with some imagination all the individual's personal characteristics may be part of the description of his competence (or, more precisely, of his different types and levels of competencies).

3.1 Competence as a condition for effective performance at work and its relation to knowledge

Two characteristics of the understanding of competence in economics and management are of the essence⁷: the first is shown in the *reduction of competence to the level of specific operative activities*, which blurs the delineation between competence and performance that Chomsky established in linguistics, while the second is the *instrumental relation between knowledge and competence*, leading to the marginalisation of theoretical knowledge and to a retroactive legitimisation of knowledge only on the basis of its recognised usefulness in the process of performing specific tasks. Let us take a closer look at both characteristics.

Although it is true that at the level of principle Boyatzis wrote that the set of an individual's competencies reflects his *capability* and that they thus describe 'what he or she *can do*, not necessarily what he or she does' (ibid.), in

⁷ It is necessary to emphasise that the understanding of competence in this segment (like in any other segment where this concept has a significant role) is not uniform. According to Civelli (1997, p. 227), there are at least three approaches to the definition of competence, namely the French, American and British approaches. We will primarily focus on the American and British understandings; these two do not differ significantly in the point we highlight in our treatise, and are also predominant in the theoretical arena.

practically the same paragraph he also defined competencies as characteristics 'causally related to effective or superior performance in a job' (ibid.). Kohont arrives at a similar conclusion, saying: 'Only when an individual successfully uses his capability (combination of knowledge, skills and motives) in a certain situation, can we speak of competences' (Kohont 2005, pp. 35-36). Or, to put it differently, competence exists and an individual is only competent to the extent this is objectively manifested; there is no longer a *de facto* difference between the underlying capability of an individual and objectification of this capability. In one of the bulletins of the UN Industrial Development Organisation (UNIDO) dedicated to competencies, we find the same definition: competence is 'a set of skills, related knowledge and attributes that allow an individual to perform a task or an activity within a specific function or job' and is 'demonstrated or mastered in a job and could be easily transferred to another job' (UNIDO Competencies 2002, p. 8). Actually, the presumption about the existence of a causal relation between competence and effective performance of a job (and expectations about the achievement of superior results) is not erroneous in principle to the extent it is understood as a claim that a successfully performed job is an *indicator* of an individual possessing a certain body of abilities, knowledge, motivation, skills and similar characteristics which we can cover with the term of competence(s). Besides, this claim by itself does not necessarily lead to the reduction of competence to a set of operative tasks, the latter is only a consequence of the further development of the thesis of causal relation. The thing is that the definition of competence as being causally related to the effective performance of an activity led to the conclusion that it can be measured through observations of the execution of tasks and the implementation of test situations in which employees prove their ability to effectively respond to the requirements of their jobs. According to our understanding of McClelland and Boyatzis (1980), here lies the major strength of the concept of competence in the theory and practice of management. Compared to the 'traditional' assessment of 'academic abilities', the implementation of this concept is supposed to have the advantage that it enables an assessment of the functionality of an individual at a specific workplace and provides the basis for considering in what way the employees can improve their performance if it is below expectations. The two authors thus developed five steps that, in their view, enable the assessment of competences (ibid., pp. 368-370):

- (1) locate some outstanding and average performers in the position;
- (2) conduct behavioural-event interviews of a small sample of outstanding and average performers;
- (3) conceptualise the competencies that differentiate superior from average performers;
- (4) find or develop measures for the competencies that differentiate superior from average performers; and
- (5) administer tests that supposedly measure the competencies to a new group of individuals rated for job success to see if the tests differentiate the more from the less successful.

These steps show the logics according to which a carefully implemented process of identifying a set of activities and characteristics is supposed to enable the 'assessment of competence'. Of course, the problem lies in the fact that the relation between competence and performance is simply not reversible: even if it is true that the competence of the subject is embedded in individual activities, the sum of these activities never leads to an objectively measurable competence. This is also the presumption of the linguistic concept described in the first part: if competence means the ability of an infinite use of finite means then, by definition, it is not possible to compose a *finite set of possible uses* or, in other words, competence cannot be captured in the sum of individual activities. Certainly, the assessment of a set of specific activities or set of personal characteristics cannot be equated with the 'assessment of competences', unless to the extent competence is removed the basic dimension establishing it as competence: the fact that it is an uncatchable surplus, i.e. always something more than the mere sum of empirical activities. It seems that, in the desire to establish control over competence, this is exactly what happened: competence (to the extent we speak of an individual and not an organisation⁸) has *de facto* become a synonym for skill. Or in the words of Kohont: 'work-specific competence enables' a baker 'to estimate when to take bread out of the oven so that it is baked in the best way' (Kohont 2005, p. 39).

The above-described is closely connected to the second characteristic property of competence in this discourse, namely the understanding of the role of (theoretic) knowledge as a mere *instrument* for the implementation of specific tasks. When McClelland (1973) spoke about the role of criterion sampling as the basis for the assessment of competence, he emphasised that this also includes the assessment of the theoretical knowledge needed. But it is more than obvious that he primarily thought about the 'theoretical' knowledge that an individual needs to perform the envisaged vocational tasks:

'Some of the job sampling will have to be based on theory as well as practice. If policemen generally discriminate against blacks, that is clearly not part of the criterion because the law says that they must not. So include a test which shows the applicant does not discriminate. Also sample the vocabulary he must use to communicate with the people he serves /.../ and not the vocabulary that men who have never been on a police beat think it is proper to know' (McClelland 1973, pp. 7–8, emphasis added).

It is only the theoretical knowledge that is directly relevant for the job performance that is taken into account and which is as such considerably limited, even more, it is desirable that it does not exceed the limits of the envisaged vocational operability. The thoughts of Boyatzis (1982) do not differ

⁸ With competence being understood as an attribute of an individual, the use of this term as the characteristics of an organisation also became established in the theory of management. Both can thus be competent: an individual and an organisation in which the former is employed (cf. Bergenhenegouwen et al. 1996). It is clear that the synergy of both is desired, also providing optimal business results.

much from the above, although he referred to managerial competencies, i.e. the competencies of highly educated managerial staff:

'Through the competency assessment approach, specialized knowledge has been further refined to mean *usable* facts and concepts. /.../ The specific information of concern in assessing competence in certain jobs must be practical; if it is not usable, the possession of information is not related to performance' (Boyatzis 1982, p. 183).

At first sight, one can agree with both authors, with their arguments being at least apparently logical: if you test an individual's 'competence' to drive a car. you will not require that he knows Dante's Divine Comedy in the theoretical part of the test. However, the problem of this logic lies elsewhere, i.e. in the general question of what is derived from what, knowledge from operatively understood competence or competence from wide conceptual knowledge. The first derivation seems to be becoming more and more predominant: the only relevant knowledge is the knowledge that can be directly derived from the needs dictated by an individual task, all other knowledge is 'useless' and as such unnecessary. Or to put it differently, it is not that knowledge is the criteria for competence, competence is the criteria for the selection of knowledge. To the extent that this is the logic applied by individual companies in their efforts to achieve the best business results and competitiveness possible, it could be totally acceptable. However, it becomes much less acceptable at the moment it transits from a particular entrepreneurial context into the field of vocational and, above all, general education and starts to overdetermine curricular planning and implementation of the teaching process. There are quite a few indications that events are developing in this direction.

4 Competencies in the educational arena as a reflection of the interweaving of education and the labour market, and the neoliberal understanding of education and knowledge

One of the goals set in the European Union's White Paper on Education and Training (White Paper... 1995) in 1995 is, as put by the authors, 'to bring closer the school and the business sector' (ibid., p. I). Of course, it is not meant that the 'business sector' should adjust to the school system, but the other way round, which also involves the presumption that such 'bringing together' is part of the solution to the problem of employment and improving equal employment opportunities. The authors of the document thus believe that '[b]uilding or reinforcing bridges between schools and businesses can do nothing but good, for both sides, and helps underpin equal employment opportunities' (ibid., p. 38). As they say afterwards, three elements are needed for that: first, education must be opened up to the world of work; second, companies must be involved in the training drive and, thirdly, co-operation must be developed between schools and firms (ibid.).

Just a few years earlier, another initiative with similar intentions emerged in the US, where the Secretary's Commission on Achieving Necessary Skills (SCANS) within the Labour Department prepared a document entitled What Work Requires of Schools (1991). Its basic message is that employers expect employees finishing education programmes to have five competencies that 'efficient performers' can productively use: (1) resources (allocating time, money, materials, space, and staff); (2) interpersonal skills (working in teams, teaching others, serving customers, leading, negotiating, and working well with people from culturally diverse backgrounds); (3) *information* (acquiring and evaluating data, organising and maintaining files, interpreting and communicating, and using computers to process information); (4) systems (understanding social, organisational, and technological systems, monitoring and correcting performance, and designing or improving systems); and (5) technology (selecting equipment and tools, applying technology to specific tasks, and maintaining and troubleshooting technologies) (ibid., p. III). These competencies must be based on (a) *basic skills*, such as reading, writing, arithmetic and mathematics, speaking, and listening; (b) thinking skills, i.e. thinking creatively, making decisions, solving problems, seeing things in the mind's eye, knowing how to learn, and reasoning; and (c) personal qualities, like individual responsibility, self-esteem, sociability, self-management, and integrity (ibid.).

Understandably, the school should operate in line with these competencies if it wishes to successfully adjust to the new paradigm:

'If all of tomorrow's students are to master the full repertoire of SCANS competencies and their foundation, schools must change. /.../ Today's schools must determine new standards, curricula, teaching methods, and materials. /.../ Learning should be reoriented away from mere mastery of information and toward encouraging students to recognize and solve problems. /.../ In sum, learning in order 'to know' must never be separated from learning in order 'to do'. Knowledge and its uses belong together' (ibid., pp. 16-17).

In other words, teaching and learning should follow the competence standard in their entirety, with a clearly established relation between 'useful' and 'useless' knowledge. As put by the authors of the document, the whole curriculum should be formulated according to these requirements: 'The SCANS competencies and skills are not intended for special tracks labelled 'general' or 'career' or 'vocational' education. All teachers, in all disciplines, are expected to incorporate them into their classwork' (ibid., p. 18).

This is a discourse with an inherent tendency towards a revision of the school function: its basic task is no longer to transmit knowledge (which is otherwise considered unstable and becoming outdated and useless with an increasing speed), but to prepare for work. Competencies seem to be one of the more productive concepts supporting such tendencies. Laval thus finds that strategic uses of competencies 'cannot be separated from new 'human resources management' in which school plays the initial role. The purpose of this use is rather to question the traditional task of the school, the transmission of knowledge, and intellectual and cultural education in the widest meaning of

the term' (Laval 2005, p. 73). That this is not far from the truth is also shown by the efforts of the British Royal Society for the Encouragement of Arts. Manufactures and Commerce (RSA). Through projects like Opening Minds and Curriculum Network (cf. Bayliss 2001; Education for the 21st Century... 1999; Opening minds... 2003), this Society is trying to influence the curricular planning of education programmes in order to make them better adjusted to the needs of the labour market. According to V. Bayliss, head of the Opening Minds project, we still use curricular models similar to those preparing students for life in the much more stable and less insecure society of the 1950s, where we knew what a 'subject' was and what you 'ought' to know about it' (Bayliss 2001. p. 2). The times of today require something completely different: 'Things are much less straightforward now. We need a strategy for developing, over time, a different sort of curriculum that will respond better than anything we have now to the challenges of 21st century life' (ibid.). It is therefore necessary to reconceptualise the curriculum, with the essence lying in the movement from the transmission of the knowledge of contents to the development of competencies. The new curriculum therefore:

'...sets out explicitly what they [students] should be able to do, and understand, when they've worked through it; not in terms of the amount of subject information committed to memory, but whether they have developed the competences they will need to survive and succeed /.../ Competences, like those for learning throughout life, including an understanding of how they, as individuals, learn; competences for managing information and situations; for citizenship and for relating to people' (ibid.).

Basically the same rhetoric can be traced in many other documents and treatise, for instance in those about reading, mathematical and scientific literacy produced by the OECD (this topic is more extensively discussed in Štefanc 2005). Of course, this involves a concept that does not have much in common with the ideas of Chomsky and can also not be entirely understood without a wider reflection on the neoliberal economic and political ideology in which it is embedded.

4.1 From the neoliberal understanding of education to the utilitarian understanding of knowledge

Although neoliberalism cannot be defined in a single clear way, it is essentially determined by the thesis that a free market is the best mechanism for the efficient distribution of limited means, thus providing welfare and protecting the interests of both individuals and the community in the best possible way. The condition for this is that the state withdraws everywhere where market mechanisms are supposed to take over system regulation and where, in addition to the economy, the fields that did not use to be *a priori* subordinated to the neoliberal logics, for instance the health and education systems, increasingly belong. Clearly, this ideology is closely connected with the structure of the political space within which decisions are being made that concern the wider interests of the community, both public and

private. DeMartino found that the influence of powerful international actors (in the form of multinational companies with large capital power, international economic stakeholders etc.) is the very reason why states have less and less autonomy in adopting and implementing political and systemic decisions at the national level. As he said, 'global neoliberalism undermines policy autonomy and thereby threatens the ability of domestic social democratic regimes to ensure economic security and equality'(DeMartino 1999, p. 344). The structure of neoliberal ideology is too complex for a detailed analysis here, which would also not be sensible in the context of our treatise. However, its major features should be outlined. P. Harris highlighted three core elements: competition, individualisation and authoritarianism⁹ (Harris 2006, p. 9). According to the author, with neoliberalism prevailing, competition took the position held by security in the early 20th century, which was the logical consequence of globalisation of the economy; the presumption inherent to keynesianism that the national economy can be managed within 'was replaced by a view of the economy as protagonist in a competitive web of international relations. /.../ In parallel, any assumption that the health of the economy and the wellbeing of the population are mutually reinforcing faltered and gave way to the primacy of the market.' (ibid.). This is closely connected with individualisation: the interest of the community, i.e. public interest, is no longer at the forefront; it has been replaced by the private interest of the individual. Of course, this does not mean that the importance of public interest is ignored but that there is logic according to which the public interest will be best satisfied if it is ensured that each individual can first take care of his own interests himself (and which seems erroneous due to the implicit presumption that the public interest can be defined as the sum of private interests). The logic of individualisation applies both to companies and individuals: in the same way that a company must compete in the global market and take care of its competitiveness, this is also expected from an individual who must take care that he is worth as much as possible as 'human capital' in the labour market. He must therefore gain knowledge, abilities, skills and personal characteristics with which he can satisfy the demands of employers. And this is how neoliberal logics enters education: in this context, education becomes a service providing an individual with competitiveness in the labour market, and being as such put in the function of employability, so much more and so much earlier as it itself becomes part of offer and demand through privatisation. This subordination of education to the rule of the market, is what Laval (2005) makes an issue of in his criticism of neoliberalism. Or, according to Kodelja, 'the more neoliberal views of education are being established, the more

⁹ Below we will not speak of authoritarianism as an element of neoliberal ideology as it does not directly concern the issues treated in this paper. Surely, this does not mean that this is a marginal feature of neoliberalism. On the contrary, it is an essential element, and a more profound analysis should uncover the interesting duality that can be detected and which relates to it: on the one hand, neoliberal ideology develops an appearance that it advocates the establishment of autonomous individuals who will be able to act with sovereignty on the labour market, self-confidently 'sell' their personality qualities, smartly choose among products, and the like, while on the other hand it is equally obvious that it does not need such individuals, but needs employees and consumers with an adjustable personality structure, subordinating to constantly new and different demands of the market and being without a solid value basis.

there are doubts about the previously prevailing understanding of education as public good and simultaneously as a fundamental human right leading to the state's obligation to provide all its citizens with equal education opportunities' (Kodelja 2005, p. 323). The changing of education from a fundamental human right to a marketable product, and schools into organisations providing services and goods required by the labour market, also means a revision of the knowledge which is legitimately transmitted in such a school. It is not surprising, as shown by Laval (2005), that the predominant position within neoliberally-oriented education is taken by the utilitarian understanding of knowledge: if it is to be legitimate, it must be useful first. Which, of course, is unacceptable to the extent this becomes the criterion for general education, which must not be a direct function of individual interests. It must be liberal in this sense, and according to Kodelja:

'Liberal education is liberal because is expands human mental horizons, thus freeing them from the limitations brought by a particular way of thinking, captured within narrow specialised or doctrinarian borders. Liberal education in this sense is a means enabling people to become free individuals to the greatest possible extent regardless of their vocation. Therefore, general education is understood as a value by itself and is not, like vocational and career education, in the function of certain external, utilitarian goals, although it may also contribute to their achievement' (Kodelja 2005, p. 317).

The analysis of understanding competence as it has become established in economic discourse shows that it includes utilitarian logics; it is always defined as an *ability to use a specific* knowledge in combination with an appropriate personality structure (expressed through values, motivation, self-image etc.). Although at the level of curricular planning of general education, at least in Slovenia, one cannot say that competencies (understood in this way or another) have already taken the place held by knowledge in curricular documents, international tendencies show that this is not impossible in the future. Certainly, it is not possible to say in advance that this would lead to the deconstruction of general education and of its position and significance in the school system. Nevertheless, one cannot be too careful at this point; perhaps, in Slovenia we will face the first such test when the results of the PISA survey are published. The latter is a project of the OECD which is one of the main actors in the promotion of the neoliberal understanding of education. In this survey, it measures the 'competencies' of 15 year olds, with which it *de facto* measures the effects of general education, and this very segment of the school system is the most exposed when the results of PISA are published.

5 Conclusion

That a concept of competence as developed within economics and management has become established in the field of education is more than evident in the last part of the article. The term competence has been frequently defined in different ways as to its contents. Chomsky (1964a; 1964b; 1965) introduced competence to the theory of universal grammar as a *mentalist* concept with which he opposed the then prevailing descriptive paradigm in linguistics, considerably based on behaviourist psychology. He insisted on the fundamental distinction between competence as an underlying knowledge of a language enabling an individual the infinite, creative use of finite linguistic means, and specific linguistic performance, only meaning a partial reflection of competence.

Competence as later established in the theory of management is based on an opposite presumption that the empirical performance is its objective reflection, which among other things is shown in the belief that an individual's competence can be directly measured and handled on the basis of testing and observing his behaviour or conduct when resolving specific tasks. A problem appearing in this is shown in the reduction of competence to abilities and skills, with the content, conceptual knowledge only having an instrumental value, being desired to the extent it is recognised as directly functional in the process of performing specific tasks at work. We surely do not need to highlight that this means a serious revision of the concept and function of both vocational and even more general education, where competencies understood in this way are taking an increasingly important position. Without doubt, the findings made via a critical analysis of documents of the EU, OECD and other similar interest groups lead to the conclusion that a serious reflection on this topic is unavoidable.

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