EDUCATIONAL STANDARDS AND COMPETENCES: NEW DIDACTICAL AREAS?

dr. sc. Vladimir Strugar, professor

Abstract: In everyday public communication, especially in education, more and more often the terms standards and competences are used. The question remains whether the terms educational standards and competences, as two mutually related terms, are represented in current course books for didactics, which is one of the conditions of defining them as such.

The author was interested to find out to what extent these terms were represented in pedagogical periodical articles. The author raises the issue if it is justifiable to standardize education or personalize and individualize it. He also deals with problems of favouritism in output and achievements in education at the expense of other elements of the system, such as system inputs and their organisation.

After analysing several course books for didactics, the author came to conclusion that the terms educational standards and competences were hardly mentioned. With regards to the analysed terms representation in course books for didactics and the fact that their authors understand them differently, one can conclude that the didactics theory should define the abovementioned terms, which means that the content and scope of each term should be determined. Therefore, it is suggested that didactics researchers should decide if the mentioned terms will be integrated into the didactics terms unit as termini technici and into didactics course books and, thus, become the teachers’ education curriculum content.

Keywords: didactics, course books on didactics, pedagogical journals, educational standards, competences.

Introduction to the problem

In the last two decades, two terms have been in public use, as well as in teaching, especially in European documents – educational standards and competences. Not analysing it in more detail it can be stated that they are defined in many different way, which is frequently a cause of misunderstanding.

Educational standards and competences are interrelated terms. Competences are acquired, above all, in the process of education and, as
understood today, they depend on educational standards that define general educational goals, and clearly and specifically frame what students need to know and what they will be able to do at the end of a certain learning period. Achievements and outcomes are named competences.

We have assigned three discussion tasks:

a) to determine whether and to what extent the terms educational standards and competences are represented in Croatian didactics course books;
b) to define the term educational standards and to question the standardization in education;
c) to define the term competences whereby two questions are raised: is pluralism of the term that determines the goals of the teaching process eligible and how to evaluate competences?

**Methodology and research results**

We have analysed seven Croatian didactics course books published in the last twenty years (1991-2010) in order to determine the representation of the terms educational standards and competences in them (Poljak, 1991; Bežen Jelavić et al. 1991; Lavrnja, 1996; Bognar & Matijević, 2002; Pranjić. 2005; Jelavić, 2008; Cindrić et al., 2010).

We have determined that only one of the didactics course books (Cindrić et al., 2010) defines the mentioned terms (pp. 215 - 236). Such a result of the insight raises the first doubt and the question: Does that mean that educational standards and competences are not the result of the didactic theory development, but the result of the influence of education politics and administration? This might be a proof that reality and practice, as starting points in creating a theory, change more rapidly than researchers in didactics can formulate them in the corresponding theory.

By the insight into the practice we tried to establish whether the terms, the issues of our discussion, have been represented in pedagogical papers. Therefore we analysed keywords in four journals: Napredak (Zagreb), Život i škola (Osijek), Školski vjesnik (Split) and Pedagogijska istraživanja (Zagreb).

<table>
<thead>
<tr>
<th>Journal name</th>
<th>Total number of papers</th>
<th>Educational standards</th>
<th>Competences</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Napredak, Zagreb</td>
<td>417</td>
<td>2</td>
<td>0.5</td>
<td>26</td>
</tr>
<tr>
<td>Život i škola, Osijek</td>
<td>290</td>
<td>-</td>
<td>-</td>
<td>10</td>
</tr>
</tbody>
</table>
Educational standards: term and doubts

The term standard has multiple meanings; it can be the typical shapes of products, it refers to the norm as well, pattern, measurement, regulation, average, level, basic measurement that determines other measurements, as well as the totality of life conditions (income, apartment, nutrition, cultural needs, entertainment).

In education standard has a twofold meaning:

a) student’s average achievement in the particular knowledge field or
b) desired (prescribed) achievement.

It is most commonly accepted that the educational standard is the desired (prescribed) achievement, which means that it is a normative demand toward which educational system is directed (Pastuović, 2005, p. 14). Educational standards are based on the economic models of effectiveness, the evaluation of the quality of the education system, as well as its management and control. Educational standards are understood in broader and narrower sense. In broader sense they encompass:

a) standards of the contents,
b) standards of achievement levels,
c) standard of conditions (learning possibilities, pedagogical standard).

Nowadays, in the teaching practice, standards understood in narrower sense are applied, which means that they encompass students’ achievements, and therefore they define: general educational goals, as well as clear and specific formulation (operational goals/tasks) that students and the end of a school year (grade) or educational period (cycle) should know and can do, i.e. which competences they need to acquire up to that moment (Bašić, 2009).

Considering individual differences among students, three levels of achievement are determined:

a) minimum standards – contain the description of minimum level of a competence that all students at a certain age (grade) at any type of school must achieve;

b) medium or normal standards – “describe the level of competences development, that the majority of students at a certain age, at a particular type of school should achieve”, (Bašić, 2009),

c) maximum standards – proscribe the level of achievement of the most successful (highlighted by V.S.) students.

The majority of school systems, in order to realize the equality of educational conditions, choose the minimum standard level, which means that it is attempted that all the students at a certain level (grade) should acquire that competence level. However, students who can realize medium and maximum standards should be taken into account thereby, which means that educational standards must satisfy different students’ needs, possibilities or multiple intelligences.

As it was mentioned before, achievements or education system outputs are standardized (paradigm output – standard). The realized operational goals are outputs, and they are named after competences which are the centre of education. Thereby, teaching contents and other important constituents of the educational process, as inputs (students’ and teachers’ characteristics, working conditions) and organization (teaching and learning process) are not considered important as stressed, among other things, in the National Curriculum Framework (NOK, 2011).

Such a starting point motivates critical remarks that can be established by didactics researchers. Namely, the creators of educational standards are not interested in the way in which the school and teachers will develop students’ competences (Palekčić, 2005, p. 211). Educational politics is not interested in the conditions in which the school will realize educational standards, i.e. competences. In the conditions where schools are not financially independent, and therefore cannot plan and independently develop, from pedagogical point of view, it is not good to ignore all the factors that influence the quality of the educational process, i.e. to determine the devotion to only one of the constituents of the process, the output or the achievement.
By supporting the output, as the result of learning, we underrate the importance of the input in the educational process. Are we sending the message that prior knowledge, skills and motivation are not important? Are teachers’ qualifications, optimal school premises and equipment not related to the successful organization of the teaching process? Can we ignore the level of the finances that enter the school and influence working conditions and material situation of teachers? Current situation and tendencies show that educational administration is interested only in success/output and that they give up on obligations and responsibilities for creating conditions in education with the aim of realization of quality outputs. It is completely clear that these are interrelated constituents and that certain constituents entering education are the foundation for its successful organization, as well as for the success and output.

In the approach based on the outputs, not only is the input neglected but also the processes that help inputs turn into educational outputs (Pastuović, 2001, p. 56). A student is a part of the knowledge acquisition process, and the knowledge achieved by student’s discovering and problem solving are of better quality. Therefore Jerome S. Bruner, in his work “The Process of Education” (1968) writes about learning act in which three simultaneous processes take place: the process of data gathering, transformation (processing) of data and evaluation (assessment of results). In the more recent research Bruner writes that educational processes should result in understanding, and not just in mere acquisition (Bruner, 2000, p. 11). During the learning process, in teaching situations created by a teacher, as a student works, researches, cooperates, advances or stumbles – he/she acquires knowledge, develops skills and abilities, acquires values. We must not ignore student’s intellectual efforts and spiritual disquiets in the teaching process, as well as the joy of searching and unusual creation. By standardizing the achievements, the characteristics of education and learning as a process are omitted, and they are key pedagogical and didactic issues.

The paradigm output – standard, as we have already said, emphasizes the importance of the achievement, the output, and that approach is understood just as a possibility or transition stage. However, in order for the paradigm output – standard to be generally accepted, it should be thought through as a didactic term that makes the whole of the educational process.

The described dominant paradigm output – standard is not universally accepted (Pastuović, 2005, p. 14). This knowledge can be a starting point for the future didactic solutions. So, it is necessary, and has not been solved so far, to decide whether the educational process will be based on educational standards perceived in this way (outputs = competences) and therefore given up on the understanding that the teaching process is more complex and that student’s success in it depends on multiple constituents, which means that it
needs to be observed as a system that, apart from exit, has entrance, has the organization of working process, methods, teaching and learning strategies as well.

It is therefore important for our discussion in what way didactics will respond to the mentioned doubts and whether it will succeed in creating a theory that will qualify the students, future teachers, for teaching practice. We will probably get the first answers in the new editions of didactics course books.

**Instead of standardization, personalization of education**

Educational standards influence the appearance of the term standardization as well. Standardization is valuation, adaptation to a particular pattern, creating after a single pattern (Klaić, 1990, p. 1262).

Economic science determines standardization as valuation, prescribing conditions that raw material, product or service has to satisfy, and whose special forms are unification (dimension equalization) and type equalization (the restriction of number of types of one series), (Ekonomski leksikon, 2011, p. 877). Standardization can be international, national and internal.

In didactics course books the term standardization is not represented and defined, which means that graduated generations of teachers today may be deprived of understanding of the term that marks contemporary efforts in education, and that understanding about it must be acquired from other different sources. Therefore we face another didactic doubt: do we need standardization or personalization and individualization in education? That doubt and especially the solution, will probably occupy pedagogic, and particularly didactic thought in the next decade.

Educational standards were based on the idea of quality measurements in education, ranking of schools and students, which are most commonly upheld by educational administration and government services interested in external control, and not the real life in the classroom and the school. A teacher’s role is therefore changing. The message is that its function is not raising a complete person, but preparing a student for testing in order to measure outcomes/achievements. Besides, during their education students are concentrated on school subjects that will be verified in the foreseen evaluation forms. Teachers think that standards dehumanize relationships between them and students while experts warn that standards develop test drill and negative competitive affinities (Šoljan, 2007, p. 325). Still there is no answer to the question whether standards and external evaluation contribute to the personal and social development. Maybe, some pedagogues are wondering, they are just a transitional stage on the way to the personalization of education and

The concept of educational standards imitates the application of economic models of effectiveness and evaluation of knowledge quality. It is believed that this economizes and technologizes education (Palekčić, 2007). The creators of educational standards are not interested in the way the school and teachers will develop students’ competences, but they expect a significant (reciprocal) influence of the implementation of educational standards on the quality of teaching (Palekčić, 2007, p. 78). This approach is a reorientation from the individualized to the institutionalized observation of achievements (Palekčić, 2007, p. 75).

From the pedagogical and didactical point of view, by measuring achievements, and then also by ranking them, individualization, i.e. personal development of every single student is forced out. The personalization of education is a process of self-actualization, which means that a person as a social being creates relations towards society in judgment, accepting, rejecting, and efforts for changes in their social environment (Malić & Mužić, 1989). According to the opinion of Milan Polić, Croatia does not need standardization, but educational diversification that will enable each individual to develop the optimum, and that each individual receives maximum (Polić, 2005, p. 3).

It appears to us that Frans Carlgren, in the foreword of the book “Odgoj ka slobodi: pedagogija Rudolfa Steinera”, asked the right question: we should not wonder: what does a person need to know and be able to do for the existing social order, but: what talents does a person have and what can be developed within them (Carlgren, 1991, p. 4).

Konrad Paul Liessmann, in his book, “The Theory of Ignorance: The Delusions of the society of knowledge” critically observes the term of knowledge and perceives that, due to different efforts, education is not directed towards possibilities or restrictions of an individual today, but towards external factors such as the market, employability. He concludes that, in this way, general education and personality formation are neglected (Liessmann, 2008, p. 82). Howard Gardner explicitly states that the school must be individualized and personalized if we demand education for everyone (Gardner, 2005, p. 71).

If we understand learning as mental or some other students’ activity they use to achieve developmental changes, then those changes cannot be standardized (Bežen et al., 1991, p. 31). Therefore, a student is the only possible standard of achievements, not the market.

Pedagogy is, as well as didactics, as its scientific discipline, under the influence of different principles and criteria that tend to significantly influence the understanding of education as a process of cognition whose centre are its subjects (teacher and students), but with no clear insight into circumstances.
We can, of course, patiently wait for the results of scientific research (who guarantees that there will be some?) on real educational value of standardization, but we express fear that the child/student might be lost.

It is, after all this, (maybe) easy to define the challenge that will, it is expected, be met by didactics: standardization (of what and how deep and broad) or personalization as actualization of own potentials and boundaries of achievements.

**Will competences be didactic and not administrative term?**

The term competence, as well as the term educational standards, is the result of the efforts of European administration that emphasizes that the goal of competences (key competences) i.e. learning outcomes is to use them properly on the job market (Puljiz & Živčić, 2009, pp. 82-83).

The term competences is rarely found and it is not explained in Croatian pedagogical dictionaries and encyclopaedia (Enciklopedijski rječnik pedagogije, 1963, Pedagoška enciklopedija, 1989) and pedagogies (i.e., Pranjić, 2001; Milat, 2005) up until a decade ago, when Antun Mijatović in “Leksikon temeljnih pedagogijskih pojmova” (2000) interprets that competence is personal ability to do, perform, control or act on the level of particular knowledge, skills and abilities, that a person can prove in a formal and informal way (Mijatović, 2000, p. 159).

In recent times (2010) the authors of the course book “Didactics and curriculum” defined the term competences, described the characteristics of key students’ competences and competences of curriculum implementer, but they did not deal with the process of acquiring and evaluating competences (Cindrić et al., 2010, pp. 215-230).

The term competence (lat. competere – be suitable, aspire) is understood as authority, range, authorization of an institution or a person, but also as a field in which a person has knowledge, experience. In accordance with that, a competent person is the one who is capable, informed, who knows, who is excellent at an area (Klaić, 1990, p. 715).

A competence is the authority, in other words, a recognized expertise, and ability a person has at their disposal (Anić, 1991, p. 271). Competence in general is the ability and the knowledge of a person for completing tasks in a field or job (Ekonomski leksikon, 2011, p. 393).

We will mention a few constituents the authors write about in order to define the term competence (Pastuović, 2005; Vijeće Europe, 2005; Baranović, 2006; Batarelo, 2007; Matijević, 2009). A competence encompasses:

- Knowledge and skills, as well as abilities and readiness for them to be applied in certain situations,
Combination of knowledge, skills and attitudes appropriate to the context,
Cognitive abilities and skills that an individual possesses or that they can
learn, as well as communicative, cognitive and social readiness and the
ability to use it,
Knowledge and experience, abilities,
Cognitive competence (usage of theory and concepts, informal knowledge
acquired through practice), functional competence (skills, abilities to work
in a specific field), personal competence (ability to choose behaviour in
certain situations) and ethic competence (appropriate usage of personal and
professional skills).

European Commission determined the key competences which are a
transferable multifunctional set of knowledge, skills and attitudes that every
individual possesses for their personal fulfilment and development, as well as
for inclusion and employment. They are acquired during the whole life as a
part of lifelong learning (Puljiz & Živčić, 2009, p. 83).

The syntagm key competences aims at the adjustment of goals of the
education systems in the European Union. Taking the mentioned facts into
consideration, we can briefly show the basic joint constituents of the term
competence, and these are:

Knowledge + abilities + skills + attitudes, readiness to choose, apply and
use

In the further analysis it can be determined that the mentioned
constituents of the term competence consist of approximately familiar
taxonomies of the learning goals. According to the taxonomies (Bloom, 1956;
Gagné, 1988) and didactics course books (Bežen et al., 1991; Bognar &
Matijević, 2002) the constituents of the term competence are:
   a) cognitive goals: knowledge and abilities,
   b) psychomotor goals: skills,
   a) affective goals: attitudes, readiness to choose, apply and use.

The second summarized overview of the constituents of the term
competence can be presented according to the knowledge of didactics and
pedagogy about the teaching tasks (Poljak, 1991; Lavrnja, 1996; Vukasović,
2001). Teaching tasks are:
   a) material: knowledge,
   b) functional: abilities and skills,
   c) educational: educational values, attitudes, readiness to choose, apply
   and use.
The determining of teaching goals that are more general and more brief formulation of didactic intention while the tasks are concretization (Bognar & Matijević, 2002, p. 158) or operationalization of the goal is very important since, by realizing them, the competences are achieved, as it is being understood today. Therefore, in theory and school practice there is a certain pluralism of terms in the naming of what we want to achieve by teaching, so we might understand the term competence, which includes constituents of goals or tasks, as an attempt to standardize terminology. Nevertheless, such an understanding is not without doubts, especially when teaching practice is considered. Namely, teachers in their regular work planning in the teaching process define goals/tasks using the approach and terminology of taxonomy, but also, should we say, classical didactic classifications. The crucial question is, therefore, to what extent the term competences will be accepted and used in teaching practice. The answer to that question depends on didactic theory which will be the basis for the education of future teachers, i.e. how much the employees will improve in the process of lifelong learning. Competence is a construction that is needed, as it has already been said, on the job market, and didactic theory (taking into consideration Croatian didactics course books) has not yet included the term among its thematic fields. Therefore it is necessary to didactically interpret the term competence, and determine the range and amplitude of the term. The defining must be done for the purpose of teaching organization and realization of the educational process, and especially teaching internal evaluation of students’ achievements/outcomes, in other words, competence.

It seems that didactic theory will address numerous issues when it comes to evaluation of competences, therefore, some of the questions can be raised and possible solutions problematized.

When analysing evaluation we should start with three levels of standard (maximum, medium and minimum level). Each level has general goals and operationalized tasks that are considered to be outcomes i.e. competences of the process. Will the outcomes, i.e. competences be evaluated and by which criteria? Will we really be able to answer the question whether our students are competent after a certain educational period? When answering this question we might be in the same situation as when accepting the numeric grade for a school subject or general achievement, without, sincerely saying, being sure what is behind the grade or achievement? For the sake of truth, the numeric grade is most commonly understood as an indicator that a student learned the teaching contents, i.e. acquired knowledge (acquired facts and generalizations), but we do not ask about the developed skills and abilities, or educational values, and we do not know almost anything about them. A similar question can be asked about competences, but a new doubt arises here. The success in the teaching process or general success is expressed by numerical grades. And
how will we express the achieved (in)competence? How can we name a competence achieved according to the minimum educational standard? Is it minimum competence in comparison to the one anticipated as medium or maximum level? The general question is actually: will the achieved competences be evaluated and by whom, and are they acquired only during formal and informal education? Since competences, especially the key ones, are acquired in the process of learning (in school), and on the basis of operationalized tasks, it is logical that they will be evaluated by teachers. However, competences are acquired during the whole life so that they will be evaluated in work, many life activities and circumstances and then it will probably be referred to as (in)competent society. Nevertheless, no matter what the answers to the doubts are, didactics is expected to deal with them.

Concluding remarks

Nowadays, the opinion is present that educational standards and competences are the results of the efforts of educational politics and administration with the purpose of managing education by using market principles, and that they are not the result of didactic theory.

The consequence of the introduction of educational standards is standardization, to the damage of the personalization of education. In relation to that we express fear that standardization in general, and especially standardization of outcomes, without considering other constituents of the educational process leads to the standardization of human abilities past real potential of an individual.

The second question, closely related to the first one, refers to the understanding of the term competences, the application of different terms naming the goals of education in the teaching practice and evaluation of competence. In the analysis many questions important for education were raised, and therefore they need to be answered by didactics, since it studies the principles of education. Didactics scientifically explains what happens in the teaching process (teaching and learning), what for (acquiring of knowledge and educational values, development of abilities and skills) and how it happens (the application of methods, strategies, social forms of work). Therefore, the key condition for the studied terms to be understood, applied and the competence acquired is that they become a didactic thematic field, which is today still not the case in the majority of didactics course books.
References:

Obrazovni standardi i kompetencije: Nova didaktička područja?

Sažetak: U svakodnevnoj javnoj komunikaciji, a posebice u odgoju i obrazovanju, sve se učestalije rabe pojmovi obrazovni standardi i kompetencije. Autori različito razumiju i tumače te pojmove. Budući da se obrazovni standardi razumiju kao osnovica za stjecanje kompetencija i da se kompetencije stječu u procesu odgoja i obrazovanja, istraživačko je pitanje jesu li ta dva, međusobno povezana pojma, zastupljena u aktualnim udžbenicima didaktike i člancima u pedagoškoj periodici.

Treba li odgoju i obrazovanju standardizacija ili personalizacija? Autor shvaća standardizaciju kao težnju obrazovne politike (administracije) da upravlja školstvom primjenjujući zakonitosti tržišta, što nije obilježje odgoja i obrazovanja. Standardizacija ne uvažava spoznaje o višestrukim inteligencijama. Pojam kompetencije objašnjava se kao skupni naziv koji obuhvaća znanja, sposobnosti, vještine, vrijednosti, odluke za djelovanje i dr. Kompetencije su izlaz ili postignuće odgoja i obrazovanja, što znači da su bitno povezane s definiranjem ciljeva i vrjednovanjem njihova ostvarenja.

Autor analizira udžbenike didaktike (1991.-2011.) i tri časopisa o odgoju i obrazovanju (2000.-2011.) da bi utvrdio jesu li pojmovi obrazovni standardi i kompetencije njihov predmet. Na uzorku sedam udžbenika didaktike i 679 objavljenih članaka u pedagoškim časopisima utvrđeno je da samo jedan udžbenik didaktike (2010.) u tekstu i rječniku pojmov razmatra ta dva pojma te da je u 1,2% članaka (ključne riječi) zastupljen pojam obrazovni standardi i 6,8% pojam kompetencije.

S obzirom na mali postotak zastupljenosti analiziranih pojmovi može se zaključiti da oni nisu rezultat razvoja didaktičke teorije, nego nastojanja obrazovne, prije svega europske, politike. Danas je važno porađi toga opredjeljenje (izraz) didaktičara hoće li se ta dva pojma postati integrirani didaktički pojmovi (u udžbenicima) i postati sadržaji kurikulum obrazovanja učitelja koji će potom u svojoj pedagoškoj praksi djelovati sukladno spoznajama te istraživati tu praksu.

Ključne riječi: didaktika, udžbenici didaktike, pedagoški časopisi, obrazovni standardi, kompetencije, stjecanje kompetencija.

Braucht die Bildung eine Standardisierung und Personalisierung? Der Autor versteht die Standardisierung als Bestrebung der Bildungspolitik (Verwaltung) das Schulwesens nach den Gesetzmäßigkeiten des Marktes zu leiten, was aber nicht charakteristisch für die Bildung ist. Bei der Standardisierung werden die Erkenntnisse der multiplen Intelligenzen nicht anerkannt. Der Begriff der Kompetenz wird als Sammelbegriff erklärt, der Kenntnisse, Fähigkeiten, Fertigkeiten, Werte, Handlungsbeschlüsse, usw. umfasst. Die Kompetenzen werden als Ausgangsergebnisse der Bildung betrachtet, das heißt, dass sie im Wesentlichen mit der Festlegung der Ziele und Bewertung ihrer Leistungen verbunden sind.


Schlüsselbegriffe: Didaktik, Didaktik-Lehrbücher, pädagogische Zeitschriften, Bildungsstandards, Kompetenzen, Kompetenzerwerb.