Conceptual delimitations regarding pedagogical competenc(i)e(s)

A. I. Suciu, L. Mătă

Andreea Irina Suciu, Liliana Mătă
“Vasile Alecsandri” University of Bacău

Abstract: When studying pedagogical competence(s) certain delimitations are necessary between the general concept of competence, the differentiation between “competence” and “competency” and the categorization of pedagogical competence among the richly identified gamut of competences in various fields. Other authors make a clear cut distinction between the terms “competence”, “skills” and “vocational qualification” making subtle differences between the “required skills, knowledge and responsibility in accordance with a specific work situation”, “the ability of a person to complete work tasks, including the ability to acquire, develop and extend knowledge and know-how to complete tasks and solve problems” and respectively “the evaluation of educational and professional skills with respect to a particular profession confirmed by documentary evidence” [1].

Keywords: concept, vocation, education

The term “competence” dates, according to Webster Dictionary as far back as 1596, but it is only recently that it acquired a greater and greater importance particularly in business and later in education. Especially “business organizations and educational institutes are eager to use the term competence to refer to instruments for human resource development (HRD) or to new educational methods” [2].

General definitions of competence place the term in the sphere of a compound of individual behavioural characteristics whose nature and level of manifestation depend on the knowledge, skills and abilities or attitudes, but also beliefs or values manifested in a job or situation. Many authors link the term with various levels of efficiency (from proficiency up to excellence)
in performance but also with beliefs and values. The diachronic analysis of the definitions of the terms, offered in figure 1, reveals a migration of the term from a general presentation drawing rather on the field of psychology to a regarding of term in the more practical field of labour and human resource development. The common denominators that we tried to identify helped us in offering our own definition presented in the lines above.

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
<th>Common denominators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampson, Demetrios G., 2009</td>
<td>competence can be defined as a set of personal characteristics (e.g. skills, knowledge, attitudes) that an individual possesses or needs to acquire, in order to perform an activity within a specific context, whereas performance may range from the basic level of proficiency to the highest levels of excellence.</td>
<td>• compound</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• set</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• individual behavioural characteristic</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Herling, Richard W., 2000</td>
<td>human competence ... is displayed behavior within a specialized domain in the form of consistently demonstrated actions of an individual that are both minimally efficient in their execution and effective in their results (p. 20)</td>
<td>• knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• skills</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• ability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• attitudes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• beliefs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• values</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• manifested in a job or situation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• with efficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• proficiency</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• excellence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• performance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mirabile, Richard J., 1997</td>
<td>competency is a knowledge, skill, ability, or characteristic associated with high performance on a job, such as problem solving, analytical thinking, or leadership. (p. 75)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parry, Scott B., 1996</td>
<td>a competency is: a cluster of related knowledge, skills and attitudes that affects a major part of one’s job (a role or responsibility), that correlates with performance on the job, that can be measured against well-accepted standards, and that can be improved via training and development. (p. 50)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Conceptual limitations regarding pedagogical competencies

| Spencer Lyle M.; Spencer Signe M., 1993 | A competency is an underlying characteristic of an individual that is causally related to criterion-referenced effective and/or superior performance in a job or situation. Underlying characteristic means the competency is a fairly deep and enduring part of a person's personality and can predict behavior in a wide variety of situations and job tasks. Causally related means that a competency actually causes or predicts behavior and performance. Criterion-referenced means that the competency actually predicts who does something well or poorly, as measured on a specific criterion or standard. (p. 9) |
| Keen, K., 1992 | - Competence is the ability to handle a situation (even unforeseen).” (p. 115);
- Competence is a compound, made up of different parts, just like the fingers of a hand [i.e. skills, knowledge, experience, contacts, values, and additionally, coordination which is located in the palm, and supervision, symbolized by the nervous system]. (p. 112) |

I. “Competence” and “competency”
When trying to differentiate between “competence” and “competency” we observe a general tendency of giving competence a generic or holistic meaning as it refers to a person’s overall capacity whereas competency is considered to refer to specific capabilities (knowledge, skills, attitude, ability). Thus, we choose to refer to the generic capacities demonstrated in a given situation using the term “competence”, while if we are referring to a particular capacity or ability we consider that it is best to use the term “competency” (with the plural “competencies” when necessary).
Table 2. A comparative presentation of “competence” and “competency”

<table>
<thead>
<tr>
<th>Author</th>
<th>Definition</th>
<th>Common denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cheetham, Graham; Chivers, Geoff, 2005</td>
<td>effective overall performance within an occupation, which may range from the basic level of proficiency through the highest level of excellence (p. XI)</td>
<td>• competence - comprehensive performance/notion; - demonstration of effective and qualitative work</td>
</tr>
<tr>
<td>Rodzevičiūtė, Emilija, 2006</td>
<td>a person’s readiness to do a particular job; the ability to do a particular job applying knowledge, proficiency, skills, views, experience, attitude, personal features and values (p. 10)</td>
<td>effective and qualified work or the ability to use skills and competences in practice; competency is said to manifest in practice, which means the ability to apply certain competences (p. 10)</td>
</tr>
<tr>
<td>Pukelis, Kęstutis; Savikienė, Izabela; Fokienė, Aušra</td>
<td>the demonstration of an effective and qualitative activity, which meets the requirements of the world of work. Competence is determined by the level of qualification and professional experience the person possesses as well as</td>
<td>an ability of a person to perform a certain task of an activity on the grounds of the acquired knowledge, skills, values and attitudes. The combination of certain competences</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Competencies acquired via formal, non-formal and informal learning. Competence is demonstrated in unpredictable situations. (p. 28)</th>
<th>Composes qualification. Competency is demonstrated in unpredictable situations. (p. 28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampson, Demetrios; Fytos, Demetrios, 2008</td>
<td>Competence is a more comprehensive notion and competency, as a synonym with “skills”, is only a part of it. (p. 6)</td>
</tr>
<tr>
<td>Competencies are only a subset of the required competences for a given professional and/or academic field. (p. 6)</td>
<td></td>
</tr>
</tbody>
</table>

### II. Pedagogical competence(s)

The beginnings of defining pedagogical competence place the syntagm “pedagogical competence” in parallel with the definitions of the general term “competence” used in programmes of human resource development. Thus Barnett R. observes that in education, competences “built around the sense of a student’s mastery within a discipline” while in vocational settings there is “an operational conception of competence… essentially reproducing wider societal interests in performance” [3]. The same parallel is drawn by Prins F. J. et al: “The concept is strongly associated with post-secondary education as well professional development. Many work organization and educational institutes use the concept of ‘competence’ for describing performance ability for particular occupations or jobs or for describing educational objectives.” [4]

Thus, it needs to be discerned that pedagogical competence is strongly connected with a study of students’ performance in accordance with a series of criteria of performance and with their evaluation according to these criteria, but also with an attempt to organize education in such a way so as to lead to the development of these competencies, and general competence so that learning could be more easily achieved and so that students might be prepared for their future professions. In other words “competences can be used as the drivers for (1) the design of appropriate learning resources and activities; (2) the selection of appropriate learning material, processes and eventual curricula that bare the potential to eliminate the gap between competences needed and those available. This is important for the adoption for on-demand training.” [5]
For the accomplishment of these purposes some authors [6] try to answer arising questions on the matter such as: is competence something that can only be acquired in a working environment?; is there a difference between competence of a fresh graduate and an experienced professional?; can competence be taught?

In order to answer these questions the authors introduce the concept of viability discussing the notion depending on three variables: people, goal and context (pp. 351–352) and the boundary approach to competence viewing competence as being influenced both by outside and by inside forces and concepts such as performance, cluster of knowledge skills and attitudes as being related but not equal to competence. (p. 353)

In order to reach closer to a definition the authors discuss the oppositions between personal vs. task characteristics/ “the US vs. the UK approach to competence”/ competency vs. competence/ competences vs. competencies/ input vs. output/ behavioural vs. vocational competence; individual vs. distributed competence; specific vs. general competence; levels of competence vs. competence as a level; teachable vs. non-teachable competence; (pp. 354–357).

In order to reach an even better understanding the authors also oppose competence to concepts such as: performance, qualification, capability and ability, knowledge, skills and attitudes, expertise. (pp. 358–360)

From a more simplistic definition that view pedagogical competence as minimal professional standard, often specified by law, which a person has to reach in fulfilling a certain role of the didactic profession so that they might serve the society in an efficient manner definitions of pedagogical competences moved to a more complex level in which features have also to be taken into consideration. Thus, Biarika Jäenecke [7] introduces as important variables in defining pedagogical competences three features:

(a) competences are dependent on the context (individual and institutional needs have to be considered as well as the context in which the school and its personnel function);

(b) competences are indivisible (in planning the curriculum one needs to take holistically into consideration knowledge, abilities, attitudes, values, employing a varied gamut of methods of teaching-learning);

(c) competences are exposed to change (competences must be evaluated and according to these the syllabus must be renewed and adapted to the needs of the school and the teachingstuff);

(d) competences are linked to objectives, activities and tasks;

(e) competences require well-developed processes of teaching and development;
(g) competences are interdependent.

It is at this point that the definition offered by Madhavaram, Sreedhar, Laverie, Debra A., seems more than appropriate. Pedagogical competence is defined by the authors as “the ability of an individual to use a coordinated, synergistic combination of tangible resources (e.g. instruction materials such as books, articles and cases and technology such as software and hardware) and intangible resources (e.g. knowledge, skills, experience) to achieve efficiency and/or effectiveness in pedagogy.” [8]

For the proper understanding of pedagogical competences and for the initiation of any programme meant to lead to the development of these pedagogical competences, it is essential that one should identify possible components. The following chart comprises our findings in connection with the taxonomies theorised upon or discovered in the practice of teaching.

**Table 3. A synthetic presentation of taxonomies of pedagogical competences**

<table>
<thead>
<tr>
<th>Author</th>
<th>Types of pedagogical competences</th>
<th>Common denominator</th>
</tr>
</thead>
</table>
| Madhavaram, Sreedhar; Laverie, Debra A., 2010 | - content knowledge (or knowledge of subject matter);  
- knowledge of pedagogical approaches;  
- course management capability;  
- classroom management capability;  
- student management capability.  
(pp. 5–6) | A general analysis of the taxonomies studied reveals a concentration on the general fields of:  
- knowledge  
- management  
- relationships  
- pedagogy  
- psychology  
- communication  
- culture  
- art  
- ethics  
- technology |
| Prins, F. J. et al., 2008      | - interpersonal competence;  
- pedagogical competence;  
- subject knowledge & methodological competence;  
- organizational competence;  
- competence for collaboration with colleagues;  
- competence for collaboration with the working environment;  
- competence for reflection and development. |                     |
| Rodzevičiūtė, Emilija, 2006   | - management competency – includes planning organization, managing, evaluation, additional education organization, and managing competences;  
- pedagogical-psychological |                     |
| Petrovic, Constantin, 2006                                                                 | competency – includes gnostic motivation, methodical and lifelong improvement competences;  
|                                                                                         | - methodical didactic competency – includes methodical didactic, didactic-managing, didactic-social and methodical lifelong learning competence;  
|                                                                                         | - expression competency – includes expression and communicative competences;  
|                                                                                         | - communicative competence – includes communicative-cognitive, communicative-methodical-didactic and communicative cognitive competences;  
|                                                                                         | - modern social competency – includes modern social competence;  
|                                                                                         | - informational technology implementation competency – includes informational technology implementation competence, (p. 16)  
|                                                                                         | - specialty competence;  
|                                                                                         | - scientific competence;  
|                                                                                         | - the competence of establishing connections between theory and practice;  
|                                                                                         | - the competence of renewing contents in agreement with new scientific acquisitions;  
|                                                                                         | - psycho-pedagogical competence;  
|                                                                                         | - the competence of knowing students and of treating them in agreement with individual particularities;  
|                                                                                         | - the competence of communicating with students, of influencing and motivating the activity of learning;  
|                                                                                         | - the competence of planning and |
|                                                                                         | • practice  
|                                                                                         | • curriculum  
|                                                                                         | • innovation  
|                                                                                         | • affectivity |
performing educational activities;
- the competence of evaluating objectively educational programmes and activities;
- the psycho-social and managerial competence;
- the competence of organizing students in agreement with the educational objectives;
- the competence of establishing relations of cooperation and of solving conflicts;
- the competence of taking responsibility;
- the competence of orienting, organizing and coordinating and making decisions according to the situation;
- innovative competence;
- cultural competences;
- socio-moral competence. (pp. 22–23)

<table>
<thead>
<tr>
<th>Jänecke, Bianka</th>
</tr>
</thead>
<tbody>
<tr>
<td>- developing and maintaining the relationship with students;</td>
</tr>
<tr>
<td>- putting into practice an innovative process of education, focused on the student;</td>
</tr>
<tr>
<td>- creating and maintaining a safe learning environment and efficient skills for classroom management;</td>
</tr>
<tr>
<td>- planning and applying the curriculum, the syllabi and the didactic methods of</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bankauskiene, Nijde; Augustiniene, Aldona; Ciuculkienė, Nijde, 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Pedagogical-professional</em> competence is subdivided into:</td>
</tr>
<tr>
<td>a) <em>Transferrable competencies</em></td>
</tr>
<tr>
<td>- social competence;</td>
</tr>
<tr>
<td>- learning to learn competence;</td>
</tr>
<tr>
<td>- competence of the effective action;</td>
</tr>
<tr>
<td>- communicative competence;</td>
</tr>
<tr>
<td>- competence of the information management;</td>
</tr>
</tbody>
</table>
- project management competence;
- action research competence;

b) *General pedagogic competence* -
- the competence to implement educational ideas and IT;
- the competence to promote active and innovative learning environments and programmes;
- the competence to motivate and support the pupils;
- socio-cultural competence;

c) *Special pedagogic competence*:
- pre-elementary educational competence;
- elementary educational competence
- general and secondary educational competence;
- competence of special education;
- competence of career education;
- competence of informal training.

### III. Conclusions

The taxonomies presented, the effort to identify so many groups of pedagogical competences is relevant for the complexity of the syntagm. As we conclude in the third column of figure 3 it is also relevant for the multiple fields from which they arise in almost all teaching activities proving a wide gamut of domains that a teacher must master in his profession: knowledge, management, relationships, pedagogy, psychology, communication, culture, art, ethics, technology, practice, curriculum, innovation, affectivity. All these prove once again the importance of developing a curriculum and a pedagogical act based on pedagogical competence and the need to train teachers in such a way as to achieve as complex and varied pedagogical competences as possible.

### Bibliography:

Bankauskiene, Nijole; Augustinienė, Aldona; Čiučiulienė, Nijole: *The expression of teacher competencies in action research field: the case-based*


Cheetham, Graham; Chivers, Geoff: Professions, Competence, and Informal Learning, Cheltenham, UK, Edward Edgar Publishing, 2005

Coi, Juri L. de; Herder, Eelco; Koesling, Ame; Lofi, Christoph; Olmedilla, Daniel; Papapetrou, Odysseas; Siberski, Wolf—A Model for Competence Gap Analysis

Gliga, Lucia (coord.), Diaconu, Miha; Țăranu, Oana; Bizo, Bianca: Standarde profesionale pentru profesia didactică, Ministerul Educației și Cercetării, Consiliul Național pentru pregătirea profesorilor, București, 2002.

Jărecke, Bianka: Competențele profesorilor și ale directorilor de licee din mediul rural din România și din alte state din Uniunea Europeană – analiză comparativă, Ministerul Educației și Cercetării, Centrul Național de Fomare a Personalului din Învățământul Preuniversitar


Schneckenberg, Dirk; Wild, Johannes Understanding the Concept of eCompetence For Academic Staff, available at http://www.ecompetence.info/uploads/media/ch3.pdf Site visited on October 2nd 2010


