

## Pedagogical Competencies of Teachers at the Beginning of Their Professional Career

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**Abstract.** The paper presents the results of a pilot study into the level of pedagogical competencies of students of teaching degrees. The study was conducted using the diagnostic tool called “Pedagogical Competencies at the Start” (*KPNS, Kompetencje Pedagogiczne na Starcie*), developed by the research team. The authors present a holistic approach to the categories of pedagogical competencies. The study, which is the initial phase of a bigger research project, has revealed deficits with which young people begin their careers, and at the same time identified areas to be developed in university curricula. This refers, in particular, to the competencies for sustainable development and organizational competencies. This state is considered as the result of mainly theoretical education of teachers and low quality of internship.

### Introduction

In Poland, research on the preparation of future teachers and their competencies as they begin their careers, are conducted only occasionally [1]. However, the existing studies into professional adaptation of new teachers [2-18] suggest that many of them experience numerous difficulties as they try to implement their knowledge and pedagogical skills. This, in turn, hinders proper implementation of the teaching process and leads to disappointment, burnout and, in consequence, giving up teaching career. In the light of the above, we concluded it is important to study pedagogical preparation of prospective teachers, and develop a proper tool to diagnose pedagogical competencies of candidates. The objective of the study was to diagnose the pedagogical competencies “at the professional start” and to introduce adequate educational and corrective actions to minimize candidates’ fear regarding teaching different school subjects.

We began with defining terminology and developing the concept of pedagogical competencies of future teachers, based on the analyses of the existing research on pedagogical competencies of teachers during their preparation to professional work. We also designed the diagnostic tool to study pedagogical competencies of the prospective teachers. Based in our analyses, we assumed that professional competence is a competence connected with the ability to master the knowledge. Teachers' pedagogical competence is the ability to manage learning, and this includes planning, implementation and evaluation of learning outcomes. Every teacher should possess these competencies in order to achieve success in learning and teaching [19]. Thus, we decided that pedagogical competencies are context-specific, learnable cognitive dispositions that are needed to successfully cope with the specific teaching situations [20]. Competency categories, defined for the research purposes as a set of categorial competencies considered necessary in teaching profession [14], allow to assume that each studied area may consist of several specific, detailed, single competencies. Ten categories of competencies developed and presented below (Table 1) are treated as category variables.

**Table 1.** Categories of Pedagogical Competencies of Prospective Teachers “at the Professional Start”\*

Didactic competencies	Related with skills and knowledge regarding developing and leading the process of education, teaching, performing the tasks of a teacher and pedagogue, and knowledge of teaching methods.
Coaching competencies	Related with ability to motivate students, help them set ambitious educational and developmental goals, encourage them to self-improve, and raising awareness of the need for constant development according to the Life Long Learning principles.
Educational competencies	Connected with developing socially adequate attitudes, encouraging discussion about values in life, ability to self-reflect on axiological issues, and understanding the importance of teacher’s authority.
Socio-emotional competencies	Related to communication skills and ability to build healthy interpersonal relations; empathy and understanding of others. This category consist partially of communication competencies and soft competencies connected with functioning in the society or in a group.
Organizational competencies	Related to time management planning and realization of goals; they include temporal skills and analytical and predictive thinking
Mediation competencies	Connected with the ability to amicably solve conflicts, prevent conflict situations, communicate in difficult situations, awareness of the importance of restorative justice.
Care and rescue competencies	Connected with ensuring safety of students, skills and knowledge of the first aid, adequate behavior in life or health threatening emergencies.
Competencies for sustainable development	Understood as a set of competencies of critical, predictive and analytical thinking in the following areas: social, economic-political and environmental.
Therapeutic and preventive competencies	Connected with the ability to provide support in difficult situations, awareness of various types of disorders and ability to organize institutional support. Ability to implement effective preventive measures.
Legal competencies	Connected with legal knowledge, ability to apply legal provisions in educational practice, respect towards the law and institutions.

\*Source: Authors’ own compilation based on the publications listed in the Introduction.

## Research and Methods

Based on the literature analysis, we identified 10 categories of pedagogical competencies (as described in the Introduction) and – on the basis of the same search – items assigned to each of them. Then, the tool, pedagogical competencies of teachers at the start” was developed, its test version consisting of 75 items. The survey was conducted in May 2018 at the Pedagogical University of Cracow. It was in the form of self-evaluation, which means the respondents assessed their own level of competencies, based on self-diagnosis (knowledge, skills and experience, and reflective abilities). The standardized, final version of the tool after the pilot study consists of 64 items assigned respectively to the identified 10 categories.

## Sample

The main goal of the pilot study was to test the tool. It was conducted among randomly selected group Pedagogical University senior students of all programs with teaching specialization. We applied the following selection criteria: direction of studies and subject taught (for example, Polish language, English language, mathematics, physics, history, biology, fine arts, primary education), positive declaration of willingness to work as a teacher, being in the senior year and having obtained full teaching qualifications (didactic, pedagogical and to teach the selected subject).

Ultimately, 51 students took part in the survey, out of which 47 were females (N=47) and 4 were males (N=4). Lack of gender differentiation is typical for teacher population. Employment statistics confirm that this profession is most often chosen by women (in Europe, 85% of teachers working in primary schools are women; in high schools they are 65% of teaching staff; in Poland, too).

### Method

In the pilot study, we used the test method—the original tool, pedagogical competencies of Teachers at the Start” (KPNS). In order to standardize the KPNS, and considering its specifics, we used the Cronbach method based on the analysis of statistical characteristics of test items [21] As a result of the Cronbach’s  $\alpha$  test, the questionnaire was reduced to 64 items in 10 groups of pedagogical competencies.

### Main Goal of the Research

The research had three main objectives: (1) to describe the categories of pedagogical competencies of students preparing to work as teachers, (2) to standardize the KPNS tool, and (3) to diagnose the level of pedagogical competencies of graduates with teaching specialization before they begin their professional careers (prospective teachers). The paper presents excerpts from the research, that refer to the diagnosed level of competencies among the prospective teachers. The main research question was: *What is the level of pedagogical competencies among the prospective teachers?* The survey allowed us to formulate the initial diagnosis of the level of pedagogical competencies among students who finish their education and professional training at university level.

### Results

The analysis of category variables helps to determine the level of students’ competencies in each category. This allowed us to describe which competencies are developed on high or average, and which on the low level.

Considering distribution of the results obtained by analyzing the questionnaire data, with standard deviation  $r=0.817$  ( $p=0.05$ ), we can assume that:

- (1) Therapeutic and preventive, socio-emotional and coaching competencies are at a high level
- (2) Care and rescue, didactic, educational and mediation competencies are at an average level
- (3) Sustainable development, organizational and legal competencies are at a low level

The research results indicate that, in the area of identified pedagogical competencies, prospective teachers have a high level of knowledge (the highest results) but poor ability to use it in practice. They also got low results when it comes to modifying their knowledge and methods of care, educational, preventive, intervention, mediation or communication work in new, unpredictable situations (the only ones that can be experienced in school reality).

### Conclusions

Given the 4-point scale, the diagnosis results show that students of teaching specializations declare their competencies are at an average level only. The results lead to the following conclusions:

(1) Students evaluate their competencies as the lowest in the area of sustainable development [22]. This results from the fact that, despite recommendations provided for years in this regard, education for sustainable development is marginalized in university curricula.

(2) Organizational competencies are also evaluated as low. This might be due to insufficient number of internships during the whole studies.

(3) Students lack legal knowledge and awareness of legal regulations that would help them function effectively as teachers. In many cases, university curricula provide only 5-10 hours of education law (usually combined with the labor law), often in the distant learning form.

(4) Students evaluate their didactic competencies as average. Like in case of organizational competencies, this may be due to the limited number of internship hours. This, in turn, means less opportunities for individual discussion and practice with more experienced teachers. There are no systemic solutions in the area of supervision for students [1].

(5) Similar to the above, students evaluate their mediation competencies as average, especially in terms of intervention in conflict situations [17]. These competencies include readiness to intervene in difficult situations. They are based on knowledge and communication skills [23]. Such evaluation results from the lack of opportunity to analyze real critical incidents during internships.

(6) Care and rescue competencies are also evaluated as average, while in practice there is a tendency to increase teachers' responsibility for widely understood safety of children and youth.

(7) Students evaluate their therapeutic and preventive competencies as the highest. This is due to the increased number of topics regarding different disorders at every stage of human development, addressed in university curricula. This would indicate that recommendations from the previous years—to increase the focus on developing knowledge about preventive measures in psycho-emotional and physical health, and therapy of addictions in pedagogical curricula—have been met [24].

(8) Socio-emotional competencies were also evaluated as high. During the recent years, this competence group was also under particular focus, due to previously diagnosed difficulties [25].

(9) Students declared their coaching competencies are at a high level. This may also be connected with the growing interest in coaching methods. Many students and university teachers undergo independent trainings in this area [17]. However, this type of innovation is missing in study curricula. The demand is met by the training market.

The research results indicate that there is a need to develop a system of pedagogical internships, both in terms of numbers (more practical hours of direct work with schoolers) and quality (opportunity to receive personal supervision and use "critical incidence analysis") [1,26]. Introducing internships and tutoring as permanent element of the professional preparation process would lead to greater effectiveness of university programmes. The identified weak links in the process of teacher preparation, regarding certain pedagogical competencies, are crucial to introduce changes in university curricula, both in the content and practical application of theoretical knowledge. This should include practical application of knowledge during supervised workshops, and then in school reality.

## References

- [1] J. M. Łukasik, Zaniedbane obszary w procesie kształcenia do zawodu nauczyciela [In] *Labor et Educatio* 2017, nr 5: 155-165.
- [2] F. Fuller, Concerns of teachers: A developmental conceptualization [J], *American Educational Research Journal*, 1969, nr 6: 217-226.
- [3] Lacey, C. *The Socialisation of Teachers*. London: Methuen 1977.
- [4] S. Veenman, Perceived problems of beginning teachers. "Review of Educational Research", 1984, 54 (2): 143-178.
- [5] D. M. Kagan, Professional Growth among pre-service and beginning teachers. "Review of Educational Research", 1992, 62 (2): 129-169.
- [6] J.A. Ross, Teacher efficacy and the effect of coaching on student achievement [J]. *Canadian Journal of Education*, 1992, 17 (1): 51-65.
- [7] Hargreaves, A. *Changing Teachers, Changing Times: Teachers' Work and Culture in the Postmodern Age*. Teachers College Press, New York 1994.
- [8] M. Huberman, The Professional Life Cycle of Teachers. "Teachers' College Records", 1989, 91 (1): 31-57.

- [9] Fessler R. Dynamic of teacher career stages. [In:] T.R. Guskey, M. Huberman (ed.). *Professional Development in Education*, (p. 171-192). New York: Teachers College Press, 1995.
- [10] D. Gabryś-Barker, Novice Teachers as Researcher: On developing teacher autonomy, [In:] J. Arabski (ed.) *Studies in Foreign Language Acquisition and Teaching*. Katowice: Wyd. UŚ 2000.
- [11] U. Ordon, *Start zawodowy nauczycieli przedszkoli*. Częstochowa: Wyd. WSP, 2000.
- [12] W. Dróżka, *Nauczyciel. Autobiografia. Pokolenia. Studia pedeutologiczne i pamiętnikoznawcze*. Kielce: Wyd. AŚ 2002.
- [13] S. M. Wysocka, Nie każdy początek jest trudny – z doświadczeń szkolnych początkujących nauczycieli. [In:] J. Szempruch (ed.), *Adaptacja zawodowa nauczycieli*. Wyd. WSL, Częstochowa 2009.
- [14] S. Madhavaram, D.S.Laverie, D.A. Developing pedagogical competence: Issues and implications for marketing education. *Journal of Marketing Education*, 2010, 32(2), 197-213.
- [15] H. Kędzierska, *Kariery zawodowe nauczycieli. Konteksty-wzory-pola dyskursu*. Toruń: Wyd. A.Marszałek 2012.
- [16] “Początkujący nauczyciele” (2012). [www.ibe.edu.pl](http://www.ibe.edu.pl)
- [17] A.K. Duda, Kompetencje i umiejętności coachingowe w codziennej praktyce nauczycieli [In:] J.M. Łukasik, B. Stańkowski (ed.). *Wyzwania szkolnej codzienności*, WAM: Kraków 2015.
- [18] J. M. Łukasik, Luki w kształceniu nauczycieli. [In:] W. Kremien, T. Lewowoicki, S. Sysojewa (ed.), *Paradygmaty oświatowe i edukacja nauczycieli*. Warszawa-Kraków: PIB, 2010: 329-340.
- [19] M.H. Rahman, Professional Competence, Pedagogical Competence and the Performance of Junior High School of Science Teachers [In:] *Journal of Education and Practice*, 2014, Vol 5, No 9
- [20] S. Herppich et al., Teachers' assessment competence: Integrating knowledge-, process-and product-oriented approaches into a competence-oriented conceptual model [In:] *Teaching and Teacher Education* 2017: 1e13
- [21] L. J. Cronbach, L. Rajaratnam, H. Nanda, G. C. Gleser, *The dependability of behavioral measurements: Theory of generalizability for scores and profiles*. New York 1972.
- [22] A. M. Mróz, *Nauczyciel wobec koncepcji zrównoważonego rozwoju w edukacji*, Impuls, Kraków 1018.
- [23] K. Jagielska, *Sztuka komunikowania asertywnego*, [In:], K. Jagielska, A. Mirczak (eds.), *Starzejmy się w dobrym stylu*, Kraków: Scriptum 2015: 53-76.
- [24] P. Koperna, *Praca nauczyciela i jej wartość w percepcji studentów kierunków ze specjalnością nauczycielską* [In:] „*Ruch Pedagogiczny*”, 2018, nr 4.
- [25] K. Sobieszkańska, *Codziennosc szkolna na scenie – scena w szkolnej codzienności* [In:] J.M. Łukasik, B. Stańkowski (ed.). *Wyzwania szkolnej codzienności*, Wydawnictwo Ignatianum, Kraków: WAM 2015.
- [26] J. M. Łukasik, Education teachers through critical events [In] “*Society, Integration, Education: proceedings of the International Scientific Conference*”, 2016, nr 2: 154-162.