

BUCHAREST UNIVERSITY OF ECONOMIC STUDIES
The Faculty of International Business and Economics
The Department of Modern Languages and Business Communication of ASE
11th International Conference: Synergies in Communication (SiC)
Bucharest, Romania, 26 - 27 October 2023

DRAWING INSPIRATION FROM NEW TEACHER DEVELOPMENT COURSES – A MULTI-DISCIPLINARY PERSPECTIVE

Sandra KOTLEBOVÁ¹

Abstract

The paper 'Drawing Inspiration from New Teacher Development Courses - A Multi-Disciplinary Perspective' discusses the need to develop higher education teachers' pedagogical content knowledge. The author emphasises the importance of strengthening the pedagogical competences of higher education teachers through the new Erasmus+ professional development courses. The aim of higher education is to provide students with effective teaching, which will increase their engagement and motivation to learn, ultimately leading to better academic achievements. Research on Pedagogical Content Knowledge suggests a correlation between inadequate instruction in higher education and poor academic achievements, which can result in higher student dropout rates. Based on the available studies on the theory of Pedagogical Content Knowledge and our personal experience with the new Erasmus+ mobilities aimed at the professional development of teachers, we propose that higher education teachers participate in these mobilities to develop student-centred learning and teaching principles, as well as practical skills in various other courses that will enrich their roles as leaders, facilitators, managers and build a culture of excellence in higher education institutions.

Keywords: Pedagogical Content Knowledge; academic achievements; instruction; student-centred learning and teaching; Erasmus+ mobilities; professional development courses.

DOI: 10.24818/SIC/2023/02.02

1. Introduction

The education systems across the Member States of the European Union (EU) are highly diverse, with varying structures due to their long and rich histories. From economic, social, cultural, and democratic perspectives, these countries are committed to maintaining their unique education systems. To preserve the identity of the Member States and acknowledge that education and schooling are not under the direct competence of the EU, there has yet not been an attempt to establish a unified education system. However, in the field of higher education, there is a consensus due the Bologna Process that has introduced a unified three-level structure, the ECTS label and the Diploma Supplement, which ensures transparency and comparability in the European Higher Education Area.

One of the primary aims of the Bologna Process is to uphold and consistently enhance the quality of higher education in Europe. In 2005, the European Association for Quality Assurance in Higher Education (ENQA), in cooperation with other organisations such as the European Student's Union (ESU), the European Association of Institutions in Higher Education (EURASHE), and the European

¹ University of Ss. Cyril and Methodius, Trnava, Slovakia, sandra.kotlebova@ucm.sk. ORCID number (0000-0001-8211-3081)

University Association (EUA), created the European Standards and Guidelines for Quality Assurance in Higher Education (ESGs). The European Higher Education Area (EHEA) was launched in 2010 at conferences in Budapest and Vienna to emphasise student-centred learning and teaching (SCL) and the involvement of students in the teaching, management, and governance of higher education institutions. The website www.enqa.eu provides further information. The Bologna Process aims to promote student mobility and encourage cooperation among institutions to ensure the quality of higher education and currently includes 49 countries that ratified the European Cultural Convention of the Council of Europe in 1954. The process also fosters the mobility of teachers, researchers, and administrators. Mutual trust between institutions is crucial for academic mobility. When considering learning outcomes, it is essential to maintain a student-centred approach to teaching. The responsibility for ensuring internal quality within higher education institutions lies with the institutions themselves, which develop their own tools for measuring the quality of education. These tools often take the form of questionnaires that are distributed to university students. The questionnaires primarily evaluate the quality of teaching and instruction provided by individual teachers, as well as the satisfaction with the quality and availability of study materials, technical resources, and information resources.

In recent years the discourse upon the connection between students' learning outcomes and teachers' instruction abilities and skills which has been labelled as 'Pedagogical Content Knowledge' (PCK) is increasingly popular among scholars on pedagogy (Filgona et al., 2020). The term PCK was first introduced by Lee Shulman in the 1980s. It combines Content Knowledge (CK) and Pedagogical Knowledge (PK) to demonstrate that they are the two sides of the same coin. Shulman argued that teaching is often viewed as an unprofessional career and called for clear education and performance standards to increase respect, responsibility, and rewards for teachers (Shulman, 1987; Carlson, 1999).

This paper aims to clarify the importance of improving PCK, particularly for higher education teachers who have not received formal pedagogical education beyond their professionalisation. We offer suggestions for bridging the gap between students' needs and teachers' pedagogical performance through innovative development courses within Erasmus+ mobilities.

2. Higher education teachers' duties - Slovakia

University teachers worldwide, including those in Slovakia, are not required to prove their pedagogical education or skills once they have met the necessary conditions to join the academic staff. According to Section 75 (6) of Act No. 131/2002 on higher education and the amendment of certain acts issued by the National Council of the Slovak Republic, the general conditions state that:

“a university teacher working in a professional assistant's position ensures, in cooperation with university teachers working in a professor's position or in a position of associate professor, the performance of the university's tasks in the field of education and science, technology or arts. Where a university teacher serving in a professional assistant's post does not hold a third-level university degree, or a scientific-pedagogical degree or an artistic/pedagogical degree, he or she shall be trained with a view to obtaining them. Depending on the specific content of the duties, the qualification for filling the post of a professional assistant is the higher education of the second level or the university degree of the third level.”

In the case of professional assistants who do not hold a third-level university degree or a scientific-pedagogical degree or an artistic-pedagogical degree the duties specified (in Act 131/2002) include:

- “(a) in particular the conduct of seminars and exercises, the evaluation of students and the conduct and opposition of final thesis in the first level of higher education, the creation of study materials, consultations for students and the provision of excursions and professional experience of students;
- (b) in particular the conduct of lectures from selected chapters, the conduct of seminars and exercises, the evaluation of students and the conduct and opposition of final thesis in the first two levels of higher education, the examination at state examinations in study programmes of the first level, the second level and study programmes linking the first and second level, the creation of study materials, consultations for students and the provision of excursions and professional experience of students;

(c) the participation in the research, development or artistic activities of the workplace and the publication of its results in journals and scientific, professional or artistic events and cooperation in the organisation of scientific or artistic events.” (National Council of the Slovak Republic, 2002)

Professional assistants in university staff are responsible for various duties, with conducting lectures, seminars, and exercises being the primary responsibility. Where do university teachers/educators with no pedagogical education get the instructional skills? The higher education environment assumes training and experience-based coming by, i.e. the more experienced the teacher, the better their PCK. Is it a nourishing academic environment our students await us to create for their brains and minds?

2.1. Where is the disconnection?

In the field of higher education, teachers either shine or fail in terms of their pedagogical content knowledge (PCK). Our sixteen-year teaching experience at one university in Slovakia seems to confirm this idea since we have observed a disconnection between some university educators and their students who articulate they are missing effective instruction mainly. Glickman (1991) puts effective teaching this way:

“it is not a set of generic practices, but instead is a set of context-driven decisions about teaching. Effective teachers do not use the same set of practices for every lesson... Instead, what effective teachers do is constantly reflect about their work, observe whether students are learning or not, and, then adjust their practice accordingly (p. 6)

It is clear that students require effective teaching for their academic achievements. The framework of the course curricula, included in the 'information sheets', is the primary tool for students to understand the course. These sheets detail the conditions for successful course and exam completion, as well as summarising the course outcomes in terms of knowledge, skills, and professional and transferable competencies. The question remains: What do students want after graduation? They definitely expect to find a job once they have completed a Master's degree. However, students with a Bachelor's degree often face a dilemma: whether to pursue a higher degree or leave in search of a job. Their decision-making process is influenced by their belief that attending university will increase their chances of finding a well-paid job. Bachelor-level students dropping out of the university has caught the attention of field experts, faculty members, and teachers in Slovakia too. Our research on the increasing dropout rate is ongoing, so we cannot provide relevant data now. However, in discussions with students, they have expressed that poor teacher instruction is also a reason for their lack of interest and understanding of the subject matter during the seminars and lectures. At its core, instruction is the process of teaching and engaging students with content. Gage (1978) and Bruner (1966) used the terms teaching and instruction almost synonymously. Grossman (1990) describes instruction as how a teacher organises time and activities in implementing the content, which makes it focused on 'how the content is being taught' rather than 'what is being taught' (Cochran et al., 1993; Barnett and Hodson, 2001).

3. Elements of pedagogical content knowledge and student-centred learning

Pedagogical content knowledge (PCK) comprises these key elements: knowledge of subject matter representations (content knowledge), understanding of students' conceptions of the subject and the associated learning and teaching implications, general pedagogical knowledge (or teaching strategies), curriculum knowledge, knowledge of educational contexts, and knowledge of the purposes of education (Shulman, 1987). Other scholars have proposed simplified definitions of PCK, such as Hassard's (2005) view that it is the ability to teach within a discipline rather than the discipline itself, and Sidhu et al.'s (2011) suggestion that it involves simultaneous teaching and learning of the subject matter. According to Cochran et al. (1993), PCK refers to how teachers connect their subject matter knowledge to their pedagogical knowledge and how subject matter knowledge contributes to the process of pedagogical reasoning.

When considering whether higher education teachers can handle the PCK elements, it is essential to ask: Does their PCK meet the course outcomes for students' knowledge, skills, professional competencies, and transferable competencies? Undoubtedly, students care about having a teacher with sound pedagogical content knowledge (PCK) as it creates a student-centred learning environment that enhances their interest, attitudes, motivation, problem-solving abilities, sustainability, endurance, and other study-related notions. This eventually leads to a meaningful learning experience(s).

The concept of student-centred learning (SCL) is attributed to Hayward as early as 1905 and it was later developed by psychologists such as John Dewey (1956) and Carl Rogers (1983). Rogers, for instance, introduced client-centred therapy, which extended beyond psychology into general educational theory. The term can also be found in Jean Piaget's cognitive psychology. In his book 'Freedom to Learn for the 80s' (1983), Carl Rogers describes a shift of activity and power from the teacher to the student. This shift is driven by the need for change in the traditional educational environment. Rogers believes that students were passive, apathetic and bored (in: Burnard, 1999). SCL puts the learner at the centre of the learning process, giving them autonomy and responsibility for their own learning.

The teacher has multiple roles, including facilitator, information provider, and colleague. The student makes their own strategic decisions about what, how, where and when to learn. Such decisions promote deep learning and understanding of the learning process as the student uses reflection, discussion, reasoning, note-taking and research techniques to facilitate their learning. Through these multi-purpose activities, SCL learning recognizes the intrinsic value of each learner, who is a holistic being in SCL concept. It brings past experiences, as well as already acquired knowledge to their learning.

The student is self-motivated to identify and discover learning at their own pace which results in their personal development. Cognitive psychology highlights advantages in the cognitive, affective, and psychomotor domains for both students and teacher-facilitators. Teaching involves creative methods to enhance communication and learning among teachers and peers, particularly in areas such as problem-solving, critical thinking, and reflection. Mutual respect and cooperation are obligatory between both parties. SCL teaching involves research-led instruction. This means that the teacher shares their research findings with their students and listens to their opinions and perspectives on the subject matter. As a result, students are encouraged to participate in their own research or the development of the subject, which actively involves them in teaching and curriculum development. This can also inspire students to pursue a career in academia. It is important to note that SCL teaching is objective and avoids subjective evaluations.

3.1 Higher education teacher's PCK empowerment by SCL guidelines

SCL is fully embedded in the ESG 2015 guidelines, which we consider to be the foundations of PCK. The fundamental principle emphasizes the role of a teacher as a facilitator, empowering students' independence and developing, improving, and varying their teaching methods and ways of conveying information to students. By involving students in their research, the teacher can improve the content of their subject, increase their motivation, and bring students closer to the academic population. SCL methods should be used to broaden learners' knowledge, skills, and competencies in order they reach professional development and career progression. The teacher's innovative approaches shall contribute to reducing the number of students who do not complete their higher education studies (dropout rate). Attracting more potential students can increase mobility in the environment and improve the social climate in the region where the university or faculty is located. An important factor is participating in measuring the internal quality of a university or faculty since it leads to increased institutional self-reflection. Due to the increased motivation for learning among students, the teacher fosters a culture of lifelong learning and empowers students to think practically, logically, and analytically. This, in turn, enhances their effectiveness in their future careers. Mutual assertiveness between teachers and students fosters better communication at all levels of the university, including among non-teaching staff due to the flat hierarchy.

The ESG 2015 guidelines recommend also specific teaching methods for SCL. Effective learning is promoted through problem solving, questioning, discussion, explanation, argumentation and teamwork, while students are held accountable for their own learning outcomes. The most commonly used SCL teaching methods include problem-based learning, collaborative project work, case studies, role-plays, class workshops, and group presentations. It is important to note that there has traditionally been no formal development of higher education teachers' PCK which encompasses all the above-mentioned guidelines and instruction methods.

3.2 Higher education teacher's PCK empowerment due to teacher development courses

It is commonly believed that the pedagogical content knowledge (PCK) of higher education teachers naturally improves with experience, resulting in better instruction through a variety of techniques and improved communication strategies. However, there is no evidence to support this belief. To improve university teachers' PCK in a challenging way, there are now various courses available through the Erasmus+ Learn&Lead innovation project, which any university can participate in. This project is a development strategy continuously developed within the EU since 2010 as a network of language schools and individual trainers to enhance the quality and attractiveness of all levels of education through increased teachers' professionalism, self-development, workplace relationships, working motivation, and particularly student-centred learning (SCL).

Additionally, the Learn&Lead courses not only benefit teachers; this innovative Erasmus+ project also targets managers, CEOs, trainers, leaders, business owners, team leaders, and anyone who feels the need for self-development or new content-related knowledge. All courses take a multidisciplinary approach, connecting various academic topics' knowledge and skills, which is crucial for effective teaching and learning. The courses are designed so participants can comprehend the topics via the SCL principles, eventually enhancing their interpersonal skills, empathy, and marketability.

In the higher education sector, university teachers can attend professional development courses outside their expertise to improve their leadership skills and resilience and promote a culture of excellence among many others.

All the courses are taught in English, which can also improve the teachers' English language proficiency. Their durations is three or five days and they allow participants to share ideas, good practices and knowledge, and to collaborate in learning. In 2024, the Learn&Lead mobility countries include Slovakia, Croatia, Poland, Lithuania, and the Czech Republic; other places are subject to mutual agreement with partnership institutions. For more details on how the university can get involved in this Erasmus+ project, please contact the author of this paper.²

Conclusions

Academics have always been in the spotlight of professional development in line with the needs of today's society. However, not much attention is given to the development of their professional PCK, despite scholars claiming it is one of the most influential factors affecting students' learning and achievements. Inadequate PCK can hinder students' ability to comprehend and apply academic material to their learning (Gess-Newsome & Lederman, 1993). Research has shown that novice teachers often make broad pedagogical decisions without considering students' prior knowledge, ability levels, or learning strategies (Carpenter et al., 1988). Carlsen (1987) argues that teachers with poor PCK tend to convey more factual information that is often disorganised, and the overall outcome is often limited to recalling questions.

Higher education teachers must first practice their PCK to achieve teaching integrity with four vital principles: commitment, congruence, consistency and coherence. Teachers should be committed to

² the list of Learn & Lead courses is included in Appendix 1

meeting students' needs and providing excellent and comprehensible instruction. Congruence and consistency in the academic environment are attributed to all SCL principles and teaching methods that do not conflict and fit together well. Higher education teachers should align with clear, understandable rules and instructions. Articulating ideas in a calm and intelligible manner will help students grasp them more easily. Moreover, a consistent teacher will approach their students with respect while holding them accountable once they have successfully studied the subject matter.

Effective and successful teachers and lecturers align their organisation's needs with the needs of their students. By understanding that meeting students' needs through excellent instructional techniques can motivate and positively influence their approach to studying, they can achieve the objectives of their study programme, which, in turn, benefits the university. The Erasmus+ Learn&Lead mobility courses enable university staff to enhance their professional development and are open to all universities.

References and bibliography

- Bruner, J. (1966). *Toward a Theory of Instruction*. Harvard University Press, Cambridge, Mass.. <https://www.science.org/doi/10.1126/science.152.3719.193>
- Burnard, P. (1999). Carl Rogers and postmodernism: Challenged in nursing and health sciences. *Nursing and Health Sciences* 1, 241–247. <https://onlinelibrary.wiley.com/doi/abs/10.1046/j.1442-2018.1999.00031.x>
- Carlsen, W. S. (1987). Why do you ask? The effects of science teacher subject-matter knowledge on teacher questioning and classroom discourse. <https://eric.ed.gov/?id=ED293181>
- Carpenter, T. P., Fennema, E., Petersen, P., & Carey, D. (1988). Teachers' pedagogical content knowledge of students' problem solving in elementary arithmetic. *Journal for Research in Mathematics Education*, 19, 385-401. <https://www.jstor.org/stable/749173>
- Cochran, K. F., DeRuiter, J. A., & King, R. A. (1993). Pedagogical content knowing: An integrative model for teacher preparation. *Journal of Teacher Education*, 44, 263-272. <https://files.eric.ed.gov/fulltext/ED340683.pdf>
- Filgona, J., Sakiyo, J., Gwany, D.M. (2020). Teachers' Pedagogical Content Knowledge and Students' Academic Achievement: A Theoretical Overview. *Journal of Global Research in Education and Social Science* 14(2), 14-44. https://www.academia.edu/44005245/TEACHERS_PEDAGOGICAL_CONTENT_KNOWLEDGE_AND_STUDENTS_ACADEMIC_ACHIEVEMENT_A_THEORETICAL_OVERVIEW
- Gess-Newsome, J., & Lederman, N. (1993). Preservice biology teachers' knowledge structures as a function of professional teacher education: A year-long assessment. *Science Education*, 77, 25-45. https://www.academia.edu/26344475/Preservice_biology_teachers_knowledge_structures_as_a_function_of_professional_teacher_education_A_year-long_assessment
- Glickman, C. (1991). Pretending not to know what we know. https://files.ascd.org/staticfiles/ascd/pdf/journals/ed_lead/el_199105_glickman.pdf
- Grossman, P. L. (1990). *The making of a teacher: teacher knowledge and teacher education*. Columbia University Teachers college press, New York. <https://lib.ugent.be/catalog/rug01:002491715>
- Hassard, J. (2005). *The Art of Teaching Science*, N.Y: Oxford University Press. <https://www.scribd.com/document/361030473/Jack-Hassard-the-Art-of-Teaching-Science>
- National Council of the Slovak Republic, *Collection of Laws, The Slovak Republic* https://saavs.sk/wp-content/uploads/2022/07/ZZ_2002_131_20220425_EN.pdf
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, 15, 4-14. <https://journals.sagepub.com/doi/10.3102/0013189X015002004>
- Shulman, L. S. (1987). *Knowledge and Teaching: Foundations of the New Reform*. <https://people.ucsc.edu/~ktellez/shulman.pdf>

Suggestions for further reading

- Ashton, P. T. (Ed.). (1990). Theme: Pedagogical Content Knowledge [Special issue]. *Journal of Teacher Education*, 41(3). In Lee, O. (1995). Subject matter knowledge, classroom management, and

instructional practices in middle school science classrooms. *Journal of research in Science Teaching*. Vol. 32, No 4, PP. 423-440.

https://www.researchgate.net/publication/229466234_Subject_matter_knowledge_classroom_management_and_instructional_practices_in_middle_school_science_classrooms

Ball, D. L., & McDiarmid, G. W. (1989). The subject matter preparation of teachers. <https://files.eric.ed.gov/fulltext/ED310084.pdf>

Buchmann, M. (1984). The flight away from content in teacher education and teaching. In J. Raths & L. Katz (Eds.). *Advances in teacher education* (Vol. 1, pp. 29-48). Norwood, NJ: Ablex. <https://www.narst.org/publications/research/pck.cfm>

Feiman-Nemser, S., & Parker, M. B. (1990). Making subject matter part of the conversation in learning to teach. *Journal of Teacher Education*, 41, 32-43. https://www.researchgate.net/publication/249704411_Making_Subject_Matter_Part_of_the_Conversation_in_Learning_to_Teach

Fook, Yuen. Ch., Sidhu Kaur. G. (2010) Authentic Assessment and Pedagogical Strategies in Higher Education. *Journal of Social Sciences*. Volume 6 No2. 153-161. <https://thescipub.com/abstract/jssp.2010.153.161>

Grossman, P. L., Wilson, S. M., & Shulman, L. (1989). Teachers of substance: Subject matter knowledge for teaching. (in: Reynolds (Ed.). *Knowledge base for the beginning teacher* (pp. 23-36). Oxford: Pergamon Press.

https://www.academia.edu/97350375/Teachers_of_substance_Subject_matter_knowledge_for_teaching

Hasweh, M. Z. (1987). Effects of subject-matter knowledge in the teaching of biology and physics. *Teaching and Teacher Education*, 3(2), 109-120.

https://www.researchgate.net/publication/223521405_Effects_of_subject-matter_knowledge_in_the_teaching_of_biology_and_physics

Shing, Lee. Ch, Saat, Mohd.R., Loke, Heng. S. (2015) The nowlege of Teaching – Pedagogical Content Knowledge (PCK). *The Malaysian Online Journal of Educational Science* (Volume 3 – Issue 3)

<https://files.eric.ed.gov/fulltext/EJ1085915.pdf>

https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf

The author

Sandra Kotlebová, Ph.D., is a professional assistant at the Faculty of Social Sciences at the University of Saints Cyril and Methodius in Trnava, Slovakia. She specialises in teaching professional English in the fields of European studies and politics, Public administration and Social services and counselling, using the principles of ESP, CLIL and EMI. She also teaches Spanish as a foreign language. Additionally, she is a professional coach and trainer in the business environment and participates in Learn&Lead courses (www.sandracoach.sk, www.educal.sk/en/)

Appendix 1

Here is a list of the current Learn&Lead courses:

- Application of the Learner-centred approach
- Fundamentals of international communication in a team
- Fundamentals of new leadership
- Building visions in schools
- Building excellence culture together
- Empowering people at the workplace
- Smart Managerevolution
- Resilience
- Application of a CLIL method (Content and Language Integrated Learning) to teaching and training
- Application of the theory of Multiple Intelligences to teaching and training
- How to build excellent schools
- How to sell yourself and succeed
- The 9 Principles of a Smart Person Learn&Lead
- Train the Trainer

For a detailed description of the courses and the *Learn&Lead* professional development programme catalogue, you may contact Sandra at sandra.kotlebova@ucm.sk or kotlebovasandra@gmail.com