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PROFESSIONAL LEARNING COMMUNITIES IN SCHOOLS

Abstract: This review paper brings an outline of information gathered from content analysis of available scientific literature on Professional Learning Communities in schools. As it is not a new concept in education, we feel the need to explore nowadays understanding and practical implications, both positive and negative, of this concept in schools. With the current strong digital transformation of today's schools, comes the need for new strategies and transformation of approaches to empowering teachers towards efficient and sustainable collaborative work in their professional learning communities. The aim of this research was to find new evidence that would help neoteric researchers, education authorities and decision makers in schools to instigate the use of this concept, upgrade crucial aspects of these communities and boost their efficiency to better the educational process in schools. Research has shown various possibilities and strong potential of this concept which should be considered a valuable asset of human resource management in education.

Keywords: Management in education, Professional learning communities, Schools

Introduction

This review paper brings an outline of information gathered from content analysis of available scientific literature on Professional Learning Communities [PLC] in schools. As it is not a new concept in education, we feel the need to explore nowadays understanding and practical implications, both positive and negative, of this concept in schools. With the current strong digital transformation of today's schools, comes the need for new strategies and transformation of approaches to empowering teachers towards efficient and sustainable collaborative work in their professional learning communities. Today's educational management in schools face various, often conceptually different educational reforms that present big challenges to their operational and strategic activities. As stated by Fullan (1995), the educational systems are in its core conservative and any change often comes to a non-fruitful soil so it becomes, at best, a surface change. If any change is to be executed, the transformation needs to be essential and fundamental. Therefore a change needs to be non-partial but a change in ideas, thoughts and active participation. None of the changes in schools can come to light if the people that do the main activity in a system are not included in the transformation process. One of the core ideas of change in schools is professional development (education) of teachers, often stated in school reform documents and guidelines. One of the concepts that should be able to bypass the obstacles that the management faces are PLCs. The fact that social areas of business, economy, anthropology, psychology and engineering are areas where this concept also found its place, gives us additional drive to research how effective it can be in schools and how applicable it is in our schools and how effective it has been, worldwide. PLCs are a concept of teacher education within their working communities to enhance and develop effective learning methods and approaches. Nowadays educational authorities seem to forget the basis of any work related learning, meaning the importance of learning communities in schools. PLCs in practice tend to be left to the work enthusiasm and work ethics of teachers as well as school management; head teachers, pedagogues etc. This paper refers to recent scientific research done on this concept as well as explore new concepts within PLCs with the recent burst of IT usage in schools. The variety of definitions and explanations of the concept have guided us in researching the concept's main ideas in order to shed light on the concept itself and its possibilities in nowadays virtual, IT area that schools share. Shortly said, PLC's are regular structured teacher meetings for the exchange of ideas, constructive dialogues and discussions, sharing good

practices with the goal of upgrading continuity in teaching, using effective teaching strategies for improving the pupils learning experience. The cooperative activities need to have tangible results, be striving to improve and developing curricula for the benefit of the pupils and teachers. According to Pang & Wang, (2016) PLCs are a professional development strategy implemented in many countries worldwide. IT in nowadays schools offers modern education tools and PLC concepts that offer teachers and school authorities new ways of ensuring teacher development and the achievement of teaching outcomes in everyday classes. These shouldn't be ignored by management in education and educational decision makers, as one of the core goals of any school reform is to ensure teacher and pupil development towards desired learning outcomes in schools.

Theoretical Background

Professional learning communities [PLC] are a concept in education from the early ages of education. The idea of professional learning communities originated in the business sector, according to Walker (2002), who states that the idea organizations can learn is as old as Mary Follett's (1924) work, Creative Experience on human relations movement in business which led to democratic ways of relating in the workplace. W. Edwards Deming's work in the 1940's post war Japan industry reform where he was called to develop effective management of work processes. Max Weber's systems theory (1947) derived an early understanding of the influence of the social and organizational context in organizations. The term professional learning community (PLC) emerged among researchers as early as the 1960's when the concept was revised within the teaching profession. The research began to become more explicit in the late 1980s and 1990s. These ideas consequently led to Senge (1990) reintroduced the term "learning organizations" in his book "The Fifth Discipline" and the work of, Shirley M. Hord (1997) who issued a white paper titled "Professional Learning Communities: Communities of Continuous Inquiry and Improvement". Rosenholz (1989) states that in the mid 1990's, the idea of PLC sin schools emerged with the idea to "re-culture schools by examining the effects of school organization on teachers' work and their commitment to school improvement". Other research (Little, 1989; Louis, Marks, & Kruse, 1994) concluded that studies focused on teacher working conditions; particularly how teachers learn from one another in school settings influenced their job satisfaction and responsibility for pupil learning. All of these (and many more) show a historical, continuous search for finding effective ways of using the concept of PLC in education which gives us a boost for interdisciplinary scientific research of the phenomenon.

PLC's in Schools

As these research show, the phenomenon of PLCs is a complex social structure. A topic that needs to be understood as not just a collection of teachers working together or a social network of educators who share stories, materials, and advice (Coburn, & Russell, 2008; Protheroe, 2008). PLCs as a term are wrongly used to describe committees, school teams meetings or planning meetings where teachers undertake data-based decision making (DuFour, 2004; Jessie, 2007). This misconception is something that needs to be shattered or displaced from schools and educational institutions. PLC's have been described in various definitions and descriptions. Bognar (2009) depicts it as a social structure that connects what is learned with the possibility of increased interaction between learners with their teachers who become participants in the learning challenge. Lieberman et al. (2011, 16) state PLC's are groups of teachers who "meet regularly for the purposes of increasing their own learning and that of their students". Schaap, & Bruijn (2018) state that PLC's are "communities within schools, composed of voluntary participating teachers facilitated by school principals with a specific task to accomplish as part of a larger innovation project". Broadie (2021,2) gives a definition of PLC's as groups of teachers who come together to

engage in regular, systematic and sustained cycles of inquiry-based learning, with the intention to develop their individual and collective capacity for teaching to improve student outcomes which other confirm; (Hairon et al. 2017, Stoll et al. 2006). As these definitions offer a wide spectrum of this educational phenomenon we feel the need to narrow the core focus of PLC's. With that in mind here are the most common characteristics of PLCs: Shared values and vision; (Bolam et al., 2005; DuFour, 2009; etc.) teachers and school management share a common vision focused on pupils learning and personal and organizational drive to improve. Collaborative school culture; (Bolam et al., 2005; Stoll et al., 2006; etc.); the schools collaborative efforts bring benefits to the teachers in a way that they facilitate a mechanism for sharing responsibility for pupils learning and a means to work together among colleagues for a common purpose. Focus on examining outcomes to improve student learning (DuFour, 2004; Reichstetter, 2006; etc.) PLC's are outcome oriented and their focus is wider than data collection and review but, if done correctly, develop teachers' collective efforts for outcome achievement. Shared (distributive) leadership; (Louis, & Bryk, 1994; Mitchell, & Sackney, 2006; etc.) PLCs characteristic is the idea that school leaders/ administrators/head teachers are committed to distribute leadership and decision making among colleagues within the teacher community to benefit the educational process. Shared personal practice (Louis, & Kruse, 1995; Wignall 1992; etc.) teachers are the main participants of PLCs. These communities thrive to learn and work together with inquiry based activities to tackle the shared obstacles in their teaching experiences.

These characteristics are not, or shouldn't be a list of "wishes" but goals to achieve before and while carrying out PLCs at schools. In addition, the many definitions of PLC may vary in "steps" or concepts but they all have this common "note" that: teachers meet, discuss and collaborate, use creativity, critical thinking and inquiry to benefit teaching and pupils.

In addition, our research has found that there are several concepts and approaches, for example: Three big ideas; a focus on learning, a focus on collaboration and a focus on results (DuFour, 2007). Seven stages of PLC's; 1) Filling the time, 2) Sharing personal practices, 4) Planning, 5) Developing common assessment, 6) Analyzing pupil learning and 7) Reflecting on instruction (Graham & Ferriter, 2008). Two ground assumptions (Vascio, Ross & Adams, 2008); first, it is assumed that knowledge is situated in the day-to-day lived experiences of teachers and best understood through critical reflection with others who share the same experience (Buysse, Sparkman, & Wesley, 2003). Second, it is assumed that actively engaging teachers in PLCs will increase their professional knowledge and enhance pupils learning.

This content analysis of available literature shows a constant, diverse and well-developed scientific interest in this concept.

IT and PLCs

Information technology has, especially in this pandemic era forced teachers to face new challenges in their profession. Dubovicki, Jukić & Topolovčan (2022, 155) choose a description that teachers have "sailed" into a sea of online tools, platforms and materials to, as effectively as possible, teach classes in a digital surrounding. This fact has affected the whole educational system worldwide. In that perspective, research was done on the usage of IT professional learning communities. The data is relatively new, diverse but indicative and informative. The usage of IT in PLCs in education, has been fairly less researched than these phenomena separately. This "combination" has brought new artefacts into education and our research has shown that they are still to be researched and evaluated. Some of the artefacts used in the available data are E portfolios [EP], Massive open online courses [MOOC], social media and Virtual PLCs. Lim & Lee (2014) explore Teaching e-portfolios and the development of professional learning communities. Their research has shown that the usage of teacher E portfolios may have a plausible role in the "quality enhancement of higher education teaching and learning, and its impact on culture, beliefs,

policies and practices in the context of implementation to build a professional learning community." In other words, their research has shown that the usage of this IT tool is somewhat a challenge even in higher education. Other research studies (Lyons, 1998; Stone, 1998; Wolf & Dietz, 1998; Xu, 2003) have shown that teaching e-portfolio may be used as a tool to develop PLCs among higher education teaching staff. Xu (2003) concludes that EPs within his study, served as a means of generating teacher "reflection and collegial sharing in the school community." As the data on EP is positive but scarce and not extremely indicative we feel this tool within PLCs needs to be further researched. Social media, (Facebook, Twitter etc.) as a tool for developing PLCs, have been researched from 2011. Goodyear, Parker, Casey (2019) examined the characteristics of a specific Twitter-based professional learning community. Their research shows that social media is a contemporary form of professional development. They state that Twitter groups can address the clear challenges associated with teacher learning and, in turn, enhance the quality of teaching and improve student learning outcomes. Bostick (2018) concludes that social media had a positive impact on teacher perceptions of efficacy and potential retention of teachers within PLCs. One particularly interesting research was done by Pimmer et al. (2019, 19) on Mobile Instant Messaging (MIM), meaning massaging through WhatsApp and/or Viber groups. This massive communication phenomenon and its educational use can be seen as a "genuine form of mobile learning", state the authors. Their results show PLCs governed and conducted with these applications showed "lower professional isolation (during the pandemic), higher job satisfaction, and the perceived transfer of school knowledge to work practice within the teacher groups examined. This tool has been studied to a limited extent up to date. MOOCs are a fairly well researched digital tool (Sai & Siraj (2015); Milligan & Littlejohn (2014); Akoglu, Lee & Kellogg, (2019) etc.) used for PLCs. According to Chen et al. (2020), MOOCs, which became a globally used IT educational tool for teachers in the era of the pandemic, are recognized as a potential contributor to teacher personal development. Massive online courses have been a source for teacher education for some time. There are several MOOC platforms (Teacher academy, Futurelearn, Coursera, edX, etc.), some free and some commercial, that offer and provide such opportunities to the teacher population worldwide. All of these digital tools that offer teachers possibility to have a functional PLC show how the development of IT in education, meaning schools, should enable school leaders to actively advice teachers to use these possibilities to enhance their digital teaching skills and knowledge.

Research Methodology

As stated before, the goal of this paper is to find new evidence on PLC's that would help modern researchers, education authorities and decision makers in schools to instigate the use of this concept, upgrade crucial aspects of these communities and boost their efficiency to better the educational process in schools. With that in mind, we explored nowadays understanding and practical implications, both positive and negative, of this concept in schools. In addition, with the current strong digital transformation of today's schools, comes the need for new strategies and transformation of approaches to empowering teachers towards efficient and sustainable collaborative work in their professional learning communities. This educational phenomena has been researched during the period of March 2021 and April 2022 with content analysis of available scientific literature on the concept of PLC itself as well as modern prospects of these communities in light of information technology in schools worldwide.

All of these have raised 2 crucial research questions:

RQ1: Are PLC's a concept that can effectively raise the quality of the educational process in schools?

RQ2: What are the prospects of teacher IT usage for PLC's?

Positive answers should help deepen the understanding of the PLC's and the usage of IT within this educational concept in schools.

Discussion & Results

In our search for our RQ1 answers the search was confined to scientific data on the effectiveness of PLC's as means to raise the quality of the educational process in schools. Data collected shows PLC's are effective in raising the quality of education. As collaborative ways of developing personal education of teachers, PLC's consequently lead to better academic and personal success of pupils as stated in (Bolam et al. 2005: Doğan & Adams 2018; Lee, 2020; McMahon, & Thomas, 2006; Reynolds, 2016; Stoll, Vescio et. al., 2008; and Watson, 2012; etc.). All of these authors, and many others, advise the usage of PLCs in education. Nevertheless, they also critically question various aspects of this concept. Watson (2012, 27) questions this paradox "ideal" concept of PLCs. He states that the easy, "assumptions that underpin the notion of community are not self-evident truths which lead inexorably to enhanced professional learning and school improvement. Critical and comprehensive research done in this work concludes PLCs have a potentially significant role to play in nowadays dynamic organizational processes, he states that they can "shake" the rigid approach to education in schools, organizational and personal towards the teachers "but in order to achieve this it might need to re-examine the meanings attached to those three purposefully chosen words". Stoll, McMahon, & Thomas (2006) choose an approach that the effectiveness of PLCs should be judged in three ways: impact on students' learning; impact on the professional learning, work experience, and morale of the staff; and the extent to which PLC characteristics were in place and leaders were using PLC processes. In other words they "unpack" it with three main parts: pupils, teachers and school leaders. This spreads the effectiveness to three school artefacts which could be separately researched. Authors conclude with the idea that what is required is continual and sustainable professional learning and improvement, sharply directed at pupils' learning. This task, they believe, is critical for education leaders at all levels. Reynolds (2016, 11) examines PLCs positive effects. She states that her research has shown how "strong professional learning communities ensure that school and system goals align with the importance of student achievement". She also emphasizes the importance of head teachers and their role(s) in effective PLCs as they ought to be "trustworthy leaders". Lee (2020, 206) examines the effectiveness of PLCs and finds that "professional learning communities have a positive effect on teacher efficacy" but also concludes that school organizational culture is a better predictor than PLCs. Bolam et al. (2005) offer a wide and comprehensive research on the effectiveness and possible models of effective professional learning communities and assess the generalizability and transferability of such models. They conclude PLCs should be seriously consider by education leaders for adopting the PLC approach and the methodology. Vescio et al (2008) offer a literature review paper on the impact of PLCs to pupils and teacher achievement. Their research concludes the positive sides of PLCs; as far as the "possibility of shifting educational paradigms" for teachers and pupils but the research needs to have "Rigorous reporting of research methodology is essential if we are to build a credible justification for the resources necessary to sustain PLCs." As this paper is somewhat limited we consider the research to be extremely motivational for further research and discoveries. Doğan & Adams (2018, 21) state that there are some questionable methodology research done in thirteen papers they covered but, nevertheless, state that "PLCs remain a powerful format for teacher learning to thrive". So, if we can wish to summarize the researched data, negative aspects of PLCs are best depicted by Bolam et al. (2005). In their research paper, they offer a focused "list" of downsides/obstacles to successful PLC implementation: a) Staff resistance to change; b) resources (time) and budget being dependent on central and local policies; and c) staff turnover, especially at the leadership level.

At the same time, we conclude, guided by the researched data and the experience of the author of this article that this educational concept has reinforcing, current and "state of the art" strong points:

- derives its effectiveness in continuous and substantial scientific research;
- it is based on social learning; cooperative activities are considered desirable in modern educational settings;
- it is stimulus for teachers; teachers claim "ownership" of the work done in PLCs;
- it sends progressive methodical impulses; It is in line with modern lifelong learning aspirations towards self-regulated learning in groups;
- derives the need for transformative (pedagogical) leadership; visible in nowadays tendencies in school leadership.

The search for answers to our RQ2, IT in PLCs has shown clear evidence that the usage of IT in PLCs offers a wide spectrum of possibilities. This answers our RQ2; yes, there are (some) prospects for teachers to use IT in PLCs. We also found that this is area has not been thoroughly researched. MOOCs in PLCs have been found to be most often and plausible to be used, but as our research shows, they still need to be analyzed, researched and developed to have a have a scientific basis for use in schools within PLCs. If we consider that Varga, Peko & Geiger (2018) state "future-oriented thinking, critical and creative thinking, classroom management skills and responsible decision-making" are the future of education, PLCs offer an educational "setting" that can trigger the teachers to thrive and succeed an all of these. IT can be of assistance as a form of "filling" in the possible social obstacles (like the pandemic). In short, we would advise more and analysis, research and development of IT in PLCs especially with the use of Future studies methods.

Both of the researched educational artefacts, PLCs and IT in PLCs consider a common basis, collaboration. If we take into consideration that many researchers (Slater & Ravid, 2010; Lawson (2004) Goulet et.al. (2003); etc.); have proven that collaboration has a positive affect to education and learning, it can be downsized to a single paraphrase; Effective collaboration among teachers affects student achievement in a positive manner when collective inquiry focuses on the right work (DuFour et al., 2010).

Conclusion

First we wish to address the use of IT in our schools which has been rising and it is a current fact, scientific interest on its aspects is rising every day. IT in PLCs on the other hand, has very little data to be explored. That doesn't mean it cannot or shouldn't be used for PLCs. It shows that more research needs to be done to clear the information surrounding it and defining and evaluating the prospects of it. In addition to these beneficial side(s) of this concept, we mustn't forget that very few research has been done on the downsides of the concept. In this way, a clear indication for the need of future research of IT in PLCs is needed for future prospects of education. In addition, the usage of IT in PLCs needs further research done to confirm the usefulness of combining these two concepts. Secondly, our research has shown how the concept of PLCs in education has been proven to have positive influence on the development of innovative ideas, creativity and cooperative ventures of schools teachers. Evidence shows how effective and beneficial it is to: the development of curricular content, usage of innovative methods in teaching, cooperative and inclusive decision making among teachers, raise of democracy and that it benefits school management. It has also vivid that this concept, if done properly, influences school culture and overall hidden curricula within schools. All of this data shows that PLC's have the capacity and scientific background that should encourage school leaders, head teachers and the education authorities to include this concept into teacher education within schools. This also leads to the need of including this concept into future teacher education, meaning teacher colleges and universities.

There should be research done on the real, everyday situations, especially in our south east region of Europe for the reason of very little or none done so far. It is possible that PLCs are organized in schools in this geographical area but, there is no clear evidence of it. Also, there is very little evidence, if they are being conducted properly, on their work or visible scientific data that confirms their existence. Finally, we conclude that PLC's should and could be the future of teacher education within their schools and institutions. If its strong points, previously offered would be considered, if all the characteristic of an effective PLC have been met prior to the practical implementation, the results will come. These results can have the desired effect on pupils, teachers and consequently head teachers, which will surely be beneficial to the educational process in our schools. With that in mind, this paper offers vivid content analysis of various aspects of PLCs. This should guide educational leaders, decision makers and management in education to include this concept into future development of education in south east Europe.

Literature

- Akoglu, K., Lee, H., & Kellogg, S. (2019). Participating in a MOOC and professional learning team: How a blended approach to professional development makes a difference. Journal of Technology and Teacher Education, 27(2), 129–163.
- Bognar, B. (2009). OSTVARIVANJE SUŠTINSKIH PROMJENA U ODGOJNOJ PRAKSI POSREDSTVOM AKCIJSKIH ISTRAŽIVANJA. Educational Sciences/Odgojne Znanosti, 11(2).
- Bolam, R., Mcmahon, A., Stoll, L., Thomas, S., Wallace, M., Greenwood, A., & Smith. (2005). Creating and sustaining effective professional learning communities. 637.
- Bostick, B. (2013). Using social media and professional learning communities as tools for novice teacher collegiality and improved self-efficacy.
- Brodie, K. (2021). Teacher agency in professional learning communities. Professional Development in Education, 47(4), 560–573. https://doi.org/10.1080/19415257.2019.1689523
- Buysse, V., Sparkman, K. L., & Wesley, P. W. (2003). Communities of practice: Connecting what we know with what we do. Exceptional Children, 69(3), 263–277. https://doi.org/10.1177/001440290306900301
- Chen, C., Sonnert, G., Sadler, P. M., Sasselov, D., & Fredericks, C. (2020). The impact of student misconceptions on student persistence in a MOOC. Journal of Research in Science Teaching, 57(6), 879–910. https://doi.org/10.1002/tea.21616
- Coburn, C. E., & Russell, J. L. (2008). District policy and teachers' social networks. Educational Evaluation and Policy Analysis, 30(3), 203–235. https://doi.org/10.3102/0162373708321829
- Doğan, S., & Adams, A. (2018). Effect of professional learning communities on teachers and students: reporting updated results and raising questions about research design. School Effectiveness and School Improvement: An International Journal of Research, Policy and Practice, 29(4), 634–659. https://doi.org/10.1080/09243453.2018.1500921
- Dubovicki, S., Jukić, R., & Topolovčan, T. (2022). Izazovi nastavničkog poziva u budućnosti. U: Luketić, D. (ur.) Ogledi o nastavničkoj profesiji.
- Dufour, R., Dufour, R. B., Eaker, R. E., & Karhanek, G. (2004). Whatever it takes: How professional learning communities respond when kids don.
- DuFour, Richard. (2007). Professional learning communities: A bandwagon, an idea worth considering, or our best hope for high levels of learning? Middle School Journal, 39(1), 4–8. https://doi.org/10.1080/00940771.2007.11461607
- DuFour, Rick, DuFour, R., & Eaker, B. (2009). New insights into professional learning communities at work. In The Challenge of Change: Start School Improvement Now! (pp. 87–104). Corwin Press.
- Feger, S., & Arruda, E. (2008). Professional learning communities: Key themes from the literature. Education Alliance.
- Fullan, M. (1995). The school as a learning organization: Distant dreams. Theory into Practice, 34(4), 230–235. https://doi.org/10.1080/00405849509543685
- Goodyear, V. A., Parker, M., & Casey, A. (2019). Social media and teacher professional learning communities. Physical Education and Sport Pedagogy, 24(5), 421–433. https://doi.org/10.1080/17408989.2019.1617263

- Goulet, L., Krentz, C., & Christiansen, H. (2003). Collaboration in education: The phenomenon and process of working together. Alberta Journal of Educational Research, 49(4).
- Graham, P., & Ferriter, B. (2008). One step at a time. Journal of Staff Development, 29(3), 38-42.
- Hairon, S., Goh, J. W. P., Chua, C. S. K., & Wang, L.-Y. (2017). A research agenda for professional learning communities: moving forward. Professional Development in Education, 43(1), 72–86. https://doi.org/1 0.1080/19415257.2015.1055861
- Hord, S. M. (1997). Professional learning communities: Communities of continuous inquiry and improvement. Jessie, L. G. (2007). The elements of a professional learning community. Leadership Compass, 5, 1–3.
- Kafai, Y. B. (2006). Constructionism. The Cambridge handbook of the learning sciences. 35–38.
- Katz, S., & Earl, L. M. (2009). Building and connecting learning communities: The power of networks for school improvement. Corwin Press.
- Kruse, S., Louis, K. S., & Bryk, A. (1994). Building professional community in schools. Issues in Restructuring Schools, 6(3), 67–71.
- Lambert, L. (1989). The constructivist leader, second edition, Teachers College. Teachers College Press.
- Lawson, H. A. (2004). The logic of collaboration in education and the human services. Journal of Interprofessional Care, 18(3), 225–237.
- Lee, S. Y. (2020). Analysis of the effect of school organizational culture and professional learning communities on teacher efficacy. Integration of Education, 24(2), 206–217. https://doi.org/10.15507/1991-9468.099.024.202002.206-217
- Lieberman, A., Miller, L., Wiedrick, J., & Frank, V. (2011). Learning communities: The starting point for professional learning is in schools and classrooms. The Learning Professional, 32.
- Lim, C. P., & Lee, J. C.-K. (2014). Teaching e-portfolios and the development of professional learning communities (PLCs) in higher education institutions. The Internet and Higher Education, 20, 57–59. https://doi.org/10.1016/j.iheduc.2013.10.002
- Little, J. W. (2007). Teachers' accounts of classroom experience as a resource for professional learning and instructional decision making. Teachers College Record (1970), 109(13), 217–240. https://doi.org/10.1177/016146810710901305
- Louis, K. S., Marks, H. M., & Kruse, S. D. (1994). Teachers' professional community in restructing schools. Louis, Karen Seashore. (2006). Changing the culture of schools: Professional community, organizational learning, and trust. Journal of School Leadership, 16(5), 477–489. https://doi.org/10.1177/105268460601600502
- Lyons, N. (1998). With Portfolio in Hand. Validating the New Teacher Professionalism. Teachers College Press.
- Milligan, C., & Littlejohn, A. (2014). Supporting professional learning in a massive open online course. The International Review of Research in Open and Distributed Learning, 15(5). https://doi.org/10.19173/irrodl.v15i5.1855
- Mitchell, C., & Sackney, L. (2006). Building schools, building people: The school principal's role in leading a learning community. Journal of School Leadership, 16(5), 627–640. https://doi.org/10.1177/105268460601600512
- Pimmer, C., Brühlmann, F., Odetola, T. D., Oluwasola, D. O., Dipeolu, O., & Ajuwon, A. J. (2019). Facilitating professional mobile learning communities with instant messaging. Computers & Education, 128, 102–112. https://doi.org/10.1016/j.compedu.2018.09.005
- Protheroe, N. (2008). Teacher Efficacy: What Is It and Does It Matter? Principal, 87(5), 42-45.
- Reynolds, K. (2016). Creating Effective Professional Learning Communities (PLCs). BU Journal of Graduate Studies in Education, 8(2), 9–12.
- Rosenholtz, S. J. (1989). Teachers' workplace: The social organization of schools. Addison-Wesley Longman Limited.
- Sai, X., & Siraj, S. (2015). Professional learning community in education: Literature review. The Online Journal of Quality in Higher Education, 2, 65–78.
- Schaap, H., & de Bruijn, E. (2018). Elements affecting the development of professional learning communities in schools. Learning Environments Research, 21(1), 109–134. https://doi.org/10.1007/s10984-017-9244-y
- Senge., P. M. (1990). The fifth discipline: The art and practice of the learning organization, by Peter M. Senge. (1990). New York: Doubleday Currency. 424. Human Resource Development Quarterly, 2(2), 198–201. https://doi.org/10.1002/hrdq.3920020215
- Slater, J. J., & Ravid, R. (Eds.). (2013). Collaboration in Education. Routledge.

- Stoll, L., Bolam, R., McMahon, A., Wallace, M., & Thomas, S. (2006). Professional learning communities: A review of the literature. Journal of Educational Change, 7(4), 221–258. https://doi.org/10.1007/s10833-006-0001-8
- Stoll, L., Mcmahon, A., & Thomas, S. (2006). Identifying and leading effective professional learning communities. Journal of School Leadership, 16(5), 611–623. https://doi.org/10.1177/105268460601600511
- Stone, B. A. (1998). Problems, pitfalls and benefits of portfolios. Teacher Education Quarterly, 21(1), 105–114. Sun-Keung Pang, N., Wang, T., & Lai-Mei Leung, Z. (2016). Educational reforms and the practices of pro-
- fessional learning community in Hong Kong primary schools. Asia Pacific Journal of Education, 36(2), 231–247. https://doi.org/10.1080/02188791.2016.1148852
- Thompson, S. C., Gregg, L., & Niska, J. M. (2004). Professional learning communities, leadership, and student learning. RMLE Online, 28(1), 1–15. https://doi.org/10.1080/19404476.2004.11658173
- Varga, R., Peko, A., & Vican, D. (2016). ULOGA RAVNATELJA U KONCEPCIJAMA PROMJENA ODGO-JNO-OBRAZOVNOG SUSTAVA REPUBLIKE HRVATSKE. Život i škola: časopis za teoriju i praksu odgoja i obrazovanja, LXII(1), 39–50. https://hrcak.srce.hr/165099
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and Teacher Education, 24(1), 80–91. https://doi.org/10.1016/j.tate.2007.01.004
- Walker, D. (2002). Constructivist leadership: Standards, equity, and learning: Weaving whole cloth from multiple strands. The Constructivist Leader, 1–33.
- Watson, C. (2014). Effective professional learning communities? The possibilities for teachers as agents of change in schools. British Educational Research Journal, 40(1), 18–29. https://doi.org/10.1002/berj.3025
- Wignall, R. (1992). Building a collaborative school culture: A case study of one woman in the principalship. In European Conference on Educational Research.
- Wolf, K., & Dietz, M. (1998). Teaching portfolios: Purposes and possibilities. Teacher Education Quarter-ly. 9–22.
- Xu, J. (2003). Promoting school-centered professional development through teaching portfolios: A case study. Journal of Teacher Education, 54(4), 347–361.

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INITIAL EDUCATION AND PROFESSIONAL TRAINING OF TEACHERS THROUGH PEDAGOGICAL FACULTIES

Abstract: The initial education of teachers represents the basic part of the preparation of the teaching staff. This phase is just a prerequisite for starting the career development of the class teacher, which continues through permanent education.

The functionally established continuity between initial education and vocational training presupposes quality. For these reasons, the pedagogical faculties are the most appropriate institutions that are also responsible for the entire approach of the creation and development of the teacher's profile.

The subject and purpose of the research in this paper refer to the following: analysis of the current situation in our country regarding the systematic professional development of primary school teachers in the primary school and determining a system of thematically structured activities and trainings for the teaching staff, which would be realized at the pedagogical faculties. According to the goal, we determine the operational tasks and hypotheses, as well as the research methods, techniques and instruments that will be listed in the paper.

Through the research we have acquired specific data on what types of training teachers need to actively participate in. From the ranking of the received answers by frequency, it is evident that the teachers need training most, which refers to modern models and strategies of teaching work.