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PROACTIVITY IN TEACHER COMPETENCE DEVELOPMENT. THE CONTEXT OF APPLYING NEW EYE-TRACKING TECHNOLOGIES*

Introduction: Modern education is redefining the role of the teacher, expecting not only the transfer of knowledge but, above all, proactivity in creating didactic and pedagogical processes. Courage in charting new developmental paths, often supported by technological progress, is becoming a key attribute. The increasing availability of eye-tracking systems allows for the postulate that future teachers should develop competencies in supporting the optimization of students' visual and cognitive functions by boldly adapting innovative solutions.

Research Aim: This article aims to conceptualize the use of eye-tracking technology as a tool to foster the development of professional proactivity among future teachers. The study attempts to redefine the role of eye tracking, shifting it from its traditional function as a clinical diagnostic method to that of an innovative instrument supporting the educational process. A conceptual synthesis method was employed in the research, integrating interdisciplinary literature from the fields of pedagogy, cognitive psychology, and attention research to formulate a new interpretive framework for the phenomenon of proactivity (*job crafting*) in education.

Evidence-based Facts: In the field of pedagogy, oculography has traditionally been associated with the diagnosis of learning difficulties, such as dyslexia. However, we postulate a shift in focus toward utilizing this technology in a much broader dimension within the teacher education process. Assuming that fixations and saccades constitute a direct record of selective attention, it is justified to include the analysis of oculographic data in the university curriculum. Using objective indicators provides students (future teachers) with the opportunity to better understand classroom dynamics and safely test their own teaching methods.

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Summary: The implementation of eye-tracking technology in teacher education marks a new stage in the development of professional teacher identity. Transitioning from traditional training methods to a model based on objective data analysis enables a deeper self-evaluation of instructional practices. Within the paradigm of the interdisciplinary preparation of educational personnel, it becomes crucial to demonstrate the synergy between advanced technological tools and the process of fostering the professional identity of a proactive teacher across task-related, relational, and cognitive dimensions.

Keywords: education, teacher, interdisciplinarity, proactivity, eye tracking, conceptual synthesis

INTRODUCTION

Contemporary education requires teachers to move beyond the role of passive transmitters of knowledge, promoting a proactive attitude that is primarily based on the conscious shaping of didactic and educational processes (Biesta, 2017; Siuda, 2015). Therefore, the development of self-reflective competences, which allow for a critical analysis of one's own teaching workshop in terms of tasks performed, relationships established, as well as the very process of thinking and perceiving one's professional role, is a key challenge in training future pedagogical staff. The adaptation of modern technologies – hitherto often confined exclusively to closed laboratory spaces – is becoming one of the foundations of a teacher's professional identity. This is possible primarily due to the rapid decline in device prices, making professional eye-tracking equipment more affordable (Bates, 2019; Ertmer, 2005; Rojas et al., 2025). However, a necessary prerequisite here is a critical distance from technocentrism and an ethical awareness of the context in which the growing influence of digitalization redefines contemporary educational processes (Berg, 2000; Carroll, 2002; Herczeg, 2024; Obrycka, 2026; Selwyn, 2021; Shapiro, 2020).

The importance of efficient interpretation of visual data has significantly intensified in recent times. Hence, it is worth noting that “Technological advancement, particularly in AI and virtual reality, is reshaping how students engage with content, how cognition is understood, and how learning itself is documented and valued” (EDUCAUSE, 2025, p. 4). Drawing, in turn, from socio-cultural, cognitive, and transformative learning theories, digital agency is fundamentally based on the ability of individuals to demonstrate intentionality and autonomy. Furthermore reflexivity in their interactions with digital technologies, and the extraordinary acceleration of technological progress that has been ongoing for several decades requires appropriate adaptation among both teachers and students (Engeness & Gamlem, 2025). Therefore, as Ochojski (2024) points out, “the implementation of technology should be supported by appropriate training for teachers and by informing educational decision-makers about the benefits and risks associated with technology” (p. 117).

This article, being a conceptual synthesis, attempts to recontextualize eye-tracking technology as a tool supporting teachers' professional development. The anal-



ysis of eye-tracking data, which records the dynamics of selective attention, offers a unique opportunity to objectify self-reflection and precisely adapt didactic strategies to individual needs of students. By incorporating technology understood in this way into the education process, it becomes possible to overcome innovation barriers and shape the teacher as a conscious researcher of their own practice – an action researcher who can manage the learning process with courage and ethical sensitivity, thereby building professional capital (Hargreaves & Fullan, 2012; Zhang et al., 2026).

Since eye tracking has for years successfully supported fields as diverse as medicine, neurology, aviation, the automotive industry, psychology, psycholinguistics, marketing, interface design, sports, and the military, we believe it is high time for it to begin serving broadly understood education and teachers on a larger scale. The effectiveness of this technology in analyzing human behavior has already been repeatedly confirmed; therefore, it is worthwhile utilizing this proven tool to optimize teaching processes and better understand students' needs, also taking into account categories such as imagination, visual perception, visual arts, neuroscience, and persuasion (Francuz, 2007). Transferring experiences from such advanced areas to schools and universities would allow for the creation of didactic materials that are naturally tailored to the way our brain processes visual information. This postulate applies to a wide spectrum of educational interventions – ranging from foreign language teaching, sign language, mathematics, chemistry, and natural sciences to the extensive use of multimedia in the educational process (Hadi et al., 2026; Isotaloa et al., 2026; Koudelíková et al., 2026; Wienholz et al., 2026). Bearing the above in mind, the process of introducing eye tracking into the mainstream of teacher education may constitute a step not only toward technological modernization, but above all, toward a profound professionalization of the occupation, based, among other things, on the analysis of empirical evidence.

RESEARCH PROBLEM AND AIM

The main research question of this paper is formulated as follows: in what way can the implementation of eye-tracking technology into the education process of future teachers support the development of their professional proactivity? Therefore, the objective of the undertaken research is to demonstrate a new interpretive framework in the areas of proactivity (job crafting) and eye tracking, assuming that the analysis of one's own attention patterns and classroom interaction dynamics, based on eye-tracking data, could constitute an effective tool for self-reflection for students (future teachers; see Wrzesniewski & Dutton, 2001). Consequently, the implementation of eye tracking into teacher education could represent a paradigmatic shift toward the objectification of self-reflection.



METHODOLOGY

A methodological approach of conceptual synthesis was applied in the theoretical construction of this work. The specialized literature on the subject (Gilson & Goldberg, 2015; Jaakkola, 2020; Torraco, 2005) identifies the following four types of conceptual synthesis: theory synthesis, theory adaptation, typology, and model. This article falls into the first category, within which we aim to achieve conceptual integration by combining multiple theories and different strands of literature. As Jaakkola (2020) notes, “papers of this type offer a new or enhanced understanding of a concept or phenomenon by combining previously unconnected or seemingly contradictory elements in a novel way” (p. 21). The adopted conceptual synthesis is therefore based on a purposive selection of literature in the fields of pedagogy, cognitive psychology, and educational technologies, such as eye tracking. The choice of sources was dictated by their capacity to construct a coherent interpretive framework that links issues of professional proactivity with the capabilities of eye tracking. Publications of high theoretical value were included in the analysis, with an emphasis on their interdisciplinarity and the currency of the studies. The contribution of this work lies in the systematization and synthesis of the current state of research, which allows for providing a new, organized structure to previously scattered theories. According to this approach, it is required that the content of the article be based on a clear research design, while the choice of theories and their role in analytical activities should be explained and justified. Bearing the above in mind, texts of this type contribute to a literature synthesis, offer an integrated theoretical framework, provide added value, and indicate directions for future inquiry. The purpose of conceptual articles is therefore not to test theory in practice through empirical research, but rather to connect different facts in an entirely new way. This article focuses on the synthesis of the existing state of knowledge, aiming to reconstruct new relationships between the adopted theoretical constructs.

EVIDENCE-BASED FACTS

This study places the use of eye tracking at the very center of an educational paradigm shift, in which technology becomes a catalyst for teacher agency. This is of fundamental importance. According to a widely accepted paradigm, attentional processes are inextricably linked to oculomotor control, particularly during the execution of complex cognitive operations (Rayner, 1998; Rayner & Pollatsek, 1992).

In the process of educating future teachers, shifting from passive acquisition of didactic theories to active modeling of one's own interpretive and critical teaching workshop is of key importance (Dewey, 2002; Mezirow, 1991; Sajdak, 2013). This refers to the relations between the types of knowledge valued in the academic environment and the types of competences valued in professional practice (Męcz-



kowska, 2002; Schön, 1983). In this publication, we are primarily interested in the personality-centered concept of the teacher, because “a teacher, who shapes the student’s personality, must himself be a well-formed individual; he must possess a distinct and educationally desirable personality” (Tchorzewski, 2022, p. 101).

In this context, striving to possess a distinct pedagogical personality requires tools that allow teachers an authentic insight into their own professional practice, which is often unacknowledged in the heat of didactic interactions. Eye-tracking technology fills this cognitive gap and, by transcending its original role as a diagnostic tool, can become one of the catalysts for professional self-creation (Obrycka & Meler, 2025). In the remainder of this article, we will conceptualize the two pillars of these considerations: proactivity in the context of teacher competence development and the potential of eye-tracking technology in the process of constructing an expert professional identity.

The development of teacher competences, with a focus on proactivity, situates this issue between praxeological competences (effective planning and evaluation of educational processes) and creative competences (innovativeness and non-standard nature of a teacher’s actions; see Denek, 1998), self-creation competences (Dudzikowa, 1994), emancipatory competences (Czerepaniak-Walczak, 1995), and professional competences (Wallace, 1995). It concerns competences in the field of planning and design, as well as self-educational competences related to professional development (Strykowski et al., 2003). The subject of this study fits into a broader context, namely the issue of teacher professionalism and professionalization – as a contemporary challenge and its determinants (Jegier et al., 2021; Michalski, 2021; Szempruch, 2010) – and the improvement and development of a teacher’s professional competences, asking how to develop them (Gawroński & Kwiatkowski, 2024; Zjaziun, 2005), as well as job satisfaction and professional self-actualization from the perspective of the new professionalism (Gołębniak, 1998; Gołębniak & Zamorska, 2014; Kwiatkowska, 2008; Szempruch, 2013).

Proactivity plays a role in the adaptation process, constituting a form of resourcefulness through which an individual is not entirely dependent on the environment. The intentional activity of the individual defines future goals, considering the surrounding living environment and one’s own internal resources. Consequently, the undertaken activity generates a change in the way reality is participated in (Bańka, 2005, 2009, 2015). Proactivity thus manifests as a subjective, agentic attitude toward events that are yet to occur. By taking the initiative, an individual accumulates personal and social resources. In doing so, they consider both current and future needs, as well as goals and actions. Initiative toward changing reality also requires taking responsibility for this process (Bańka, 2015, p. 98; Crant, 1995, 2000; Wróblewska, 2023, p. 8). As a result, proactivity becomes a way to achieve life goals under conditions of environmental pressure. It provides added value by enabling the development of new competences and demonstrating creativity in



response to change. It is visible in the ability to organize life experience in a way that is useful for solving problems in the future (Bańka, 2015, p. 99). Proactivity can also be understood in a broader context as life activity accompanied by the processes of planning, coping, and management (Cybal-Michalska, 2013, 2014).

Proactivity is understood as the self-creation of adaptation (Bańka, 2009). It constitutes the outcome of an individual's prior development, who, by intentionally launching personal initiative programs, undergoes a process of creative adaptation to changing environmental conditions. Proactivity also represents a future-oriented accumulation of personal resources for the needs of potential demands within career fields (Bańka, 2009). These resources form a capital that may be essential for developing the required activity within the career domain (Bańka, 2005, 2009; 2015, p. 100). From this perspective, proactive behaviors constitute a form of intentional construction of the future through the prior fulfillment of developmental and life tasks in real-time (Bańka, 2015). Proactivity, as a creative life activity, concerns the shaping of subjective characteristics, such as a sense of self-efficacy, motivational self-knowledge, aspirations, and openness to new life experiences (Bańka, 2015).

Proactivity, understood as an intentional life activity that allows for an early confrontation with the future, can be viewed as creative adaptation (Obuchowski, 1985). It is a type of active adaptation consisting in creating a self-concept, plans, tasks, and the means for their implementation (Obuchowski, 1993, 1996, p. 57). Creative adaptation, as the incorporation of innovation into the future world, is also present in the transgressive concept of man (Kozielecki, 1987, 1996, 2001). It assumes that human behavior is autonomous, intentional, goal-oriented, and extends beyond existing capabilities and limitations. Transgressiveness is a positive process of planning and anticipating future development (Kozielecki, 2001; Wróblewska, 2022, p. 138). Transgressive actions indicate active negotiation between the person and the environment, consisting in the intentional transformation of life goals and tasks in such a way that they are achievable and carry gratificatory value for the individual (Wróblewska, 2022, p. 139). The directions of transgressive actions encompass creative activities based on the generation of new, unconventional mental and imaginative constructs, as well as practical activities aimed at increasing the production of material goods (Kozielecki, 2001).

The development of competences, along with openness and readiness for change, is a response to a dynamically shifting reality. Proactive adaptation, as an adaptive self-creation, is of significance in the lifelong learning process. It constitutes a type of creative activity involving the undertaking of actions that transcend established boundaries in order to create new values (Popek, 2001; Wróblewska, 2022, 2023). A creative attitude manifests in the ability to perceive and the readiness to solve problems, as well as in responding to them in a positive manner (Kleszcz, 2016; Kuśpit, 2021; Popek, 2001; Wróblewska, 2015a). Within the func-

tioning of an individual with a creative attitude, there occurs a specific mechanism regulating the interaction of cognitive elements and personality activation, together with the evaluation of the results of one's own activity (Popek, 2001; Szmidt, 2013; Wróblewska, 2022, p. 138). Proactivity and undertaking transgressive actions constitute indicators of subjective creative competences. They allow for the characterization of an individual distinguished by intentionality, agency, and engagement in the processes of change, as well as their emergence, expression, and creation (Wróblewska, 2015a; 2015b). It is worth emphasizing that proactivity and transgressive actions represent vital resources that ensure effective coping in social and professional situations and also serve as predictors of success.

Research around the determinants and correlates of proactivity demonstrates a relationship with transgressive behaviors. This applies to such traits as creativity and innovativeness in seeking and designing new solutions. It is linked to the level of determination in achieving goals and the motivation to enhance one's competences. Proactivity and undertaking transgressive actions also require courage in taking on new, difficult, and risky tasks (Wróblewska, 2015b, 2018, 2023).

Bearing the above in mind, reflections on proactivity in the context of eye tracking should be related to the fact that the key function of contemporary eye-tracking systems is the precise registration and analysis of visual activity, most frequently implemented using specialized infrared cameras (Krejtz et al., 2008). Most of these systems are based on the pupil center corneal reflection method, which, in turn, allows for the precise calculation of the gaze vector. From a research perspective, this technology constitutes an invaluable tool, as it provides objective data on information processing. By recording detailed temporal and spatial data, such as fixation duration, fixation count, or saccade length, eye tracking enables the analysis of attention allocation at a level previously unattainable for traditional declarative methods (Chytry et al., 2025; Gegenfurtner et al., 2011; Zalewska-Meier & Obrycka, 2025).

Eye movements are interpreted as a spatio-temporal process of decoding visual information. It is worth adding that we execute an average of 3 to 5 eye movements per second, and these movements are crucial for coping with the vast amount of information we encounter in daily life (Holmqvist et al., 2011). Eye tracking thus offers a unique insight into cognitive processing, engagement, and knowledge acquisition strategies across various audience groups – from novices to experts, including individuals with special educational needs. This concerns not only disabilities but any barriers or talents that render standard curricula or didactic methods insufficient for a given student. In this context, mention should be made, among others, of the autism spectrum, ADHD, dyslexia, dysgraphia, or dyscalculia (Diotaiuti et al., 2026). In line with the diagnosis, it is assumed that “deficits in control of attention accompany many of affective and cognitive disorders. Findings in the domain of cognitive psychopathology allow observing deficits in attention control



among people suffering from schizophrenia, depression, anxiety or children with ADHD” (Krejtz & Krejtz, 2003, p. 13). Furthermore, educational interventions should include the functional assessment of visual perception, as its specific results can guide the development of concrete visual parameters and therapeutic activities that complement clinical evaluation. This assessment may address visual searching, tracking, pursuit eye movements, accommodation, visual acuity, visual field, contrast, and hue. These aspects provide essential information about vision and can serve as a basis for planning appropriate rehabilitative interventions (Corn, 1991; Kochanowicz, 2019; Turska, 2016; Walkiewicz-Krutak, 2005). According to Pande (2021), a fundamental role in the learning process is played by the coupling of internal (mental) and external representations through sensorimotor interactions (a model of cognitive and sensorimotor mechanisms). Eye-tracking methodology constitutes an operationalization of this paradigm, enabling analysis of the way students select, organize, and integrate information. This allows for the precise identification of critical moments involving excessive cognitive load and difficulties in integrating visual and textual messages (using microsaccade dynamics for the measurement of task difficulty and cognitive load; see Duchowski et al., 2019; Rau et al., 2015). Eye-tracker data, transformed by event detection algorithms into fixations and saccades, are subjected to further analysis using Areas of Interest (AOIs). Visualizing these processes in the form of heatmaps and scanpaths allows for a quantitative and qualitative mapping of oculomotor metrics onto the course of cognitive processes: heatmaps show where a group looked (aggregation), while scanpaths display the order of looking (the dynamics of the process; see Hessels & Hooge, 2019; Jayawardena et al., 2022; Mantiuk & Bazyluk, 2014; Nielsen & Pernice, 2010; Ober et al., 2009; Stolińska & Andrzejewska, 2017). Duchowski (2017) views the aforementioned context holistically, namely:

In approaching the topic of eye tracking, we first have to consider the motivation for recording human eye movements. That is, why is eye tracking important? Simply put, we move our eyes to bring a particular portion of the visible field of view into high resolution so that we may see in fine detail whatever is at the central direction of gaze. Most often we also divert our attention to that point so that we can focus our concentration (if only for a very brief moment) on the object or region of interest. Thus, we may presume that if we can track someone’s eye movements, we can follow along the path of attention deployed by the observer. This may give us some insight into what the observer found interesting, that is, what drew their attention, and perhaps even provide a clue as to how that person perceived whatever scene she or he was viewing. (p. 3)

Bearing the above in mind, it can be emphasized that eye-tracking research results have a direct translation into teaching practice, which in turn may indirectly affect teachers’ proactive actions (Mawduk et al., 2015). The obtained data allows not only for identifying elements that attract attention but also for recognizing



action patterns that generate difficulties. This knowledge is currently becoming a tangible foundation for designing, among other things: adaptive didactic materials (textbooks tailored to the student's level, style, and preferences); effective visual cues (signaling techniques that direct the student's attention to key aspects of the task); and online as well as virtual educational environments (the integration of attention-tracking systems enabling real-time monitoring and management of cognitive engagement; see Hahn & Klein, 2022).

Jarodzka, Holmqvist, and Gruber (2017) identify three areas where eye tracking has been successfully utilized thus far: first, improving the curriculum design process in computer-based educational and testing environments. Second, eye tracking has shed light on expertise and its development in visual domains, such as chess or medicine. Third, eye tracking has been used to promote visual expertise through eye movement modeling examples.

Within the task, relational, and cognitive contexts presented above, the role of the teacher remains paramount. Didactic interventions based on objective attention mapping can enhance both the comprehension of content and the perceptual efficiency of students (Tóthová & Rusek, 2025). Furthermore, the analysis of metrics such as transition patterns or gaze dwell time fosters the development of teachers' professional proactivity, allowing for a better alignment of educational standards with students' actual needs. It should be added that researchers are currently moving away from a simple description of gaze direction toward advanced modeling of affective, metacognitive, interpretive, attentional, mnemonic, regulatory, or motivational processes (Azevedo, 2015; Rayner, 1998). Modern eye tracking aims for the automatic diagnosis of learning difficulties and the mapping of problem-solving processes as key components of educational competences. Given these capabilities, by bridging methodological gaps, eye tracking is becoming an important tool for progress, enabling both teachers and students to move beyond superficial information processing toward deep and focused learning (D'Mello & Graesser, 2012; Jarodzka & Brand-Gruwel, 2017).

Proactivity in a teacher's work, defined as the intentional modification of one's own didactic practice within the task, relational, and cognitive dimensions, thus requires access to objective metrics of the undertaken professional activity. In this regard, eye-tracking technology can constitute a tool enabling the empirical verification of cognitive processes occurring in real-time. The analysis of data derived from eye tracking allows the teacher to juxtapose the evaluation of their own actions with measurable parameters of the student's attention distribution, for example, through the analysis of fixation duration. Consequently, a consciously undertaken redefinition of one's own teaching methods becomes a form of professional transgression, in which the teacher, utilizing precise data on the dynamics of the student's attention, can, among other things, optimize teaching processes and eliminate emerging cognitive barriers.



SUMMARY

This study addresses the issue of integrating advanced eye-tracking systems with modern pedagogical practice. We note that eye-tracking technology possesses the potential to become a standard, complementary diagnostic tool that enriches traditional methods of evaluating student achievement. A key advantage of this solution is the possibility to optimize the process of creating didactic materials, which may allow for a better alignment of learning aids with the specific cognitive needs of students (Robinson, 2015; Żylińska, 2013). Considering the above considerations, the implementation of eye-tracking methodology also emerges as an essential element of a teacher's proactive attitude, extending beyond the framework of traditional educational methods. This is because our proposed concept promotes interdisciplinarity in education, pointing to the necessity of adapting innovative technological tools to provide more precise support for diagnosing cognitive processes and enhancing the quality of education.

CONCLUSIONS

In conclusion, it is worth noting that building a modern teacher identity requires a harmonious combination of a traditional professional ethos – based on knowledge, wisdom, ethical sensitivity, and personal responsibility – with advanced reflexivity in action (Korthagen, 2004; Kotarbiński, 2019). By enabling objective insight into the dynamics of attention and the interpretation processes of visual information, eye-tracking technology becomes a key catalyst for this transformation. This tool does not substitute pedagogical intuition or imagination but rather serves as their essential complement, transforming the teacher from a task executor into a conscious researcher of their own practice (Hattie, 2015; Kostyło, 2018; Tóthová & Rusek, 2025). The integration of eye tracking allows for the precise optimization of cognitive processing, thanks to maintaining a balance between static and dynamic elements of visual message – leading to more effective educational strategies (Slapničar et al., 2025).

Through the application of conceptual synthesis in this text, we aimed to carry out a deconstruction of current paradigms regarding the diagnostic use of eye tracking. Through this approach, we sought to demonstrate that eye-tracking technology transcends its original function, becoming an essential tool capable of supporting the process of constructing the professional identity of a proactive teacher. The implementation of the eye-tracking method into the teacher education process generates a range of concrete practical applications, such as the objectification of professional self-reflection, the optimization of didactic materials, the support of diagnostic competences (particularly in relation to the area of functional vision assessment), and the training of broadly understood pedagogical competences, in-

cluding professional, communicative, interpretive, information technology, media, creative, and collaborative competences. As Szkolak (2011) adds on this matter,

a specific feature of competence is expressed in the fact that it is always a characteristic of a specific person—it is therefore a subjective category linked to a form of human activity, the core of which is a 'skill'. However, it cannot be equated solely with proficiency, as this would be a limitation of its essence. (p. 92)

Today, it can be boldly asserted that contemporary teacher professionalism is based on combining advanced technological tools with critical reflection on the ethical dimension of didactic and educational work (Kotarbiński, 1987). In this model, pedagogical agency is a process that is permanently verified and deepened, which can translate into educational effectiveness and the well-being of both the teacher and the student. Eye tracking is becoming one of the key tools for modern pedagogy (didactics), enabling the translation of knowledge about the functioning of attention into practical didactic solutions that respond more effectively to the complexity of cognitive challenges in the era of ubiquitous digitalization.

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PROAKTYWNOŚĆ W ROZWOJU KOMPETENCJI NAUCZYCIELI: KONTEKST ZASTOSOWANIA NOWYCH TECHNOLOGII TYPU EYE TRACKING

Wprowadzenie: Współczesna edukacja redefiniuje rolę nauczyciela, oczekując od niego nie tylko transferu wiedzy, ale przede wszystkim proaktywności w kreowaniu procesów dydaktyczno-wychowawczych. Kluczowym atrybutem staje się odwaga w wyznaczaniu nowych ścieżek rozwoju, wspierana często przez postęp technologiczny. Rosnąca dostępność systemów eyetrackingowych pozwala wysunąć postulat, aby przyszli nauczyciele rozwijali kompetencje w zakresie wsparcia działań optymalizacji funkcji wzrokowych i poznawczych uczniów, śmiało adaptując innowacyjne rozwiązania.

Cel badań: Celem artykułu jest konceptualizacja wykorzystania technologii okulograficznej (eyetrackingu) jako narzędzia wspierającego rozwój proaktywności zawodowej przyszłych nauczycieli. W pracy podjęto próbę redefinicji roli okulografii – z dotychczasowej metody diagnostyki klinicznej na innowacyjny instrument wspomagający proces kształcenia. W procesie badawczym zastosowano metodę syntezy koncepcyjnej (*conceptual synthesis*). Dokonano integracji interdyscyplinarnych nurtów literatury z zakresu pedagogiki, psychologii poznawczej oraz badań nad uwagą, w celu sformułowania nowych ram interpretacyjnych dla zjawiska proaktywności (*job crafting*) w edukacji.

Stan wiedzy: Dotychczas na gruncie pedagogicznym okulografia była kojarzona m.in. z diagnostyką trudności w uczeniu się, jak np. w przypadku dysleksji. Postulujemy jednak przesunięcie punktu ciężkości w stronę wykorzystania tej technologii w znacznie szerszym wymiarze w procesie kształcenia przyszłych nauczycieli. Przyjmując, że fiksacje oraz sakkady stanowią bezpośredni zapis uwagi selektywnej, zasadne jest włączenie analizy danych okulograficznych do programu studiów. Wykorzystanie obiektywnych wskaźników daje szansę studentom (przyszłym nauczycielom), aby lepiej rozumieć dynamikę lekcji i bezpiecznie testować własne metody pracy.

Podsumowanie: Implementacja technologii okulograficznej w procesie kształcenia pedagogicznego otwiera nowy etap w budowaniu profesjonalnej tożsamości nauczyciela. Przejście od tradycyjnych metod kształcenia do modelu opartego na obiektywnej analizie danych pozwala na głębszą autoewaluację działań dydaktycznych. W paradygmacie interdyscyplinarnego przygotowania kadr pedagogicznych kluczowe staje się wykazanie synergii między zaawansowanym instrumentarium technologicznym a procesem wspomagającym budowanie profesjonalnej tożsamości proaktywnego nauczyciela w zakresie zadaniowym, relacyjnym i poznawczym.

Słowa kluczowe: edukacja, nauczyciel, interdyscyplinarność, proaktywność, eye tracking, synteza koncepcyjna