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O. H. KOTYS
Candidate of Philological Sciences, Associate Professor,
Associate Professor at the Applied Linguistics Department,
Lesia Ukrainka Volyn National University, Lutsk, Ukraine
E-mail: olena.kotys@vnu.edu.ua
https://orcid.org/0000-0002-3360-8288

T. H. BONDAR
Candidate of Philological Sciences, Associate Professor,
Associate Professor at the Department of Foreign and Ukrainian Philology,
Lutsk National Technical University, Lutsk, Ukraine
E-mail: t.bondar@lntu.edu.ua
https://orcid.org/0000-0002-9421-264X

SUPPORTING STUDENTS WITH ADHD IN ACADEMIC WRITING: STRATEGIES FOR INCLUSIVE INSTRUCTION

The article explores the academic writing challenges experienced by students with attention deficit hyperactivity disorder (ADHD) and identifies effective, research-based strategies for inclusive instruction. Although ADHD has historically been perceived as a condition primarily diagnosed in the United States, contemporary international studies demonstrate its global prevalence, revealing that underrecognition frequently stems from diagnostic inconsistencies, cultural misconceptions, and sociopolitical factors. Recent findings indicate rising ADHD rates among children exposed to armed conflict, underscoring the broader environmental and psychological dimensions of the disorder. The article reviews neurodevelopmental mechanisms underlying ADHD, including dysfunctions in the frontal cortex and impairments in executive functions such as sustained attention, planning, organization, impulse regulation, and working memory. These factors significantly influence students’ performance in written expression. Studies by A. Casas, M. Ferrer, I. Fortea, S. Molitor, J. Langberg and others show that writing difficulties among learners with ADHD arise not from isolated linguistic deficits but from complex interactions between attentional control, executive functioning, and metacognitive processes.

Drawing on empirical evidence and more than twenty years of practice, the authors outline pedagogical approaches that support neurodivergent learners in academic writing. Effective strategies include reducing anxiety and perfectionism, using collaborative and time-structured writing activities, segmenting tasks into manageable stages, and employing iterative drafting cycles. Visual scaffolds, templates, graphic organizers, and freewriting techniques enhance clarity, engagement, and confidence. The article also highlights the benefits of integrating supportive digital tools (voice-to-text systems, organizational platforms, color-coding, and focus applications) tailored to students’ cognitive profiles. Emphasis is placed on individualized feedback, goal-setting, and affirming learning environments that prioritize progress over perfection. The authors argue that institutional commitment to universal design for learning, neurodiversity training, and coordinated support services is essential for creating sustainable, inclusive writing instruction. Ultimately, intentional and flexible pedagogical interventions can significantly enhance the academic writing productivity, autonomy, and well-being of students with ADHD.

Key words: ADHD; academic writing, neurodiversity, executive functioning, inclusive instruction, cognitive profiles, learning strategies.

Introduction. Attention deficit hyperactivity disorder (ADHD) is a “common neurodevelopmental disorder most frequently diagnosed in children” [Holland] identified in the elementary school years. Interestingly, boys are more prone to ADHD than girls [Data]. However, new research shows that females are often diagnosed with ADHD later in life, in adulthood [Attoe], and thus undiagnosed young girls may not receive adequate support and instruction during their school years. This issue of underrecognition, however, is not limited to gender or age; it also appears across national and cultural contexts. The predominance of American research over recent decades has fostered the perception that ADHD is primarily a U.S.-based condition, influenced by sociocultural factors unique to American society. However, subsequent international studies suggest

that ADHD is a global neurobehavioral disorder present across diverse populations, though often underrecognized due to diagnostic inconsistencies and cultural misconceptions. A review of 50 prevalence studies (1982–2001) indicated comparable ADHD rates among U.S. and non-U.S. children, underscoring that ADHD is not confined to the American context but represents a widespread public health concern [Faraone].

Research objectives. The article aims to examine the academic writing difficulties experienced by students with ADHD and explore the neurocognitive and environmental factors that contribute to these challenges; to review current empirical research on executive functioning, attentional control, and writing performance of students with ADHD; to identify effective, evidence-based inclusive instructional strategies; to highlights the role of digital tools, collaborative activities, and individualized feedback in supporting neurodivergent learners and enhancing their academic writing outcomes.

Results and Discussion. The global prevalence of attention-deficit/hyperactivity disorder has been rising, although the underlying causes remain insufficiently understood. Environmental contaminants with neurotoxic properties, particularly persistent organic pollutants, have been hypothesized as potential contributing factors. However, current evidence suggests that exposure to such pollutants during pregnancy and early childhood is not significantly associated with an ADHD diagnosis among children aged 3 to 10 years, at exposure levels representative of the general European population [Forns].

Exposure to armed conflict and military aggression has been shown to produce enduring and multifaceted effects on children's physical and mental health, with far-reaching implications for their developmental trajectories. Such consequences often arise from a combination of factors, including insufficient healthcare provision, malnutrition, exposure to infectious diseases, and heightened familial distress. Collectively, these conditions contribute to an increased risk of psychological difficulties. Notably, recent findings indicate a rise in the prevalence of attention deficit hyperactivity disorder among affected children, from 10.2% to 12.6% [War].

Genetic factors underlying ADHD-related neurodevelopmental impairments have been linked to dysfunctions in the frontal areas of the cerebral cortex, the brain regions involved in controlling outward behavioral responses [Martin]. Attention-deficit/hyperactivity disorder is often linked to learning difficulties, particularly in writing. A. Casas, M. Ferrer and I. Fortea, in their study "Written Composition Performance of Students with Attention-Deficit/Hyperactivity Disorder" found that written composition among children with ADHD relies heavily on self-regulation and attentional control. In a comparison of 50 children with ADHD and 50 typically developing peers matched for age and IQ, those with ADHD performed significantly worse on measures of planning, translation, and revision in writing tasks. The authors suggest that deficits in executive functioning or linguistic and metalinguistic skills may underlie these difficulties, emphasizing the need for further research into the mechanisms affecting writing performance in this population [Casas].

Students with attention-deficit/hyperactivity disorder frequently experience academic challenges, including difficulties in reading, mathematics, and written expression. Although writing problems in this population have been less studied, a longitudinal study of 104 middle school students with ADHD (Grades 6–8) found that baseline written expression skills significantly predicted both grade point average and parent-rated academic impairment 18 months later, even after accounting for reading ability, ADHD symptoms, and other covariates. No single component of writing was uniquely predictive, indicating that writing should be addressed as a comprehensive process in educational interventions [Molitor].

The dysfunction of these neural mechanisms impairs executive functions of the brain, including the capacity to anticipate outcomes, analyze situations, draw appropriate conclusions, organize behavior, maintain attention, and regulate impulses, as well as motor and verbal activity. Consequently, the core manifestations of ADHD comprise hyperactivity, impulsivity, and inattention. The predominant etiological factor is believed to be a genetic dysregulation of the neurotransmitters dopamine and norepinephrine within the frontal regions of the cerebral cortex [Nigg].

Students with ADHD frequently encounter challenges related to executive functioning, sustained attention, task initiation and completion, working memory, and emotional regulation. Recognizing

these as neurodevelopmental variations – rather than deficits – is essential for inclusive pedagogy. The experience of the authors of this article in the domain of teaching writing (more than 20 years) has shown that there are some instructional strategies to be applied when teaching students with diagnosed ADHD and with those who demonstrate certain signs like inattention or poor memory.

One of the crucial aspects of successful teaching to write is to reduce anxiety and perfectionism in students. If the learning space is safe, friendly and there is no one to judge, students will be more collaborative and effective. Curriculum permitting, some writing activities – particularly during the drafting stage – may take a collaborative form. Dividing the class into smaller groups and encouraging peer-to-peer learning can be effective when students need support in brainstorming ideas for their writing projects.

Research indicates that students with ADHD often make noticeable progress when writing under time constraints [Bishop]. Although this approach may appear stressful, it can actually have the opposite effect by helping students focus on short-term, manageable goals and giving them a sense of control over their immediate progress. For example, teachers may give students 10 minutes to plan their writing task, 10 minutes to draft and 10 minutes to review. The amount of time may vary depending on the complexity of a task. Instructors must make sure that students are well aware of the final result of their writing process (the output). This helps them structure their work more effectively.

Many ADHD learners write in segments rather than sequentially. Teachers should emphasize the iterative nature of drafting – cycles of drafting, reviewing, revising, and editing – and use freewriting to reduce perfectionism and writing avoidance. It is worth supporting students by segmenting writing into stages (e.g., brainstorming, outlining, drafting, revising) and providing structured timelines, templates, graphic organizers, and progress checklists. Collaborative writing, informal journals or blogs, "explain-it" assignments, visual-to-text exercises, and choice-based formats promote engagement, accountability, and clarity. For students with ADHD, task structure is often more crucial than content. Writing activities that are segmented, visually organized, interactive, and feedback-oriented foster both confidence and competence.

Contemporary writing is no longer limited to paper-and-pen or basic word-processing formats. Although some instructors believe students should avoid technological tools when writing, it is often beneficial for learners – especially those with diverse attentional profiles – to use tools and environments that support their cognitive needs. Such options include voice-to-text technology, visual organizers, color-coding systems, and varied writing spaces. Students should be encouraged to identify effective writing routines through experimentation (e.g., writing sprints, Pomodoro), guided reflection, self-assessment. Organizational platforms (Scrivener, Notion, Obsidian, OneNote), focus applications (Freedom, Cold Turkey, Forest), and planning tools (Trello, Todoist, Google Calendar) can help manage distraction and structure writing tasks.

When providing feedback and evaluation, it is essential to use an individual goal-setting approach. Even when a piece of writing is not perfect, teachers should highlight the student's improvements relative to their previous work, thereby boosting confidence, demonstrating personal progress, and encouraging continued effort and development of writing skills.

Effective support extends beyond the efforts of individual teachers and students. Educational institutions should prioritize faculty development on neurodiversity, the integration of universal design for learning, and active collaboration with disability services to ensure that students receive appropriate, individualized accommodations.

Although individual cognitive abilities are fundamental to the writing process, the social context and environmental interactions in which writing takes place significantly influence its development and effectiveness. Strategies such as actively addressing perfectionism, adopting collaborative approaches to writing, and providing supportive and affirming feedback can help reduce anxiety and foster a more inclusive environment for neurodivergent writers. Emphasizing collaborative writing practices and related strategies may therefore be essential in designing programs and interventions aimed at enhancing the academic writing productivity of neurodivergent graduate students. Participation in peer writing groups, in particular, can strengthen accountability, motivation, and overall productivity [Steinert].

Moreover, students should be encouraged to intentionally adopt writing interventions that align with their individual cognitive profiles, rather than depending solely on standardized approaches. Interventions designed to accommodate diverse cognitive variations should also aim to normalize non-traditional writing practices, such as composing text in varied physical environments [Berg], [Amoly].

Conclusions. The academic writing challenges experienced by students with ADHD arise from the interplay of executive functioning difficulties, attentional variability, and environmental stressors rather than isolated linguistic deficits. The analysis shows that targeted instructional strategies (such as structured writing processes, collaborative activities, supportive digital tools, and individualized feedback) significantly enhance students' writing performance and confidence. Implementing these inclusive, flexible approaches at both classroom and institutional levels can foster more equitable learning environments and improve academic outcomes for neurodivergent learners.

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О. Г. КОТИС
кандидат філологічних наук, доцент,
доцент кафедри прикладної лінгвістики,
Волинський національний університет імені Лесі Українки,
м. Луцьк, Україна
Електронна пошта: olena.kotys@vnu.edu.ua
https://orcid.org/0000-0002-3360-8288

Т. Г. БОНДАР
кандидат філологічних наук, доцент,
доцент кафедри іноземної та української філології,
Луцький національний технічний університет, м. Луцьк, Україна
Електронна пошта: t.bondar@lntu.edu.ua
https://orcid.org/0000-0002-9421-264X

ПІДТРИМКА СТУДЕНТІВ З РОЗЛАДОМ ДЕФІЦИТУ УВАГИ ТА ГІПЕРАКТИВНОСТІ В АКАДЕМІЧНОМУ ПИСЬМІ: СТРАТЕГІЇ ІНКЛЮЗИВНОГО НАВЧАННЯ

У статті досліджуються труднощі академічного письма, яких зазнають студенти з розладом дефіциту уваги та гіперактивності (СДУГ), а також визначаються ефективні, науково обґрунтовані стратегії інклюзивного навчання. Хоча СДУГ тривалий час вважали переважно «американським» діагнозом, сучасні міжнародні дослідження підтверджують його глобальну поширеність і демонструють, що недооцінювання часто зумовлене культурними уявленнями, діагностичною непослідовністю та соціополітичними чинниками. Нещодавні дані свідчать про зростання кількості випадків СДУГ серед дітей, які пережили збройні конфлікти, що підкреслює вплив стресогенних середовищ на нейророзвиток.

У статті розглядаються ключові нейророзвиткові механізми СДУГ, зокрема порушення у роботі лобних часток кори та виконавчих функцій: концентрації уваги, планування, контролю імпульсивності, організації й робочої пам'яті. Ці чинники значною мірою визначають успішність студентів у процесі письмового висловлення думок. Дослідження A. Casas, M. Ferrer, I. Fortea, S. Molitor, J. Langberg та ін. засвідчують, що труднощі письма у здобувачів із СДУГ виникають не через окремі мовні дефіцити, а через комплексну взаємодію уваги, виконавчих функцій і метакогнітивних процесів.

Спираючись на емпіричні дані та досвід роботи, автори окреслюють стратегії підтримки студентів з розладом дефіциту уваги та гіперактивності. Ефективними є методи зниження тривожності й перфекціонізму, використання колаборативних та структурованих за часом завдань, поділ письма на послідовні етапи та застосування циклів багаторазового редагування. Візуальні підказки, шаблони, графічні організатори та техніка фрірайтингу сприяють підвищенню ясності й упевненості. Окремо підкреслено переваги цифрових інструментів – голосового введення, організаційних платформ, кольорового кодування та застосунків для концентрації. Наголошено на важливості індивідуалізованого зворотного зв'язку, реалістичних цілей та підтримувального освітнього середовища. Автори стверджують, що інституційна прихильність до поглибленої підготовки з питань нейрорізноманіття та координованих сервісів підтримки є необхідною умовою сталого, інклюзивного навчання письма. Цілеспрямовані й гнучкі педагогічні втручання здатні значно підвищити продуктивність, автономію та психологічний добробут студентів із СДУГ у процесі академічного письма.

Ключові слова: СДУГ, академічне письмо, нейрорізноманітність, виконавчі функції, інклюзивне навчання, когнітивні профілі, стратегії навчання.

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