Academic Writing Groups in Higher Education:

History and State of Play

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Abstract

Over the past twenty years, graduate studies have seen significant growth, with student numbers more than doubling worldwide. Unfortunately, the Organization for Economic Co-operation and Development continues to report dropout rates averaging 50% for PhD and 40% for master's programs, in all disciplines combined. Among the reasons quoted for abandoning study programs are deficient academic writing competencies that could not only hinder how graduate students progress through their academic journey, but also how they integrate with the scientific community as novice scholars. Accordingly, this article will present an overview of studies related to academic writing groups, which have been identified as one of the strategies to benefit graduate studies. Based on a systematic literature review, we present a chronological account of key issues and concepts that have influenced the phenomenon throughout history. Thereafter, we explain the various characteristics of academic writing groups in order to delineate this phenomenon through the description of its inherent elements and propose an all-encompassing definition. The analysis of 72 documentary sources also allows the observation of trends through the examination of geographical, disciplinary, and methodological factors drawn from scholarly publications. Finally, we highlight considerations for future exploration of academic writing groups used as a pedagogical strategy in the context of higher education, from disciplinary, sociocultural, and gender perspectives.

Keywords: academic writing, writing groups, higher education, graduate students

1. Introduction

Dating back to the Middle Ages, there are records of writing groups forming on the basis of intellectual traditions (Gere, 1987). However, this type of collaboration started to draw greater attention in universities around the 1960s, with reforms promoting social learning (Paré, 2014). Over the last quarter century, academic writing groups (AWGs) adopted various forms, without this diversity of applications being scientifically documented. The lack of a global perspective results, among other things, in a confusion in the terminology used to describe AWGs. Moreover, there are disparities reported on the optimal concepts recommended to support graduate students, particularly doctoral candidates, during their study programs. Therefore, it appears essential to further examine AWGs, as a pedagogical and socialization strategy contributing to student perseverance and integration in the context of higher education.

This article aims at presenting the current situation with AWGs, based on a systematic literature review, by highlighting key scholars and those major theories that have influenced the evolution of the AWG phenomenon over time. Drawing on our synthesis findings, we also delineate the characteristics and inherent elements of AWGs to illustrate how various concepts can be utilized by graduate students. Finally, we identify potential avenues for exploration and documentation by recommending reflexive opportunities for higher education institutions and student-led initiatives warranting subsequent studies in this research domain.

2. Challenges of PhD Students in the World of Academia

In order to adjust to societal changes and technological advances, higher education is in constant evolution. Over the past fifty years, both masters and doctoral programs have seen a significant increase in the number of graduate students across the world, from 28,5 million in 1970, to 100 million in 2000, and 225 million in 2017 (World Bank, 2020). Even though higher education can include study programs delivered by colleges and universities (UNESCO,

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2015), this article will focus on doctoral studies as a general context because this final university level displays discouraging graduation rates in the majority of countries offering doctorate degrees.

2.1 Dropout Rates and Prolongation of Doctoral Programs

Globally, dropout rates for doctoral programs reported by the Organization for Economic Co-operation and Development (2019) have fluctuated around 50% in all disciplines combined. Furthermore, of those students graduating, many will do so by having extended the duration of their studies well beyond deadlines established by universities (Denis & Lison, 2016). Dropout and prolongation of doctoral programs have significant social and financial implications for students, universities, and governments (Fontaine & Peters, 2012). Of course, major life events, such as a birth or illness, can disrupt students" journeys (Deslauriers, 2019). Aside from these exceptional circumstances, students can generally exert influence over several elements contributing to their progression toward graduation. For some students, challenges relating to financial and time management can appear unsurmountable and necessitate a careful evaluation of available resources (Bernheim, 2016). In addition, PhD students can face psychological pressures, including doubt and loneliness (Vézina, 2016). Indeed, the problem of isolation is not only associated with academic integration, but also social integration (Lovitts, 2001), as it affects both relationships developing in personal friendships and those that are forming within the context of university activities. Therefore, institutional responsibilities gain in importance to counterbalance dropout and prolongation factors that go beyond the control of students (Litalien & Guay, 2015). In that sense, the institutional cadre, including thesis advisors and committees, play a pivotal role in enhancing doctoral experiences by progressively facilitating the student's socialization to the world of academia (Park, 2005; Wellington, 2010; West, Gokalp, Pena, Fischer, & Gupton, 2011).

2.2 Socialization of Doctoral Students to the Scholar Profession

The term socialization can be defined as "the interiorization of norms existing in a community that one wishes to integrate [translation]" (Kapp, 2015, p. 2). In that respect, universities are responsible for diversifying opportunities of interactions between PhD students and professors in departmental and disciplinary contexts in order to facilitate the socialization of students to the academic environment and, in turn, to the profession of scholar (Skakni, 2016). According to Becher and Trowler (2001), each disciplinary field internalizes a distinctive conception of research and the scholar profession. However, most disciplines demand that contemporary scholars manage multiple tasks concurrently: research, teaching, administration, publication, communications, and community services (Monin, 2017). Yet, during doctoral programs students are mostly developed to assume one of these functions, e.g., research. Moreover, Golde (2000) questions the authenticity of relationships forming in a context where students are in a position of vulnerability toward faculty staff since academic success depends on certain of these established connections. Therefore, Weidman, Twale, and Stein (2001) propose that the socialization of PhD students occurs on two fronts simultaneously; that is, internally within the university community, but also externally within a professional community. In that regard, Austin (2002) distinguishes natural sciences fostering work relationships within research laboratory teams, from humanities and social sciences involving individual interactions. In any case, PhD students are not only subjected to practices from their university cadre or field of expertise, but also have the capacity to steer their own learning throughout their doctoral journey (Hopwood, 2010). At the heart of these learning experiences is the acquisition of academic writing competencies allowing students to communicate their ideas in a credible fashion to establish a place for themselves in their research community. This socialization to academic writing is necessary for the production of a dissertation and, more broadly, of all written documents punctuating doctoral programs, such as scientific articles, book chapters, communication proposals and proceedings, scholarship applications, and other research reports or teaching material.

2.3 Gaps in the Development of Academic Writing Competencies

In general, students progressing to graduate studies do so without receiving formal education in developing academic writing competencies, namely the norms and practices associated with university level writing (Kapp, 2015). This iterative process encompasses far more than the simple act of writing that ensues from or is interspersed with documentary searches, reflexive periods, revisions, corrections, and modifications (Mazak, 2020), aiming primarily at contributing new knowledge to a specific field of study (Larivière, 2012). Thesis writing follows this iterative process and even though some students will complete this task without difficulties, for other students, it represents a challenging period, due in part to their lack of experience with academic writing (Lavelle & Bushrow, 2007; Lison & Bourget, 2016; Murray, 2001). In some cases, PhD students will also encounter difficulties integrating norms and practices related to the writing of scientific articles, placing them at a disadvantage because the selection for scholarships or paid employment in academic milieus depend, among other criteria, on publications in peer reviewed

journals (Duchesne, 2020). According to Litalien and Guay (2015), it is not only the actual deficiency, but also the negative perception that students may have of their academic writing competencies that can hinder the progression of university projects. In recent years, universities and students have addressed this issue by implementing initiatives aimed at overcoming challenges associated with academic writing. Among these strategies, AWGs are recognized as being successful by transforming a solitary activity into a solidary practice (Murray, 2014), enabling the socialization of students to the world of academia. Indeed, constructive exchanges occurring between members of these groups enhance self-confidence thanks to support from a community of students sharing common challenges (Aitchison, 2009). Moreover, AWGs offer opportunities for formal and informal education facilitating the progress of students in their study programs through the development of competencies essential to academic socialization (Rickard et al., 2009).

3. Methodology: A Systematic Literature Review

In order to draw a comprehensive portrait of the AWG phenomenon, we employed a systematic literature review by developing knowledge through the synthesizing of information. Drawing from a wide spectrum of perspectives and research methodologies, this examination method enables an in-depth understanding of available knowledge and the identification of information gaps, identifying opportunities for further investigation (Russell, 2005). For the purposes of this article, the review aims predominantly at describing characteristics of AWGs and elucidating their evolution. A five-step process developed by Whittemore and Knafl (2005) was used to guide our investigation: (1) problem identification, (2) literature search, (3) data evaluation, (4) data analysis, and (5) presentation.

3.1 Problem Identification

Over the past twenty years, several scholars have focused their attention on various types of AWGs to determine their implications for graduate studies. However, the origin of these groups has not been clearly established, along with their development over time. Therefore, the objective of our systematic literature review aims at analyzing key issues and concepts that influenced the development of AWGs, as well as identifying scholars active in this field of research in order to describe the current situation and offer avenues of exploration for subsequent studies.

3.2 Literature Search

Our literature search was initiated based on a list of 114 references provided by two Canadian researchers focusing their studies on academic writing retreats. After a first triage of these sources, 48 articles were retained by excluding duplicates and documents that did not exclusively pertain to the topic of AWGs. Then, a search for additional references was conducted using a university electronic library from which 16 relevant sources emerged. To do this, keywords were used in English and French, including "writing groups" and "groupes de rédaction" or "academic writing" and "rédaction scientifique", and the search was limited to years of publication between 2000 and 2020. All of these documents served to find other references drawing from their bibliographies by using a method called "the snowball effect" (Wohlin, 2014), which produced 14 additional articles to analyze. Documents related to writing groups in other contexts than graduate studies were excluded, as well as articles covering individual strategies to develop academic writing competencies. In the end, a total of 72 documentary sources were retained for our systematic review. The sequence of this literary search is illustrated, at Figure 1, by means of a PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) flow chart.

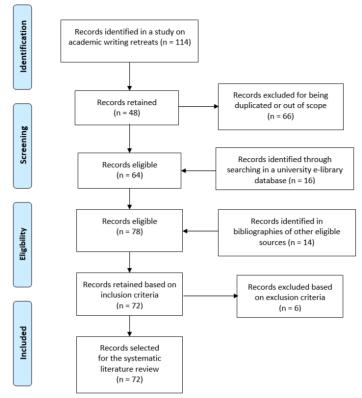


Figure 1. PRISMA flow chart on the selection of documentary sources

3.3 Data Evaluation

The final sample was composed of peer reviewed articles, thesis, compendiums, and books published by scholars. During data evaluation, sources were classified by publication dates, first authors" places of origin, and scholarly disciplines (see Appendix A). It is important to note that 70% of sources were published after 2010 and that they were clustered by five-year increments. A total of 15 countries of first authors are graphically represented, with Australia (n=19) and the United States (n=15) dominating the number of publications. With respect to disciplines, Education (n=36) is preponderant, followed by Health Sciences (n=11) and Linguistics (n=10). Considering the distribution of sources by category, the total number of records selected was deemed sufficient to conduct our data analysis with a view of establishing the evolution and characteristics of the studied phenomenon.

3.4 Data Analysis

The data were first analyzed by identifying key issues and concepts that influenced three periods starting in 2000 until 2005, then 2006 to 2010, and 2011 until today. In this regard, we noted specific contributions made over time by theorists raising questions of importance in scientific works. For example, the name of Rowena Murray, a professor in the field of Education at a Scottish university, appears in ten documentary sources, either as a first author or co-author. Thereafter, the three authors of this present article synchronously analyzed descriptive characteristics of all forms of AWGs through a second review of selected sources, followed by the prioritization of specific elements associated with seven established characteristics until saturation of this information was achieved. In general, our data were homogeneous and representative of the studied phenomenon, in the context of graduate studies, thus allowed to reach a greater understanding of the evolution of AWGs, while exposing contrasts to supplement the overall analysis.

3.5 Presentation

Our findings are presented both in a narrative and table format that illustrates the depth of the topic of interest. We first describe the evolution of the overall phenomenon by describing in a chronological fashion how AWGs progressed over the past twenty years. Then, we delineate the characteristics and offer definitions of several AWG concepts currently in existence. At this last stage of the systematic literature review, Whittemore and Knafl (2005) recommend identifying research limitations, if applicable. In this respect, our analysis is solely based on archived data, that is information already in existence and produced for other purposes than our research, preventing the

verification of its authenticity (Huberman & Miles, 2003). In order to overcome this limitation, we collected a significant number of documentary sources, allowing for information triangulation until reaching data saturation.

4. Results: The Development and the Description of Academic Writing Groups

Despite fifty years of scientific arguments supporting a collaborative approach in favour of learning, the performance of students in doctoral programs is still evaluated on an individual basis. Even though thesis supervisors and members of thesis committees are responsible for supporting PhD students through their journey, they are also in charge of formal assessments. This is where AWGs offer opportunities for intellectual exchanges with other scholars, who are more or less experienced, in a safe environment having no bearing on the assessment of academic performance. The results of our systematic literature review are presented under two themes: (1) the evolution of AWGs over the past twenty-five years to explain how they developed over time; and (2) the characterization of AWGs to describe their inherent elements, as well as propose an all-encompassing definition of the phenomenon.

4.1 The Evolution of Academic Writing Groups

Considering that AWGs morphed into various forms over time, we will discuss key issues associated with this phenomenon based on three historical periods: before 2005, from 2006 to 2010, and from 2011 until the present day.

4.1.1 Before the Year 2005: Socio-Constructivism and Women

It was during the Dartmouth Anglo-American seminar in 1966 that education specialists examined the traditional transmission of content to recommend reforms with a greater focus on process than products (Dixon, 1967; Moffett, 1968; Muller, 1967). During the decade spanning from 1970 to 1980, classrooms became more interactive and dynamic, leaning toward a more social construction of knowledge (Vygotsky, 1978). Considering writing as a social activity (Bruffee, 1986), students were then encouraged to share draft documents to exchange feedback with one another. This approach is at the root of current scientific practices of peer reviews, clearly indicating those sources that inspired the writing process, in the form of a "dialogue" with authors who explored the same topic of interest in the past (Lunsford & Ede, 1992).

The beginning of the 21st century marked the publication of results from one of the most important studies on PhD dropout rates, with 1,986 students participating in an American research toward the end of the 1990s (Lovitts, 2001). Despite this, research examining AWGs during that period did not seem to consider the concept as a valuable strategy to support graduate students. In fact, articles published during this timeframe mainly addressed groups of professors participating in *writing workshops* in order to improve their understanding of writing goals by benefiting from instant feedback from experts and colleagues (Murray, 2001). This period also saw the emergence of *writing retreats* bringing together experienced scholars spending days off university campuses to work toward individual objectives, while benefiting from mutual support by celebrating successes and overcoming challenges (Moore, 2003)

In 2000, Grant and Knowles encouraged female scholars to participate in these types of activities with a view of improving scientific publication output. At that time, because women were often disadvantaged when seeking employment as university professors, aspiring to leadership positions or applying for research grants, some scholars were exploring strategies to enhance their professional representation. In that sense, when women would manage to enter the world of academia, they seemed to prefer uniting with other female scholars for the sake of solidarity. In terms of student integration, Lee and Boud (2003) proposed forming writing teams composed of both experienced and novice scholars from the same faculty or department, with a goal of facilitating social learning through the exchanges of resources between colleagues. This type of initiative seemed to be favoured by humanities and social sciences programs, in comparison to natural sciences where students are often part of research teams in laboratory settings (Moguérou, Murdoch, & Paul, 2003). The latter would be less inclined to look to joining groups to break the feeling of isolation, but also to support their efforts invested as novice scholars aspiring to become an active member of their field of research.

4.1.2 Between 2006 and 2010: Students and Technologies

During this timeframe, certain students continued to rely on the support of structured groups to assist them in completing the final stages of their study programs. However, others started to break from authority figures to unite with their peers, who were able to provide the required support without impinging on the evaluation of academic performance. In that regard, Ferguson (2009) stipulated that writing groups solely composed of PhD students presented practical and psychological benefits since they gave momentum to productivity while enhancing motivation and self-confidence. Writing groups exclusively composed of women continued to be observed, but for reasons that differed from those previously mentioned. While the proportion of female scholars surpassed their male

counterparts in many university disciplines, their graduation rate remained under that of men (OECD, 2019), due in part to their feeling an obligation to drop out of their study programs to cater to family demands. As a consequence, female students persisted in gathering with their peers to increase their productivity at work, as well as provide and receive encouragement leading to a better professional and personal balance (Faulconer, 2010).

Although in 2000 there were several hundreds of thousands of Internet users, in 2006 the number reached over twelve million of netsurfers (Wierzanska, 2012). The information and communication technologies (ICTs) invaded all aspects of our lives and modified the way in which human beings socialized. In regard to PhD students, they started to give up individual office spaces and withdraw from formal activities organized by faculties or departments. Indeed, social media facilitated the gathering of students originating not only from their own study programs and universities, but also from a diversity of disciplines in their region. In 2007, a social movement called "Shut up & Write" emerged across coffee shops in San Francisco, where students used Facebook and Twitter to invite peers to intensive writing sessions, followed by social time (Rowbotham, 2012). These participants, who typically did not know each other, were able to engage in academic writing in the same space, while discussing common challenges related to their university experience. The level of enthusiasm toward this spontaneous gathering caused it to grow in popularity among PhD students wishing to interact with peers, while maintaining a maximum of flexibility due to their busy schedules. Eventually, this practice spread through the United States and also proliferated in Australia and the United Kingdom.

4.1.3 From 2011 to Today: Co-working and Digital Platforms

In 2011, a study examining writing cafes organized by two Australian universities revealed that students better adapted to the academic environment, among other things, by sharing resources essential to their progression and establishing internal and external connections to the groups (Mewburn, Osborne, & Cladwell, 2014). These gatherings were initiated by students in a spontaneous fashion, at a time when it was most convenient for them and a location at proximity to their personal residences, where other students joined them in solidarity. In this way, students progressed their work while comparing their experience with peers from regional universities and a diversity of study programs. The digital modalities used to organize these meetings also served as a means to ask questions and exchange resources with other students, forming a network acting as a learning community. Since 2015, this type of writing group is an activity supported by not-profit organizations, such as *Thèsez-vous* (Note 1) in Canada and its sister organization *ParenThèse* in France (Mathieu-C. et al., 2017). These organizations were originally created for the purpose of organizing writing retreats, but have greatly diversified their services with time, based on requirements expressed by adherents.

It is important to note that AWGs do not suit the needs of all PhD students, as some individuals prefer to write alone or simply lack the time to invest in group activities (Johnson & Mullen, 2007). Nevertheless, the number of individuals living alone tends to be on the rise in several western countries and this may contribute to a growing need for social opportunities. Therefore, the emergence of writing studios has been observed, drawing from the concept of "co-working" spaces, an organizational trend where independent workers share an office space to foster sociability and collaboration (Moriset, 2016). For example, many university websites are promoting writing spaces as initiatives managed by graduate studies administrative offices or implemented by students on their own. As it turns out, writing studios represent an inexpensive solution for universities in terms of infrastructure, time, and money, thus it is not surprising to observe an expansion of this type of gathering. As for digital writing platforms, they cater to the needs for integration of PhD students remote from university campuses or those who prefer online modalities to socialize with others. In that respect, there is an abundance of studies in the fields of e-teaching or e-learning, but it proved difficult to trace references specifically discussing AWGs in a digital context. To our knowledge, there are writing groups that have integrated remote individuals by using online applications, such as Zoom, Microsoft Teams, Google Hangout or Skype, especially during confinement measures imposed by governmental authorities due to the COVID-19 pandemic (Tremblay-Wragg et al., 2021). Therefore, it would be interesting to include scientific outputs that may eventually be published on this particular topic in future literature reviews.

Overall, our chronological review of the evolution of AWGs reveals that socio-constructivist influences have subsisted over the past fifty years, with both scholars and graduate students continuing to engage in academic writing activities together to benefit from expert and peer support. This is especially beneficial in the present days considering that the pressure to publish is even greater than before due, among others, to limited openings for tenure-track positions. In most disciplines, the professional opportunities for women have not improved significantly enough to change the way in which they use AWGs. Therefore, it is observed that female participants are still dominating in terms of number, even though recent articles mention that men find these academic writing strategies

useful. In a similar fashion, new trends in the literature are addressing the use of AWGs by individuals from various sociocultural background who are also underrepresented in academia (Overstreet, Harris, Crumb, & Howard, 2021). The fact that a growing number of scholars representing minority groups embrace a collaborative perspective may eventually alter the competitive nature of academic writing. As for the integration of technologies in AWGs over time, it has allowed to break geographical and institutional barriers present in the earlier years to now observe groups composed of participants coming together from various disciplines, universities, and even countries. Considering that participants continue to find new ways to use older concepts (writing workshops, retreats, and teams), as well as develop new concepts (writing cafes, studios, and platforms), AWGs present an untapped potential for scientific exploration in the context of graduate studies. Therefore, in the following paragraphs, we will dive into the characterization of AWGs to better define them.

4.2 The Characteristics of Academic Writing Groups

For the purposes of this article, we have considered that AWGs represent a phenomenon, that is "an experience lived by human beings" (van Manen, 2017). According to Yin (1982), certain phenomena may also be considered as research contexts, thus it is important to delineate our phenomenon of interest through the description of its inherent dimensions. In that respect, we will proceed with describing seven characteristics specific to AWGs: goals, organization, composition, structure, location, time, and activities.

The main **goal** of AWGs is usually set around a similar theme, namely the progression of academic projects in various forms. Members of these groups write together, although it is important to highlight that they are generally working on individual deliverables while benefiting from the presence of others. Therefore, the development of academic writing competencies and other skills essential to socialization in a scholarly environment can certainly represent another goal motivating participants to join these types of gatherings (Ferguson, 2009). Furthermore, research findings from Papen and Thériault (2018) demonstrate that the experience of PhD students participating in a writing retreat proved to be enjoyable, positively impacted their journey, favourably modified their relation to writing, and above all, contributed to the development of their scholar identity. A study by Stewart (2018), also focused on retreats for graduate students, reported benefits related to writing motivation and community of practice, thus breaking the feeling of isolation plaguing graduate students. Certain groups will establish quantifiable or qualifiable goals, for example completing the co-authorship of a scientific article in a three-month timeframe (Wilmot, 2018). Nevertheless, this sort of fixed target still adheres to intentions related to increasing publications and teaching academic writing.

The **organization** of AWGs may stem from institutional initiatives or student projects, through a single organizer or a team handling the planning, promotion, and coordination of activities. Planning efforts must align with set goals to establish conditions conducive to reaching concrete objectives. At the onset, this may include a project proposal, a request for funding, and the gathering of resources. The promotion of activities may be achieved via university communication channels or social networks external to the institution. In some instances, the coordination function may be executed by a leadership presence during activities, for example, by an expert in academic writing (Lee & Murray, 2013; Pargman, Hedin, & Hrastinski, 2013). In contrast, certain groups operate by sharing leadership responsibilities on a rotational basis, especially in those cases where participants are on an equal footing (Haas, 2014). Finally, some groups will function without clearly identifying a leader, especially when participants are already familiar with the flow of activities, thus not requiring any guidance (Guerin, 2013).

The **composition** of AWGs varies, once again, depending on established goals. In general, there are three different combinations of participants who can be either experienced scholars or novice scholars. The first group is typically composed of faculty staff with a varying degree of seniority in academic environments (Penney et al., 2015). A second group may be exclusive to graduate students, coming from masters and doctoral programs, or only one of these two graduate levels of education (Larcombe, McCosker, & O'Loughlin, 2007; Pololi, Knight, & Dunn, 2004). Finally, blending university professors and students represents another option for research groups already in existence or for participants interested in providing or receiving expert advice (Gardside et al., 2015). It should be noted that occasionally, an individual may join the group by strictly acting as a facilitator without actually engaging in academic writing, such as an administrative employee responsible for coordinating university activities.

The **structure** of AWGs can be articulated around a variety of constructs. In some instances, the group may identify with a specific designation to foster a sense of belonging among participants. In terms of size, there is no definite number of participants ensuring optimal functioning of the group (Haas, 2014), it depends again on the aimed objectives. Gatherings can occur under a "structured" framework inside a program of organized activities or in a more "spontaneous" fashion depending on the availability of participants. The group access may be restricted to a

specific type of participant, discipline, university, and region, or be open to a diverse membership (Cuthbert, Spark, & Burke, 2009). The affiliation to the group may be conditional on a registration process, require a financial contribution or commitment toward specific written tasks, or remain on a voluntary basis. Group members will usually negotiate their mode of operation, based on a set of ground rules (Murray & Newton, 2009), for example, keeping quiet during intensive writing periods.

The **location** where AWGs gather can also vary considerably. Certain groups prefer holding their activities on university campuses to facilitate access for participants and tap into resources available on site (Dickson-Swift et al., 2009). Conversely, other groups would rather meet away from university grounds in a stimulating environment with limited professional or personal interruptions, such as retreating in a recreational site or a cottage in the countryside. Those who live in urban areas may prefer to make use of local businesses in proximity to their personal residences, including coffee shops with free Wi-Fi (Mewburn et al., 2014). Finally, virtual meetings represent an alternative for connecting with a group from a distance or for proponents of digital modalities to engage in collective writing activities (Jolly et al., 2020).

A number of **temporal** elements are considered when organizing AWGs, including duration, repetition, and frequency of meetings. The schedules of professors and students are usually overloaded, even before taking into account personal engagements adding to professional commitments. On average, participants in structured groups will typically meet bimonthly for two-hour sessions (Aitchison, 2009). However, certain groups will gather every week for shorter or longer sessions during university semesters, school years or even more prolonged timeframes. When activities last several hours, or perhaps even multiple days, time management strategies may be integrated to improve productivity by establishing writing cycles and breaks at regular intervals. This common practice draws from a method called Pomodoro, among other time management strategies, whereby goals setting is combined with the alternation of concentration and rest periods to enhance intellectual agility (Cirillo, 2006).

The **activities** associated with AWGs may include expert coaching, setting goals, reading or intensive writing periods, time for discussion or feedback exchanged between participants, breaks to unwind, workshops for the development of academic competencies, and social events (Haas, 2014). Each group member adheres to shared norms and practices, thus forming learning communities where opportunities for exchanging with others materialize upstream and downstream of productivity periods. These exchanges allow for the sharing of challenges, strategies, and resources (Kornhaber, Cross, Betihavas, & Bridgman, 2016), as well as the provision of feedback essential to the progression of university projects (Pargman et al., 2013).

The above seven characteristics have been further deconstructed into specific elements after a third review of our selected sources. In Table 1, these elements are presented in priority order based on their number of reoccurrences in documents where they appeared across our overall literary corpus. It is, therefore, possible to identify prevailing characteristics in the construct of AWGs that can be assembled in a variety of combinations depending on the situation.

Table 1. Academic Writing Groups - Characteristics and Priority Elements

CHARACTERISTIC	PRIORITY ELEMENTS (n)
Goal	Boost publications (15); Teach writing (13); Develop scholars (9); Community building (9); Increase confidence (6); Exchange advice/feedback (4); Create a safe space (4); Provide optimal conditions (space & time) (3); Enhance student retention (2); Facilitate writing in a second language (1); Improve mentorship relationship (1)
Organization	<i>Initiative</i> : Institution (11); Scholars (3); Students (2); Partnership with external organization (1)
	Leadership: Writing experts/elders (10); Research professionals/Librarians (3); Administrative staff (2); Peer facilitation (2); No dedicated leader (2)
Composition	Scholars from one faculty (13); Multi-discipline scholars (12); Graduate students (9); Students & Supervisors (3); Female scholars (3); Native & non-native writers (2); International scholars (1); New researchers (1); Postdoc (1); Underrepresented & disadvantaged students (1)
Structure	Writing retreats (12); Writing groups/circles (11); Credited writing course (2); Writing program (2); Writing workshop (2); Writing space (2); Writing cafes (2); Doctoral support center (1); Writing tutoring (1); Online writing activities (1)
Location	<i>Macro</i> : University campus (12); Off campus-rural (5); On & off campus (4); Online (2); Coffee shops (2); Off-campus-urban (1); Workplace (1)
	Micro: Multifunctional space (1); Common space (1); Room with cubicles (1); Individual rooms (1)
Time	Weekly meetings (10); Monthly meetings (3); Semester to schoolyear (3); 2 days (i.e., weekend) (6); 5 days (i.e., working week) (4); Regular monitoring post-participation (1)
Activities	Expert mentorship/coaching (17); Intensive writing (17); Discussions on academic writing (15); Goals setting (13); Peer review (10); Workshops (9); Planning (7); Team building/Social (5); Editing written work (4); Tutoring (4); Collaborative writing (4); Relaxation (4); Writing exercises (3); Writing abilities evaluation (1); Exchange of resources (1); Celebrating success (1)

The socialization of PhD students rests on a proactive posture consisting of developing strategies depending on individual interests, aptitudes, and circumstances (Vezina 2016). Therefore, a multitude of options exist for those who wish to join AWGs as a means to progress their writing projects. Based on the characteristic priority elements listed in Table 1, we notice a prevalence of institutional initiatives aiming at boosting publication and teaching academic writing through expert mentorship and coaching. These findings could be explained by research efforts having mostly focused on AWGs offering structured activities, whereas AWGs formed in a more spontaneous fashion represent greater challenges to study as a field of research. It will be interesting to observe if studies examining student-led initiatives emerge in the near future, especially with the closure of campuses during the COVID-19 pandemic, preventing graduate students from accessing university services and motivating them to organize peer-support activities.

Overall, our systematic literature review demonstrates the lack of theoretical or evidence-based foundations regarding AWGs, that have instead been explored intuitively by scholars interested in this phenomenon. To our knowledge, there is no general definition encapsulating all forms of AWGs, therefore, we propose the following definition:

Groupings of novice and/or experienced scholars benefiting from the presence of others to invest dedicated writing efforts into progressing individual academic work in shared physical or digital spaces.

5. Discussion: Disciplinary, Sociocultural, and Gender Perspectives

From the outset, we recognize that the majority of scholars interested in matters related to AWGs are English-speaking women in Education Sciences and originating from the United States, Australia, and Scotland. The basis of this observation refers to the argument raised in our chronological narrative, regarding women wishing to enhance their professional representation. Additionally, the common perception of AWGs as strategies to develop writing competencies explicitly falls within the education domain. As for preferred methodologies used by scholars studying AWGs, qualitative approaches prevail in selected documentary sources, with methods varying from literature reviews, narrative studies, phenomenology, ethnography, and case studies. As authors of this article, we bring diversity to the field of research, to some extent, by representing French Canada, although we are all women, mainly working in Education Sciences, and we used a literature review to conduct a qualitative analysis for our inquiry.

It was enlightening to discover several scholars who have recently explored the various forms of AWGs. Evidently, this phenomenon continues to evolve, although some of the precursory concepts identified in older timeframes are still employed today. By reviewing the evolution of older concepts, that is writing retreats, writing workshops, and writing teams, we were able to answer questions regarding professional and personal support provided by experienced and novice scholars. There remain questions to clarify respecting the emergence of newer concepts, namely writing studios, writing cafes, and digital writing platforms. In that regard, it would be interesting to further examine the impact of socialization among students who do not know each other but who share similar experiences. A better grasp of digital modalities used by participants before, during, and after their meetings, would also enhance the understanding of dynamics occurring and the manner by which students employ their network of scholars.

In respect to other studies reviewed, they present similar findings related to the socialization of students to the world of academia, the development of academic writing competencies, and, in the same vein, the increase in self-confidence ensuing from the support of a community sharing strategies to overcome common challenges. These benefits are emphasized by studies focusing on either of the AWG concepts, irrespective of their type or structure. Certain scholars go as far as to discuss the possibility of networks developing through AWGs to compensate for institutional shortcomings, including issues experienced by students lacking support from thesis supervisors (Mewburn et al., 2014). Therefore, it would be interesting to further explore this conjecture, as well as examine if there is a standard profile of students joining AWGs. As such, the level of interest demonstrated by women toward these socialization strategies deserves a more thorough investigation from a gender perspective. Additionally, when studying participation in AWGs, a disciplinary comparison between humanities and social sciences, and natural sciences could be explored; the same applies to the distinction between international and local national students. Furthermore, it would be worth establishing the optimal timings when taking part in AWGs would most benefit students on the continuum of their doctoral journey.

This literature review also represented an opportunity to examine several AWG concepts as strategies to support PhD students throughout their doctoral programs, as well as their general socialization to the world of academia. We established several characteristics related to these groups, including goals, organization, composition, structure, location, time, and activities. Additionally, our systematic literature review allowed for the identification of several benefits and drawbacks ensuing from AWGs. Certain aspects deserve further exploration, particularly the reasons for which some individuals do not consider these strategies beneficial for their particular situation. It is understood that at various steps of the doctoral journey, PhD students must endure moments of solitude by progressing through an intellectual reflection process to assimilate knowledge and develop a personal contribution (Corbel, 2006). However, this isolation may become a cause of suffering for students requiring social support to overcome hurdles along the way. Therefore, it would be interesting to explore literature regarding the creation of communities (Anderson, 2006), especially as it relates to communities of practice (Wenger, 2005) and learning communities (Cristol, 2017), to better understand what these concepts consist of, how they differ from each other, or how they may apply to the phenomenon of interest.

6. Conclusion

This article aimed to present the history and state of play of the AWG phenomenon by means of a systematic literature review. According to our narrative description, it was established that the phenomenon evolved through conceptual diversification over time. Therefore, we examined common and divergent characteristics of precursory concepts that have emerged over the past twenty years and that remain in effect to date in the context of graduate studies. It is interesting to note that none of the older concepts (writing workshops, retreats, and teams) have disappeared over time; they still exist today, either supported by institutional programs or student-led initiatives. In

addition, we examined the emergence of more recent concepts (writing cafes, studios, and platforms), including those relying on digital tools to facilitate networking between participants. Scholars originating from western countries in the fields of humanities and social sciences predominate in studying the benefits obtained by students participating in AWGs. These benefits are directly linked to the socialization of PhD students to the world of academia and the profession of scholar. There remain several aspects of the phenomenon that deserve further exploration to better understand its intricacies through additional research efforts regarding disciplinary, sociocultural, and gender perspectives, as well as the integration of technologies. These proposed lines of research will evidently generate interest among higher education experts of all disciplines combined wishing to enhance support provided to graduate students to reduce their dropout rates in study programs and improve their socialization to the scholar profession.

References

- Aitchison, C. (2009). Writing groups for doctoral education. *Studies in Higher Education*, 34(8), 905-916. https://doi.org/10.1080/03075070902785580
- Anderson, B. (2006). Imagined Communities: Reflections on the Origin and Spread of Nationalism. Verso.
- Austin, A. E. (2002). Preparing the Next Generation of Faculty: Graduate School as Socialization to the Academic Career. *The Journal of Higher Education*, 73(1), 94-122. https://doi.org/10.1080/00221546.2002.11777132
- Becher, T., & Trowler, P. R. (2001). Academic Tribes and Territories: Intellectual Enquiry and the Cultures of Disciplines (2nd ed.). Open University Press.
- Bernheim, E. (2016). La thèse et l'argent. In E. Bernheim, & P. Noreau (Eds.), *La thèse. Un guide pour y entrer... et s'en sortir* (pp. 75-88). Les Presses de l'Université de Montréal. https://doi.org/10.4000/books.pum.4110
- Bruffee, K. (1973). Collaborative learning: some practical models. *College English*, 34, 579-586. https://doi.org/10.2307/375331
- Cirillo, F. (2006). *The Pomodoro Technique*. Creative Commons.
- Corbel, E. (2006). Réflexion sur la diversité des solitudes et leurs solutions. *Horizons philosophiques*, 17(1), 31-45. https://doi.org/10.7202/802965arThe "Write" Skills and More: A Thesis Writing Group for Doctoral Students
- Cristol, D. (2017). Les communautés d'apprentissage: apprendre ensemble. *Savoirs*, *1*(43), 10-55. https://doi.org/10.3917/savo.043.0009
- Cuthbert, D., Spark, C., & Burke, E. (2009) Disciplining writing: the case for multidisciplinary writing groups to support writing for publication by higher degree by research candidates in the Humanities, Arts and Social Sciences. *Higher Education Research and Development,* 28(2), 137-149. https://doi.org/10.1080/07294360902725025
- Denis, C., & Lison, C. (2016). Et si l'encadrement des étudiants au troisième cycle universitaire devenait une priorité? In Karsenti, T. (Eds.). *Mieux former les enseignants dans la Francophonie. Principaux enjeux actuels et futurs* (pp. 375-385). Agence universitaire de la Francophonie.
- Deslauriers, J. P. (2019). *Et si le doctorat était une belle aventure* ? Presses de l'Université Laval. https://doi.org/10.2307/j.ctv1gbrwh6
- Dickson-Swift, V. A., James, E. L., Kippen, S., Talbot, L., Verrinder, G., & Ward, B. (2009). A non-residential alternative to off campus writers" retreats for academics. *Journal of Further and Higher Education*, 33(3), 229-239. https://doi.org/10.1080/03098770903026156
- Dixon, J. (1967). Growth Through English. National Association for the Teaching of English.
- Duchesne, C. (2020). Publier pendant le doctorat, est-ce nécessaire? Revue d'éducation, 7(1), 31-36.
- Faulconer, J. (2010). The Power of Living the Writerly Life: A Group Model for Women Writers. *NASPA Journal About Women in Higher Education*, *3*(1), 210-238. https://doi.org/10.2202/1940-7890.1047
- Ferguson, T. (2009). The "Write" Skills and More: A Thesis Writing Group for Doctoral Students. *Journal of Geography in Higher Education*, 33(2), 285-297. https://doi.org/10.1080/03098260902734968
- Fontaine, S., & Peters, M. (2012). L'abandon des étudiants à l'université : État de la question. In M. Romainville, & C. Michaud (Eds.). *Réussite, échec et abandon dans l'enseignement supérieur* (pp. 33-52). De Boeck Supérieur.

- Garside, J., Bailey, R., Tyas, M., Ormrod, G., Stone, G., Topping, A., & Gillibrand, W. P. (2015). Developing a culture of publication: a joint enterprise writing retreat. *Journal of Applied Research in Higher Education*, 7(2), 429-442. https://doi.org/10.1108/JARHE-07-2014-0065
- Gere, A. R. (1987). Writing Groups: History, Theory and Implications. Southern Illinois University Press.
- Golde, C. (2000). Should I Stay or Should I Go? Student Descriptions of the Doctoral Attrition Process. *The Review of Higher Education*, 23(2), 199-227. https://doi.org/10.1353/rhe.2000.0004
- Grant, B., & Knowles, S. S. (2000). Flights of imagination: Academic women be(com)ing writers. *International Journal for Academic Development*, *5*(1), 6-19. https://doi.org/10.1080/136014400410060
- Guerin, C. (2013). Rhizomatic research cultures, writing groups and academic researcher identities. *International Journal of Doctoral Studies*, *8*, 137-150. https://doi.org/10.28945/1897
- Haas, S. (2014). Pick-n-Mix: A Typology of Writers" Groups in Use. In C. Aitchison, & C. Guerin (Eds.). Writing Groups for Doctoral Education and Beyond (pp. 30-47). Routledge.
- Hopwood, N. (2010). A sociocultural view of doctoral students" relationships and agency. *Studies in Continuing Education*, 32(2), 103-117. https://doi.org/10.1080/0158037X.2010.487482
- Huberman, A. M., & Miles, M. B. (2003). Analyse des données qualitatives, (2nd ed.). De Boeck.
- Johnson, W. B., & Mullen, C. A. (2007). Write to the Top! How to Become a Prolific Academic. Palgrave Macmillan, https://doi.org/10.1057/9780230604780
- Jolly, A., Caulfield, L. S., Massie, R., Sojka, B., Iafrati, S., & Rees, J. (2020). Café Delphi: Strategies for successful remote academic collaboration. *Institute for Community Research and Development, 1*, 1-13. https://doi.org/10.31124/advance.12047109
- Kapp, S. (2015). Un apprentissage sans normes explicites? La socialisation à l'écriture des doctorants. *Socio-logos*, 10, 1-12. https://doi.org/10.4000/socio-logos.3008
- Kornhaber, R., Cross, M., Betihavas, V., & Bridgman, H. (2016). The benefits and challenges of academic writing retreats: an integrative review. *Higher Education Research & Development*, 35(6), 1210-1227. https://doi.org/10.1080/07294360.2016.1144572
- Larcombe, W., McCosker, A., & O'Loughlin, K. (2007). Supporting Education PhD and Ded Students to Become Confident Academic Writers: An Evaluation of Thesis Writers" Circles. *Journal of University Teaching & Learning Practice*, 4(1), 52-63. https://ro.uow.edu.au/jutlp/vol4/iss1/6
- Larivière, V. (2012). On the shoulders of students? The contribution of PhD students to the advancement of knowledge. *Scientometrics*, 90(2), 463-481. https://doi.org/10.1007/s11192-011-0495-6
- Lavelle, E., & Bushrow, K. (2007). Writing Approaches of Graduate Students. *Educational Psychology*, 27(6), 807-822. https://doi.org/10.1080/01443410701366001
- Lee, A., & Boud, D. (2003). Writing groups, change and academic identity: research development as local practice. *Studies in Higher Education*, 28(2), 187-200. https://doi.org/10.1080/0307507032000058109
- Lee, A., & Murray, R. (2013). Supervising writing: helping postgraduate students develop as researchers. *Innovations in Education and Teaching International*, 52(5), 558-570. https://doi.org/10.1080/147032917.2013.866329
- Litalien D., & Guay, F. (2015). Dropout intentions in PhD studies: A comprehensive model based on interpersonal relationships and motivational resources. *Contemporary Educational Psychology*, 41, 218-231. https://doi.org/10.1016/j.cedpsych.2015.03.004
- Lison, C., & Bourget, A. (2016). Pourquoi faire une thèse ? In E. Bernheim, & P. Noreau (Eds.), *La thèse. Un guide pour y entrer... et s'en sortir* (pp. 13-22). Les Presses de l'Université de Montréal. https://doi.org/10.4000/books.pum.4099
- Lovitts, B. E. (2001). Leaving the ivory tower: The causes and consequences of departure from doctoral study. Rowman and Littlefield.
- Lunsford, A., & Ede, L. (1992). Collaborative authorship and the teaching of writing. *Cardoza Arts and Entertainment Law Journal*, 10, 681-702.

- Mathieu, C. S., Lanoue, S., Lorthios-Guilledroit, A., Desmeules, I., & Parent, A.A. (2017, n.p.). Bilan Thèsez-vous: Rapport de l'évaluation d'implantation des retraites de rédaction destinées aux étudiant.e.s aux cycles supérieurs, toutes universités et discipline confondues.
- Mazak, C. (2020). Academic Women's Writing Coach [Podcast]. https://www.cathymazak.com/
- Mewburn, I., Osborne, L., & Cladwell, G. (2014). Shut up & Write! Some surprising uses of cafés and crowds in doctoral writing. In C. Aitchison, & C. Guerin (Eds.). *Writing Groups for Doctoral Education and Beyond* (pp. 218-232). Routledge.
- Moguérou, P., Murdoch, J., & Paul, J. J. (2003). Les déterminants de l'abandon en thèse : étude à partir de l'enquête Génération 98 du Céreq. In *Proceedings of 10^{èmes} Journées d'études Céreq Lasmas-IdL*, Caen, France, May 21-23, 2003.
- Moffet, J. (1968). Teaching the Universe of Discourse. Houghton-Mifflin.
- Monin, P. (2017). La grande transformation du métier de chercheur. *Revue internationale P.M.E.*, 30(3-4), 7-15. https://doi.org/10.7202/1042656ar
- Moriset, B. (2016). Inventer les nouveaux lieux de la ville créative : les espaces de coworking. *Revue de géographie et aménagement, 34*. https://doi.org/10.4000/tem.3868
- Moore, S. (2003). Writers' Retreats for Academics: exploring and increasing the motivation to write. *Journal of Further and Higher Education*, 27(3), 333-342. https://doi.org/10.1080/0309877032000098734
- Muller, H. J. (1967). The Use of English. Holt, Rinehart & Winston.
- Murray, R. E. G. (2001). Integrating teaching and research through writing development for students and staff. *Active Learning in Higher Education*, 2(1), 31-45. https://doi.org/10.1177/1469787401002001003
- Murray, R. (2014). Peer-formativity: a framework for academic writing. *Higher Education Research & Development*, 33(6), 1166-1179. https://doi.org/10.1080/07294360.2014.911252
- Murray, R., & Newton, M. (2009). Writing retreat as structured intervention: margin or mainstream? *Higher Education Research and Development*, 28(5), 541-53. https://doi.org/10.1080/07294360903154126
- OECD (2019). Tertiary graduation rate. https://data.oecd.org/students/tertiary-graduation-rate.htm
- Overstreet, M., Harris, J. A., Crumb, L., & Howard, S. (2021). Facing the Storm: Our First Annual Faculty of Color Writing Retreat as a Microcosm for Being a Black Woman in the Academy. *Journal of Contemporary Ethnography*, 1-24. https://doi.org/10.1177/08912416211013883
- Papen, U., & V. Thériault. (2018). Writing retreats as a milestone in the development of PhD students" sense of self as academic writers. *Studies in Continuing Education*, 40(2), 166-180. https://doi.org/10.1080/0158037X.2017.1396973
- Park, C. (2005). War of attrition: Patterns of non-completion amongst postgraduate research students. *Higher Education Review*, 38(1), 48-53.
- Paré, A. (2014). Writing together for many reasons. Theoretical and historical perspectives. In C. Aitchison, & C. Guerin (Eds.). Writing Groups for Doctoral Education and Beyond (pp. 18-29). Routledge.
- Pargman, D., Hedin, B., & Hrastinski, S. (2013). Using group supervision and social annotation systems to support students" academic writing. *Högre Utbildning*, *3*(2), 129-134.
- Penney, S., Young, G., Badenhorst, C., Goodnough, K., Hesson, J., Joy, R., ... Pelech, S. (2015). Faculty Writing Groups: A Support for Women Balancing Family and Career on the Academic Tightrope. *The Canadian Journal of Higher Education*, 45(4), 457-479. https://doi.org/10.47678/cjhe.v45i4.184396
- Pololi, L., Knight, S., & Dunn, K. (2004). Facilitating Scholarly Writing in Academic Medicine: Lessons Learned from a Collaborative Peer Mentoring Program. *Journal of General Internal Medicine*, 19, 64-68. https://doi.org/10.1111/j.1525-1497.2004.21143.x
- Rickard, C., Mcgrail, M., Jones, R., O'meara, P., Robinson, A., Burley, M., & Ray-Barruel, G. (2009). Supporting academic publication: Evaluation of a writing course combined with writers" support group. *Nurse Education Today*, 29(5), 516-521. https://doi.org/10.1016/j.nedt.2008.11.005
- Rowbotham, J. (2012). Café culture helps with the thesis. *The Australian*. https://dsf.newscorpaustralia.com/theaustralian/?p=5

- Russell, C. L. (2005). An overview of the integrative research review. *Progress in Transplantation*, 15(1), 8-13. https://doi.org/10.1177/152692480501500102
- Skakni, I. (2016). Progresser dans la formation doctorale en sciences de l'humain et du social : individus et structure en tension [Dissertation, Université Laval, Quebec, Canada]. Corpus. https://corpus.ulaval.ca/jspui/handle/20.500.11794/1/browse?type=author&authority=2d0f72a6-0b4d-4600-9b5 6-4ca481aecb87
- Stewart, C. (2018). Dissertation academic writing retreats for graduate students: A qualitative case study [Dissertation, University of Colorado, Colorado, United-States]. Mountain Scholar. https://mountainscholar.org/bitstream/handle/10217/189291/Stewart_colostate_0053A_14664.pdf?sequence=1 &isAllowed=y.
- Tremblay-Wragg, É, Déri, C. E., Vincent, C., Labonté-Lemoyne, E., Mathieu-C., S., Coté-Parent, R., & Villeneuve, S. (2021). Pandémie oblige, les étudiant.e.s aux cycles supérieurs se tournent vers le numérique pour structurer leur rédaction, briser l'isolement et persévérer. *International Journal of Technologies in Higher Education*, 18(1), 291-304. https://doi.org/10.18162/ritpu-2021-v18n1-25
- UNESCO (2015). Draft preliminary report concerning the preparation of a global convention on the recognition of higher education qualification. https://unesdoc.unesco.org/ark:/48223/pf0000234743
- van Manen, M. (2017). Phenomenology in Its Original Sense. *Qualitative Health Research*, 27(6), 810-825. https://doi.org/10.1177/1049732317699381
- Vezina, C. (2016). Les isolements du parcours doctoral. In E. Bernheim, & P. Noreau (Eds.), *La thèse. Un guide pour y entrer... et s'en sortir* (pp. 233-244). Les Presses de l'Université de Montréal. https://doi.org/10.4000/books.pum.4131
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Harvard University Press.
- Weidman, J. C., Twale, D. J., & Stein, E. L. (2001). Socialization of Graduate and Professional Students in Higher Education: A Perilous Passage? *ASHE-ERIC Higher Education Report*, 28(3), 2-138.
- Wellington, J. (2010). More than a matter of cognition: An exploration of affective writing problems of post-graduate students and their possible solutions. *Teaching in Higher Education*, *15*(2), 135-150. https://doi.org/10.1080/13562511003619961
- Wenger, E. (2005). La théorie des communautés de pratique. Presses de l'Université Laval.
- West, I. J. Y., Gokalp, G., Pena, E. V., Fischer, L., & Gupton, J. T. (2011). Exploring effective support practices for doctoral students degree completion. *College Student Journal*, 45(2), 310-323.
- Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Journal of Advanced Nursing*, 52(5), 546-553. https://doi.org/10.11111/j.1365-2648.2005.03621.x
- Wierzanska, M. (2012). Cyberspace as a current frame of reference for teenage life and values. *Media I Społeczeństwo*, *2*, 147-156.
- Wilmot, K. (2018). Designing writing groups to support postgraduate students" academic writing: A case study from a South African university. *Innovations in Education and Teaching International*, 55(3), 257-265. https://doi.org/10.1080/14703297.2016.1238775
- Wohlin, C. (2014). Guidelines for Snowballing in Systematic Literature Studies and a Replication in Software Engineering. In *Proceedings of the 18th International Conference on Evaluation and Assessment in Software Engineering EASE '14* (pp. 1-10). London, United-Kingdom. https://doi.org/10.1145/2601248.2601268
- World Bank (2020). School enrollment, tertiary (% gross). https://data.worldbank.org/indicator/se.ter.enrr
- Yin, R. K. (1982). Studying Phenomenon and Context Across Sites. *American Behavioral Scientist*, 26(1), 84-100. https://doi.org/10.1177/000276482026001007

Notes

- Note 1. Thèsez-vous is a non-profit organization that specializes in creating physical and human environment to facilitate academic writing, offering scholars and graduate students ideal conditions for writing theses, scientific articles and funding applications, based on documented best practices.
- Note 2. Arts, Law & Geography/Environment each have one source that does not appear on the graph.

Appendix A

Categorization of sources (years of publication, countries of first authors, and disciplines)

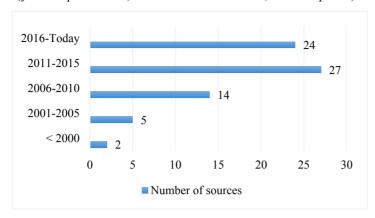


Figure A1. Years of publication

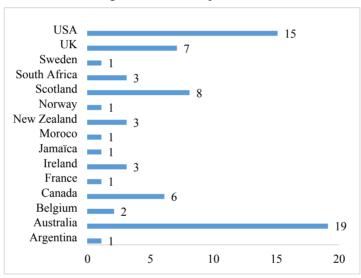


Figure A2. Countries of first authors

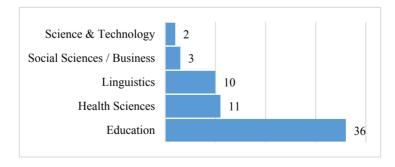


Figure A3. Disciplines (Note 2)

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