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An exploratory study of academic writing literacy and research skills of graduate business students

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ABSTRACT

The paper investigates the state of academic writing literacy and research skills of graduate business programme students based on an evaluation of assessment rubric evaluations. Results indicate that graduate business programme students have sufficient general writing skills, but struggle when applying these to academic writing for a specific discipline. Results also show that students have significant deficiencies when it comes to research skills. This paper discusses the implications of these outcomes and proposes a number of recommendations for programme managers.

Keywords: Academic writing, research skills, graduate business programme, higher education management

Introduction

Students, lecturers and higher education administrators recognize the necessity for good communication skills. These skills are important not just at the university but also in a larger world (Kellogg & Ruelerson 2007). Mastering and improving academic writing and research skills is important for students as it helps them to success in their studies and also in the professional world as the ability to communicate effectively is one of the core work-related skills (WEF 2016).

Gimbel and Mills (2013) find that universities place an ever-increasing range of expectations on graduate students when it comes to academic writing and research skills. Besides general-writing skills, such as grammar and punctuation, argumentation and coherence, and structure (Lea & Street 1998; Canseco & Byrd 1989; Ganobcsik-Williams 2006), more and more universities expect graduate students to carry out critical analysis and to synthesise information from a range academic quality sources e.g. peer-reviewed journals. As the result, independent research skills gain importance. This includes being able to do a background reading within a discipline. Students are also expected to integrate the work of others into their own research and to recognise the contribution of others by referencing (Borg 2000). Information literacy, which includes research skills, has become more important. Information literacy is vital in today's workplace. Managers must use a "variety of information to meet their workplace demands" (Quinn & Leligdon 2014, p. 247) and make sense of research in order to inform their decisions (John 2009).

However, unlike for students enrolled in undergraduate programs, academic writing and research skills are not explicitly taught within disciplinary courses of graduate programs. Academic writing and research instruction remain mostly invisible. There is little time for non-discipline related topics in an al-ready-crowded graduate and post-graduate curriculum. While graduate students are expected to write academic papers, including research papers, in order to fulfil requirements of a degree program, it is assumed that they either come pre-equipped with academic writing and research skills or that they can quickly develop such skills on their own (Lea & Street 1998).

While previous research on academic writing and research skills is widely available, the focus of studies is mainly on general academic literacy or skills development of undergraduate students. Graduate study context is rarely a subject of an investigation. Even less research is done in the area of information literacy or research skills of business students, especially graduate business students (Simon 2009; Quinn & Leligdon 2014).

As a result, the study aims to examine the academic writing and research skills of graduate business students and to identify gaps, if any exist, and propose support mechanisms, which university administrators or programme managers can implement in order to support the academic writing and research skills development of graduate business students.

To do so, the paper will first examine literature on academic writing and research skills in the higher education context. Analysis of academic writing and research skills competences of graduate students is based on a quantitative analysis of a standard research project evaluation rubric, which is then supplemented with qualitative analysis of faculty feedback.

Literature Review

Students writing in higher education is commonplace and fulfils a range of different purposes and it is equally important for undergraduate and graduate students (Rainsbury, Hodges, Burchell & Lay 2002). By writing, students acquire skills, which are then transferrable to other contexts. Students also learn by writing. They learn new subjects and develop knowledge about new areas of study (Lea & Street 1998). Writing in higher education enables students to integrate into a new culture e.g. academic culture, and helps students to engage in a dialogue with a specific disciplinary community (Coffin et al. 2005). Academic writing is also part of standard assessment practices in universities. Students write essays, research papers, and analyses of case studies, projects, and theses. Study curriculum plays a significant and formative role in developing writing (Schleppegrell 2017).

There are defined views regarding what constitutes a good piece of student writing. However, rather than examining writing in terms of good or bad, Lee and Street (1998) suggest to look at academic writing in terms of faculty and student expectations around writing. They identify three models of student writing, which they define as study skills, academic socialisation and academic literacies. These models provide different lenses through which researchers can examine writing practices in academic contexts. Furthermore, they can be "helpful for educators who are developing curriculum, instructional programs, and being reflective on their own teaching practices" (Lee & Street 2006, p. 369).

The study skills model is concerned with the surface features of language and is based on the assumption that mastery of the correct rules of grammar and syntax, punctuation and spelling ensure student competence when it comes to writing (Lee & Street 1998; Lee & Street 2006). Authors also stipulate that students can easily transfer their writing skills and knowledge of writing from one context to another. Curriculum design support this model. It is common, especially in North America and Great Britain, that students take general English language courses, regardless of which discipline they study. European practice is different. Most universities do not teach study skills, as they believe this to be an inefficient way to learn transferrable skills (Wingate, 2006).

The socialisation model stipulates that in order to write well, students should assimilate skills and strategies within particular disciplinary contexts (Lee & Street 1998). For example, students need to be able to identify purposes of text, plan their writing, and connect concepts with specific examples or factors. According to Shanahan & Shanahan (2008), writing also requires students to be objective when approaching topics, even if there are conflicting values or beliefs. Furthermore, depending on the type of a writing assignment, students may be expected to evaluate literature or to assess material critically within a context of a topic or a problem. As a result, students need to have both content area and discipline literacy. For example, content area literacy helps students to learn from subject specific texts whereas discipline literary emphasises "knowledge and abilities to create, communicate and use knowledge within disciplines" (Shanahan & Shanahan 2008, p. 2013). Students also need to develop an extensive disciplinary vocabulary for which effective reading of subject-specific literature is essential (Lee & Street 1998). By doing so students develop solid disciplinary schemata, which leads to academic writing literacy (Jones, 1991). The job of the universities is then to help students to acquire discipline-specific discourse skills by making discipline specific writing requirements explicit to students (Rowsell, Kress, Pahl & Street 2013). This model assumes that academic disciplines are homogenous, which is not the case (Baynham, Lea & Stierer 2002) and students often need to learn to overcome disciplinary conflicts. While universities acknowledge that undergraduate students lack such general writing skills and need support in developing these, it is expected that graduate students come pre-equipped with good reading and writing skills, research skills, and some knowledge of the discipline (Braine 2012). Still research indicates that graduate students face a challenge of transferring general writing conventions acquired during previous studies to a new discipline and product (Berkenkotter, Huckin, & Ackerman 1991; Bitchener & Basturkmen 2006, Hyland 2002).

According to Lee and Street (2006) the third model or academic literacies model is "concerned with a more complex, dynamic and situated process" (p. 368). Student identities and institutional practices are important part of the writing context and practice. For example, McWilliams and Allan (2014) stress the importance of acquisition of academic writing conventions by students, such as referencing and use of formal register. Previous research suggests that students lack confidence when it comes to correct citation and referencing (Kargbo 2010). Universities must also inform students about database research and referencing and citation standards and give students opportunity to work on a range of written assignments. However, George et al. (2006) writes that graduate students rely on internet resources heavily and that many prefer to find sources on the Internet. Information seeking behaviour of graduate students can be explained back speed and time restrictions, convenience, and knowledge of services and sources.

Despite not being research-focused programs, graduate business programs, such as MBA, stress the importance of information literacy, which includes research skills and methodological competence (Healey, Jordan, Pell & Short 2010; John 2009). Meerah et al. (2012) and Murton and Lehtinen (2003) stipulate that universities must prepare graduates for jobs in a knowledge-based economy by developing their information literacy skills. Information literacy refers to the need to fill a gap in knowledge with information, which requires a student or a working professional to find and evaluate information, to synthesise information and to create new knowledge and understanding and to be aware of ethical issues surrounding information use (Quinn & Leligdon 2014; Virkus et al. 2005). According to Murtonen (2015), Meerah et al. (2012), Murtonen and Lehtinen (2003) students find it difficult to acquire research skills and methodological knowledge due to complexity, ambiguity and controversy of academic literature and research. To overcome these difficulties, Lehtinen and Rui (1995) suggests that students need develop and apply concrete procedures and

frameworks to the research problem. Carter (2008) also stresses the importance of sound, coherent and logically developed theory as well as methodological and analytical validity as important elements for high quality academic writing contributions of graduate students. As a result, graduate students should be encouraged to engage in inquiry-based activities, which with the aim that they learn about the research work of faculty and learn about the research process itself (Griffiths 2004) and to develop research skills and be able to apply research methods.

The context surrounding writing is also important (Hyland 2002). Students need to understand the wider university, course and task context as disciplinary context alone is not sufficient in explaining student failures when it comes to writing at a university (Samraj 2002). The specificity of what constitutes good writing depends on an individual university or a course requirement. As a result, students need to understand different layers of context and the complexity that surrounds academic writing at a university (Zhu 2004).

One important context is a need for graduate business management students to consider the practical relevance of research work while at the same time write high quality contributions to management science, which requires academic rigor. The need for practical relevance can come in conflict with a need for academic rigor (Baruch & Peiperl 2000). Practical relevance refers to "the creation of knowledge that managers can use to better understand phenomena relating to what they manage", be it marketing, finance, supply chain management, technology or human resources. On the other hand, academic rigour requires the ability of students to carry out "systematic investigation of a particular topic" (Armstrong 1995, pp. 106-107), including sound methodology and review of state-of-the-art literature on a particular topic. Although some researchers question the value of research for graduate students, writing for knowledge acquisition, which can then be applied to practice, is gaining importance due to an ever more knowledge-based workplace demands (John 2009; Quinn & Leligton 2014).

While graduate students are not exactly novices when it comes to academic writing and research, but they are still far from being expert writers (Thesen & van Pletzen 2006; Shanahan & Shanahan 2008). Novice writers approach research in a linear way, by first doing research, then writing up and reporting on findings (Richardson 2000), while expert writers approach writing as a recursive process. One of the challenges in writing at the graduate level is that students are only exposed to finished work – in a form of a published refereed journal article or a book – when all the "evidence of the recursiveness of writing, of numerous iterations that a piece of writing usually goes through, has been obliterated" (Cameron, Nairn & Higgins 2009, p. 271). The context of graduate programmes is also important. It is quite common that students choose a graduate degree programme in a discipline different from their first degree and therefore these students are not familiar with the disciplinary literacy of the new subject area (Lee & Street 2006; Cameron, Nairn & Higgins 2009). Furthermore, graduate degree programmes are more likely to attract international students, which may have different experiences and expectations when it comes to academic writing and research.

Methodology

The study took place at a large public research university in Switzerland. Participants were in their final year of study in a graduate business administration programme. As part of requirements for graduation, students submit an individual research-based project. Students work independently under the supervision of a faculty member. They receive no formal academic writing or research instruction, just assignment instructions and feedback from faculty. The language of instruction is English. Students' academic writing and research skills were assessed using assessment (grading) rubrics, which were collected over a period of three years, from 2016-2018. Table 1 provides an overview of participants, which includes gender, previous education fields and work experience. Unfortunately, data on nationality or languages spoken was not available.

Table 1 Overview of participants

Demographic	**Content**
Gender	32 female, 59 male
Previous education disciplines	43 engineering, natural sciences or medicine 41 business or economics 7 law or other social sciences
Work experience	> 10 years

The assessment (grading) rubric contains 13 items. Items are measured using a four-point scale: exceed expectations, meets expectations, partially meets expectations and does not meet expectations. Quantitative analysis of assessment rubrics for skills assessment is very common and effective way to judge writing and research skills on a range of traits (Simon & Forgett-Giroux 2000; Rakedzon & Baram-Tsabari 2017; Boettger 2010). Quantitative analysis was supplemented by analysis of faculty feedback (n=18). However, faculty feedback was often unstructured or limited, making it unsuitable for detailed analysis.

Findings and Discussion

Table 2 depicts the results of the quantitative analysis. The results indicate problematic areas when it comes to academic writing and research skills of graduate business students: such as implementation of the research question, methodological competence, clarity of content and evidence-based argumentation, quality and relevance of literature, critical appraisal of literature, and a complete and correct list of references and citations. Between 16 to 31 percent of students failed to achieve expectations on these traits. Students performed significantly better on traits such as clear and well-defined research question, clear and logical structure, practical orientation, grammar and punctuation, adherence to formal requirements, academic style and language.

Table 2 Evaluation of academic writing and research skills (n=91)

	Exceeds Expectations	Meets Expectations	Partially meets expectations	Does not meet expectations
1. Topic and research aim and objectives are clear and well defined	21%	40%	40%	0%
2. Clear and logical structure	25%	44%	31%	0%
3. Implementation of the research question	15%	26%	35%	31%
4. Methodological competence	5%	29%	35%	31%
6. Content is clear and the work is evidence-based	13%	22%	43%	22%
7. Practice orientation and relevance for implementation	19%	51%	30%	1%
8. Scope, quality and relevance of literature (sources)	29%	21%	33%	29%
9. Critical appraisal of literature (sources)	4%	31%	34%	31%
10. Formal requirements and documentation	21%	44%	29%	7%
11. Grammar and punctuation	16%	58%	25%	0%
12. Adherence to academic style and language	21%	46%	29%	4%
13. Complete and correct reference list and in-text citations	16%	37%	30%	16%

A more in-depth analysis shows that 21 percent of students exceeded expectations when defining the research topic and setting the aims and objectives for their project. A further 40 percent met expectations and another 40 percent partially met expectations. Quite a large number of students were not able to "narrow down" the focus of their research projects sufficiently, and as a result, were not able to provide an in-depth investigation of the topic. Still, 39 percent of the students successfully implemented the research question in their work. In this case, students answered all aspects of the research question(s) thoroughly, showed systematic and critical analysis and provided insight for relevant stakeholders, while 35 percent and 31 percent partially met or did not meet expectations when it comes to this criterion.

Results also indicate that 22 percent of students did not meet expectations in regards to evidence-based argumentation, while 43 percent only partially met this requirement and 22 percent fully met this requirement. According to faculty feedback, the common problems in this area included lack of objectivity and lack of academic rigor. Furthermore, students had trouble to provide a conceptual foundation for their work data were not systematically analysed nor presented. Many relied on anecdotal evidence, fads, and gimmicks and. While students exhibited knowledge of the discipline, they were not able to transfer this knowledge to paper.

Results indicate that students did much better when it comes to practical relevance. For example, 19 percent of students exceed expectations, while further 51 percent met expectations, 30 percent partially met expectations and one percent of students did not meet expectations. Faculty comments included keywords such as "current and relevant challenges", "practical relevance", "depth of practical insight", "topic of high practical importance" and so on. This is not surprising, since many of students have significant work experience. Furthermore, graduate business curriculums emphasise practice orientation in research (Carter 2008) and application of knowledge to a task or problem is essential (Armstrong, 1995) also finds that application of knowledge to a task take precedence in management studies.

It is surprising to discover that many students struggled to identify quality literature sources. While 29 percent and 21 percent exceeded and met expectations, 33 percent only partially met expectations and 29 percent did not meet expectations. A closer analysis showed that students were not able to identify subject-specific literature and instead relied frequently on grey literature, such as company reports, newspapers, and websites. One explanation for be due to a low awareness level of different types of information or confusion due to workplace information needs as "workplace information needs do not follow typical academic research practice" (Quinn & Leligdon 2014, p. 247). Thus, it may not be surprising that students could not locate peer-review journal articles from subscription databases. Students were also found to frequently cite websites, such as Wikipedia or other free web sources such as investopia.com or mindtools.com. Students lacking information literacy skills would be more likely to use such free sources due to quick and easy searching possibility on Google (Rempel & Cossarini 2013). A further explanation might also be offered by the academic literacies' socialisation premise (Lee & Street 1998; Lee & Street 2006; Hyland 2002; Samraj 2002).

Students also struggled to do a critical appraisal of literature. Only four percent of students exceed expectations on this criterion, while 31 percent and 34 percent either did not meet or partially met expectations. They summarized models or frameworks, but did not critically reflect or review these in their work. One of the most frequent comments from faculty was that students lacked solid literature foundation in their work. Faculty further commented that students only used a handful of sources and, as a result, students offered an insufficient review of literature or theoretical foundation and were not able to deliver a well-founded result. The following comments appeared frequently in the evaluation forms "the work is based on just a few sources", "very short list of references", "the review of literature is underdeveloped" or there is "lack of critical discussion of state-of-the-art literature on the topic" and "a more extensive use of academic sources is needed". The results can be explained by lack of familiarity of students with search databases and the desire of for convenience and speed when it comes to quick and easy search on the Internet (George et al. 2006). This, in turn, had a negative impact on the overall work – implementation of the research questions and academic rigor.

When it comes to methodological competence, only five percent of students exceeded expectations, while 29 percent met and 35 percent only partially met expectations. Almost one third or 31 percent of students did not meet expectations in this area. Faculty feedback covered the following areas: better explanation of research methods is needed, same sizes are too small or not representative, no systematic data collection, lack of transparency of data collection and analysis. Findings confirm the research of Murton and Lehtinen (2003) that research skills are problematic for many students and more needs to be done to support graduate business students when it comes to information literacy development (Quinn & Leligdon 2014; Virkus et al. 2005), Healey at al. 2010; John 2009).

Students scored much better on the formal requirement criterion, such as pagination, font and spacing, title page, complete indices and appendices. Only seven percent of students failed to meet expectations. The assignment documentation provided a detailed list of formal requirements, so students could just follow the guidelines. Faculty comments were positive and included statements, such as "formal requirements are fulfilled" and "margins, typeface, spacing, page numbering, heading, title page, table of contents", "correct documentation" and "the thesis meets the formal and linguistic requirements".

Results also show that students did well in the area of grammar and punctuation, with 16 percent exceeding the expectations while 58 percent meeting expectations and a further 28 percent partially meeting expectations. When it comes to logical and coherent structure, 25 percent of students were able to structure their work in a clear and logical manner, with further 44 percent meeting expectations and 31 percent partially meeting expectations in this area. When it comes to academic style criterion, results indicate that students were able to show good level of competence in this area. Only four percent failed to meet expectations in this area, while 21 percent exceeded, 46 percent met and 29 percent partially met expectations. Faculty comments included many positive statements such as "the language is formal and understandable", "the work adheres to academic style" and "writing style is of high quality". Results are in line with findings of Bitchener and Basturkmen (2006) and Berkenkotter, Huckin, and Ackerman (1991). While small mistakes do occur, overall, graduate business students have good general writing skills (Lea & Street 1998).

The university placed significant emphasis on compliance with academic honesty. Students received detailed instructions on referencing and citation requirements. The assignment instructions contained detailed information about plagiarism and suggestions for referencing and in-text citations. Sixteen percent of the students failed to meet expectations and further 30 percent only partially met expectations when it comes to complete and correct referencing and in-text citation. Majority of the problems were linked to incorrect referencing and citation, and not plagiarism. For example, some students struggled to distinguish between different types of sources, thus they were not able to provide a correct reference. Another common problem was lack or insufficient in-text citations, especially when it comes to repeat citations and citation for tables and figures. Faculty comments include statements such as: "practice of citing sources is not always correct and not consistent throughout the thesis", "list of references is not always complete or not completely correct respectively", "the citations in the text sometimes do not really relate to the author or the source" and so on. Findings confirm that students often struggle with the originality and synthesis and that graduate students, in general, struggle with technical and rhetorical requirements of citations (Borg 2002; McWilliams and Allan 2014; Kargbo 2010). Furthermore, students may not be familiar with ethical considerations surrounding information (Virkus et al. 2005) or students must be better informed about general academic practices within academia (Lee & Street 2006; McWilliams & Allan 2014).

Conclusions and Implications for Practice

The aim of the study was to examine the academic writing and research skills of graduate students and to identify potential gaps.

Results confirm that graduate business students have the necessary general writing skills (Braine 2012; Bitchener & Basturkmen 2006). For example, students are able to develop a clear and logical structure for their work, can write error free and have no trouble adhering to the formal language requirements. However, findings also indicate that not all students are able to transfer academic writing skills from one context to another, which may be due to a lack of disciplinary schemata in the new discipline (Shanahan & Shanahan 2008; Jones, 1991; Rowsell, Kress, Pahl & Street 2013; Gimbel & Mills 2013; Baynham et al. 2002). However, more research needs to be done in this area, as the current study did not differentiate between academic writing and research stills of students with previous business and economics education background and those with non-business backgrounds.

Still results show that there are gaps when it comes to students doing a literature review within the discipline or chosen subject-area. Findings of the study confirm findings of Quinn & Leligton (2014) that students may be unfamiliar with sources of information and that students may rely too much on quick searches on the Internet (George et al. 2006). Due to an expectation that research-based writing must also be of high practical relevance, students may be confused with it comes to information sources or they simply

rely on Google for quick and simple information search (Rempel & Cossarini 2013). Students also lack knowledge when it comes to citation and referencing (Kargbo 2010).

Findings confirm the results of previous studies, which stipulate that graduate business students may lack information literacy, namely research and methodological competences (Murtonen & Lehtinen 2003). Graduate students may not always able to proceed in an empirical and systematic way with their research (Murtonen 2015; Murtonen & Lehtinen 2003; Meerah et al. 2012).

In order to close the gaps, curriculum development must make provisions for academic writing and research instruction and support in graduate business students (Griffiths 2004; Carter 2008; Virkus et al. 2005). For example, Partridge (2004) argues for needs-based academic writing support, while Coffin et al. (2005) finds that academic writing and research activities must be integrated into the curriculum. Quinn and Leligdon (2014) further suggest that support must include hands-on activities and contextualised examples within disciplines, which can be offered by faculty or online tutorials.

Integration of writing and research activities into the curriculum will require students to attend a course(s), which would address academic writing conventions within the field of business administration and research skills (Lillis 2001). Special attention can then be placed on argumentation and use of sources in order to develop students' rhetorical and intellectual skills (Canagarajah 2002) and would lead to better knowledge-producing activities in their study area (Berkenkotter & Huckin 1995). Embedding of writing instruction into the curriculum is perceived useful by faculty and students and can lead to significant improvements for some students (Wingate, Andon & Cogo 2011). These courses could also help increase student understanding about the academic writing expectations of the university or program (Swales & Feak 2004), thus improving the socialisation of students within academic contexts, which is needed for academic writing literacy (Lee & Street 2006). However, general writing courses, will do little to address content and disciplinary literacy and research skills (Rowsell et al. 2013, Baynham et al. 2002).

Academic writing support may be offered via a university writing centre. Writing centres can provide group or individual writing support. Writing centres often employ student tutors rather than professional writers. The advantage is that student tutors "know writing" because they are themselves engaged in the writing within a discipline. Tutors can support graduate students in terms of writing for a product and writing as a process. However, writing centre tutors are not supervisors and, therefore cannot formally evaluate student papers (Thonus 2002). Writing centres offer flexibility to students and individual coaching offers would be appropriate for graduate students, but they are costly for universities. Writing centres also focus primarily on support for undergraduate students and may not have tutors that have experience in graduate level writing and research. An alternative is embedded group or individual tutorials or coaching within the program – thus addressing the audience needs, context and program requirements better (Zhu 2004).

Writing centres can also provide online support in form of handouts on academic style, interactive exercises on writing, writing introductions, paraphrasing, referencing and critical analysis that students can complete on their own time (Gopee & Deane 2013) or even video tutorials (Mestre 2012). The internet has also become an important source for student writers. There are now a number of online writing labs and online style guides available to student writers. However, these often focus on general academic writing skills and do little to address the problem of writing within a discipline and within graduate context as academic writing requires much more than following universal rules and skills (Hyland 2003). Research skills also tend not to be addressed with the online tools.

Finally yet importantly, one should not underestimate the role of faculty for development of students' academic writing and research skills, especially when it comes to skills development within a concrete disciplines. However, too frequently faculty see themselves as providers of writing opportunities in order for students to learn new content. They do not see their role in helping students to learn to write. Feedback on organization, grammar and usage is often limited or offered sporadically and students rarely get an opportunity to act upon the feedback and to revise the work (Herrington 1981; Boyatzis & Kolb 1995). Feedback on written work focuses on content and is often summative, especially in final research projects, and has a form of assessment of learning, and not necessarily the development of writing or research skills (Zhu 2004). The ongoing dialogue between supervisor and student is of great importance when it comes to writing (Lillis 2001). The role of the university in this case is to set expectations and encourage faculty to give formative feedback which students can use for own skills development. Universities must do more to socialise students and enable them to develop from novice to expert academic writers.

The researcher recognizes the potential for further research that examines the content, disciplinary and research skills. Despite the exploratory nature of the study, it was possible to gain insight into the academic writing and research skills competences of graduate business students. The topic is relevant and needs further analysis, such as university context, and the background of students may need to be accounted for in the analysis in order to better understand the challenges of graduate business students when it comes to academic writing and research. The study also relied on faculty assessment of student academic writing and research skills (e.g. use of a rubric) and faculty feedback. It would be valuable to include student perspectives and instructional support as part of the study.

Biography

Anna Nikoulina has a PhD in Management from the University of St. Gallen, Switzerland. She has completed her Bachelor and Master degrees at the University of Houston. Anna has more than ten years of teaching experience in institutions of higher education. Her research interests include competence development, education for sustainability, teaching and learning in business education. Anna's professional background includes various positions in energy, consumer electronics, and real estate management industries.

References

Armstrong, J. (1995). The devil's advocate responds to an MBA student's claim that research harms learning. *Journal of Marketing*, 59, 101-106. https://doi.org/10.1177/002224299505900311

Baruch, Y., & Peiperl, M. (2000). The impact of an MBA on graduate careers. *Human Resource Management Journal*, 10(2), 69-90. https://doi.org/10.1111/j.1748-8583.2000.tb00021.x

Baynham, M., Lea, M., & Stierer, B. (2002). *Academic writing in new and emergent discipline areas*. The Open University.

Berkenkotter, C & Huckin, T. N. (1995). *Genre knowledge in disciplinary communication: cognition/culture/power*. Hillsdale: Lawrence Erlbaum. https://doi.org/10.2307/358302

Berkenkotter, C., Huckin, T. N., & Ackerman, J. (1991). Social contexts and socially constructed texts: The initiation of a graduate student into a writing research community. C. Bazerman and J. Paradis (Ed.), *Textual dynamics of the professions: Historical and contemporary studies of writing in academic and other professional communities* (pp. 191-215). Madison: University of Wisconsin Press.

Bitchener, J., & Basturkmen, H. (2006). Perceptions of the difficulties of postgraduate L2 thesis students writing the discussion section. *Journal of English for Academic Purposes*, 5 (1), 4-18. https://doi.org/10.1016/j.jeap.2005.10.002

Boettger, R. K. (2010). Rubric use in technical communication: Exploring the process of creating valid and reliable assessment tools. *IEEE Transactions on Professional Communication*, 53 (1), 4–17. https://doi.org/10.1109/TPC.2009.2038733

Borg, E. (2000). Citation practices in academic writing. In P. Thomason (Ed.) *Patterns and perspectives: Insights into EAP writing practice* (pp. 26-42). Reading, UK: Centre for Applied Language Studies.

Boyatzis, R. E., & Kolb, D. A. (1995). From learning styles to learning skills: The executive skills profile. *Journal of Managerial Psychology*, 10(5), 3-17. https://doi.org/10.1108/02683949510085938

Cameron, J., Nairn, K., & Higgins, J. (2009). Demystifying academic writing: Reflections on emotions, know-how and academic identity. *Journal of Geography in Higher Education*, 33(2), 269-284. https://doi.org/10.1080/03098260902734943

Canseco, G., & Byrd, P. (1989). Writing required in graduate courses in business administration. *TESOL quarterly*, 23(2), 305-316. https://doi.org/10.2307/3587338

Canagarajah, A. (2002). *Critical academic writing and multilingual students.* Ann Arbor: University of Michigan Press. https://doi.org/10.3998/mpub.8903

Carter, C. R. (2008). Knowledge production and knowledge transfer: closing the research-practice gap. *Journal of Supply Chain Management*, 44(2), 78-82. https://doi.org/10.1111/j.1745-493X.2008.00059.x

Coffin, C., Curry, M. J., Goodman, S., Hewings, A., Lillis, T., & Swann, J. (2005). *Teaching academic writing: A toolkit for higher education.* London: Routledge.

Ganobscik-Williams, L. (2006). Teaching Academic Writing in UK Higher Education: Theories, Practices and Models. Basingstoke: Palgrave Macmillan. https://doi.org/10.1007/978-0-230-20858-2

George, C., Bright, A., Hurlbert, T., Linke, E. C., St Clair, G., & Stein, J. (2006). Scholarly use of information: graduate students' information seeking behavior. *Information Research: An International Electronic Journal*, 11(4), n4.

Gimbel, P., & Mills, D. (2013). The value of rewriting in graduate educator preparatory programs. *International Journal of Teaching and Learning in Higher Education*, 25(2), 189-199.

Gopee, N., & Deane, M. (2013). Strategies for successful academic writing—Institutional and non-institutional support for students. *Nurse education today*, 33(12), 1624-1631. https://doi.org/10.1016/j.nedt.2013.02.004

Griffiths, R. (2004). Knowledge production and the research–teaching nexus: The case of the built environment disciplines. *Studies in Higher Education*, 29, 709–726. https://doi.org/10.1080/0307507042000287212

Healey, M., Jordan, J., Pell, B., & Short, C. (2010). The research–teaching nexus: a case study of students' awareness, experiences and perceptions of research. *Innovations in Education and Teaching International*, 47(2), 235-246. https://doi.org/10.1080/14703291003718968

Herrington, A. (1981). Writing to learn: Writing across the disciplines. *College English*, 43(4), 379-387. https://doi.org/10.2307/377126

Hyland, K. (2002). Specificity revisited: how far should we go now? English for specific purposes. In A. Johns (Ed.), *Genre in the classroom: Multiple perspectives*. (pp. 385-395). Mahwah NJ: Lawrence Earlbaum. https://doi.org/10.1016/S0889-4906(01)00028-X

Hyland, K. (2003). *Second language writing*. Cambridge: Cambridge University Press. https://doi.org/10.1017/CBO9780511667251

Jais, I., Ismail, O., Jais, I., & Basri, N. (2011). Academic Writing Genres: General versus Content Based Writing. *Journal of Language Studies*, 7(2), 45-64.

Johns, A. (1991). Faculty assessment of ESL student literacy skills: Implications for writing assessment. In L. Hamp-Lyons (Ed.), *Assessing second language writing in academic contexts.* (pp. 167-179). Norwood, NJ: Ablex Publishing Corporation.

John, J. (2009). Study on the nature of impact of soft skills training programme on the soft skills development of management students. *Pacific Business Review*, 19-27.

Kargbo, J. A. (2010). Undergraduate students' problems with citing references. *The Reference Librarian*, 51(3), 222-236.

Kellogg, R., & Raulerson, B. (2007). Improving the writing skills of college students. *Psychonomic Bulletin & Review*, 14, 237-242. https://doi.org/10.3758/BF03194058

Lea, M., & Street, B. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education*, 23 (2), 157-172. https://doi.org/10.1080/03075079812331380364

Lea, M. & Street, B. (2006). The "Academic Literacies" Model: Theory and Applications. *Theory Into Practice*, 45(4), 368-377. https://doi.org/10.1207/s15430421tip4504_11

Lehtinen, E. & Rui, E. (1995). Computer-supported complex learning: an environment for learning experimental methods and statistical inference, *Machine-Mediated Learning*, 5(3 & 4), pp. 149–175.

Lillis, T. (2001). *Student writing*. London: Routledge. https://doi.org/10.4324/9780203186268

Meerah, T. S. M., Osman, K., Zakaria, E., Ikhsan, Z. H., Krish, P., Lian, D. K. C., & Mahmod, D. (2012). *Measuring graduate students research skills. Procedia-Social and Behavioral Sciences*, 60, 626-629.

McWilliams, R., & Allan, Q. (2014). Embedding academic literacy skills: Towards a best practice model. *Journal of University Teaching & Learning Practice*, 11(3), 8.

Murtonen, M. (2015). University students' understanding of the concepts empirical, theoretical, qualitative and quantitative research. *Teaching in Higher Education*, 20(7), 684-698. doi: https://10.1080/13562517.2015.1072152

Murtonen, M. & Lehtinen, E. (2003). Difficulties Experienced by Education and Sociology Students in Quantitative Methods Courses. *Studies in Higher Education*, 28(2), 171-185. doi: https://10.1080/0307507032000058064

Paltridge, B. (2004). Academic writing. *Language teaching*, 37(2), 87-105. https://doi.org/10.1017/S0261444804002216

Quinn, T., & Leligdon, L. (2014). Executive MBA students' information skills and knowledge: Discovering the difference between work and academics. *Journal of Business & Finance Librarianship*, 19(3), 234-255.

Rainsbury, E., Hodges, D. L., Burchell, N., & Lay, M. C. (2002). Ranking workplace competencies: Student and graduate perceptions. *Asia Pacific Journal of Cooperative Education*, 3(2), 8-18.

Rakedzon, T., & Baram-Tsabari, A. (2017). To make a long story short: A rubric for assessing graduate students' academic and popular science writing skills. *Assessing Writing*, 32, 28-42. https://doi.org/10.1016/j.asw.2016.12.004

Richardson, L. (2000) Writing: a method of inquiry, in: N. K. Denzin & Y. S. Lincoln (Eds) *Handbook of Qualitative Research*, (pp. 923–948). Thousand Oaks, CA: Sage Publications.

Rempel, J., & Cossarini, D. M. (2013). Communicating the relevance of the library in the age of Google: Improving undergraduate research skills and information literacy though new models of library instruction. *Nordic Journal of Information Literacy in Higher Education*, 5(1), 49-53.

Rowsell, J., Kress, G., Pahl, K., & Street, B. (2013). The social practice of multimodal reading: A new literacy studies-multimodal perspective on reading. In D.E., Alvermann, N.J. Unrau, R.B. Rudell (Eds). *Theoretical Models and Processes of Literacy* (pp. 1182-1207). Neward, DE: International Literacy Association. https://doi:10.1598/0710.43

Samraj, B. (2002). Texts and contextual layers: academic writing in content courses. In A. Johns (Ed.), *Genre in the classroom: Multiple perspectives*. pp. 163-176. Mahwah NJ: Lawrence Earlbaum, 163-176.

Schleppegrell, M.J. (2017). Systemic Functional Grammar in the K-12 classroom. In E. Hinkel (Ed.), *Handbook of Research in Second Language Teaching and Learning* (pp. 384-396). New York: Routledge. https://doi.org/10.4324/9781315716893-28

Simon, C. (2009). Graduate business students and business information literacy: A novel approach. *Journal of Business & Finance Librarians*, 14 (3), 248–267

Simon, M., & Forgette-Giroux, R. (2000). A rubric for scoring postsecondary academic skills. *Practical Assessment, Research, and Evaluation*, 7(1), 28-42. https://doi.org/10.1080/713613325

Swales, J. & Feak, C. (2004). *Academic writing for graduate students: essential tasks and skills*. Ann Arbor: University of Michigan Press.

Thesen, L., & van Pletzen, E. (2006). In L. Thesen, L., & Van Pletzen, E. (Eds.). (2006). Introduction: The politics of place in academic literacy work. *Academic literacy and the languages of change*. (pp. 1-29). London: Bloomsbury

Thonus, T. (2002). Tutor and student assessments of academic writing tutorials: What is "success?. *Assessing Writing*, 8(2), 110-134. https://doi.org/10.1016/S1075-2935(03)00002-3

Virkus, S., Boekhorst, A., Gomez Hernandez J., Skov, A. & Webber, S. (2005). Information literacy and learning. In Kajberg, L. and Lørring, L. (Eds.) *European Curriculum: Reflections on Library and Information Science Education*, (pp. 65-83). Copenhagen: The Royal School of Library and Information Science.

Wingate, U., Andon, N., & Cogo, A. (2011). Embedding academic writing instruction into subject teaching: A case study. *Active Learning in Higher Education*, 12(1), 69-81. https://doi.org/10.1177/1469787410387814

World Economic Forum (WEF) (2016, January). The future of jobs: Employment, skills and workforce strategy for the fourth industrial revolution. In *World Economic Forum*. [online] available from <http://www3.weforum.org/docs/WEF_Future_of_Jobs.pdf> [16 October 2018]

Zhu, W. (2004). Faculty views on the importance of writing, the nature of academic writing, and teaching and responding to writing in the disciplines. Journal of Second Language Writing, 13(1), 29-48. https://doi.org/10.1016/j.jslw.2004.04.004