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Modern Family or Game of Thrones: A Systematic Analysis of Second Language Writing Publications in Web of Science from 2002-2017

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Abstract

This paper responds to recent discussions about disciplinarity in SLW and its professionalizing prospects that were recently explored in the edited volume Professionalizing Second Language Writing (2016). By employing bibliometric methods to review Second Language Writing (SLW) original research articles published in Web of Science (WoS) from 2002-2017, this paper contributes an understanding of the organizational and institutional contexts in which SLW research takes place. Employing a conceptual framework that is derived from Silva and Leki's (2004) work on the historical disciplinary roots of SLW in "Family Matters" and Matsuda's (2016) edited book on professionalizing SLW, this paper examines: (i): SLW research topics in order to shed more light into its disciplinary roots. (ii): the different academic units that produce its research to better understand its organizational contexts and how they influence its research. The examination concluded that 43.7% of all published research in WoS examines instructional materials, which could suggest how SLW research focuses on pedagogical matters. 21% of the published SLW research in WoS is produced in colleges or departments of education, whereas 20% is produced in Language Centers and Departments. SLW's pedagogy-centred research suggests that its disciplinary growth has expanded beyond its parent disciplines, especially with the increasing role of education departments in producing SLW research. It also seems to suggest that in spite of the expanding organizational contexts for SLW, teacher-centered research remains the primary focus. Finally, the paper concludes by emphasizing the need for SLW practitioners to expand the conversations about professionalizing SLW outside the North-American context and to consider the various organizational realities that surround SLW research.

Keywords: Second Language Writing (SLW), Bibliometric Analysis, Professionalizing SLW

Introduction

Second Language Writing (SLW), also referred to as L2 Writing, is "The study and teaching of writing done in a language other than one's mother tongue—or perhaps better, one's mother hand" (Silva and Leki, 2004, p. 5). Since its emergence in the sixties in the USA, SLW has been housed in different academic departments, usually Linguistics or English departments, because applied linguistics and composition are considered to be SLW's parent disciplines (p. 9). SLW's close affiliations with its parent disciplines, combined with the lack of clear definition of its disciplinarily boundaries, often poses challenges in explaining its familial structures . Many of these challenges are experienced by newcomers to the field (such as graduate students or early-career researchers) who attempt to explain

to non-SLW specialists what SLW does, and how it compares to linguistics and differs from composition studies (Mastsuda, 2013). Despite acknowledging these challenges, several SLW pioneers cautioned against defining and delimiting the field because doing so may exclude some knowledge or methodologies that may undermine the field's diversity and multiplicity as well as negatively affecting the professional activities of SLW researchers (Kubota, 2013, p. 430). This paper extends Silva and Leki's work on SLW's disciplinary family by examining its current organizational and institutional realities across the world .

Disciplinarity in SLW

Recently, conversation has emerged about SLW's disciplinary nature aiming to define its future and professionalization prospects in their flagship journal (*JSLW*) and later in special issues and edited collections. In relation to disciplinarity, SLW has previously been described as 'interdisciplinary' because it is "issue-driven" rather than theory- or method-driven, similar to many fields that emerged at the beginning of the twentieth century (Matsuda, 2013, p. 448). One of the few attempts to engage in that disciplinary conversation was in the special issue of the *JSLW* (2013) dedicated to the future of SLW. Various scholars attempted to redefine the disciplinarity of SLW while remaining aware of the limitations of the modernist conception of disciplinarity that assumes that "reality can be neatly divided into discrete branches of knowledge, which in turn can be conquered by narrowly trained specialists" (p. 448).

In that issue, Paul Matsuda, (2013), one of the leading historians of the field, wrote that an apt characterization of SLW is as a "transdisciplinary field" because the intellectual work in the field transcends various disciplinary and institutional structures in addressing issues surrounding second language writing and writers (Matsuda, 2013). Several contributors to that issue echoed agreement about the transdisciplinary nature of the field that is "as much about people who write (including ourselves) as it is about text" (Casanave, 2012, p. 297 as cited in Lee, 2013). That *JSLW* issue seems to highlight the diversity and complexity of the field, and some of its commentaries also represent the collective refusal to draw a clear boundary that delimits the field (p. 448).

Research Problem

Although the field has been constantly expanding its scope over the last two decades (Matsuda, 2013), there is little to no work dedicated to systematically analysing the organizational contexts in which its research takes place. In 2016, the first book about professionalizing SLW, entitled *Professionalizing Second Language Writing*, reviewed the disciplinary growth of SLW while also exploring some of the everyday institutional issues encountered by its practitioners who are housed in different academic units such as English, rhetoric and education (p. 5 4). Arguably, SLW practitioners around the world could be aware of disparities between these issues and their own institutional realities, due to their graduate training and/or employment in North American universities. The problem is that we lack systematic, evidence-based research that explores institutional contexts outside of North American universities. For example, Thonus (2018) noted how *Professionalizing SLW*'s

primary North American context, as written in its first person testimonials, is limited to its authors' and editors' own experiences. Similarly, Tony Silva (2016) offered in "Overview of SLW Infrastructure" in the *Handbook of Applied Linguistics* some analysis of SLW research outputs focusing on its "prominent authors" and the countries that produce them. Silva did not clearly outline his methodological design for his data collection and analysis, and he clearly indicated that he used his 30 years of experience in the field as one aspect for his data collection and analysis (p. 21).

While these attempts are commendable in laying the groundwork for understanding SLW institutional and organizational contexts even when they capitalized on their North-American authors' own experience, they do not review SLW research contexts across the world (Atkinson, 2000). Developing an understanding of the international organizational and institutional contexts of SLW research could broaden the understanding of disciplinarity in SLW. Moreover, such understanding of these contexts could contribute to resolving the hiatus between SLW practitioners and non-specialists. Also, various SLW stakeholders could benefit from that understanding in better explaining their professional activities for non-SLW specialists. This paper aims to the contribute to the disciplinarily conversation in SLW by offering a systematic investigation of some of the characteristics of: SLW research topics/foci, the institutional structures (academic units/departments) that produce SLW research, and SLW research international presence.

Employing a bibliometric method, this paper aims to answer the following questions: (i) what are some of the characteristics of SLW research topics? (ii) what are the characteristics and distribution of the academic units that produce SLW research? When used appropriately, bibliometrics offers useful tools to make decisions about research priorities, allowing researchers to map the development of science from something intangible (scientific quality) into a manageable entity (Sugimoto and Larivière, 2018; Jonkers and Derrick, 2012). By employing a bibliometric method, the paper aims to provide additional understanding of how knowledge is produced over time, across disciplines, and across the globe (Sugimoto and Larivière, 2018).

Although bibliometrics analysis has been successfully conducted in several social sciences and humanities fields, SLW bibliometrics scholarship is limited in its coverage and analysis. Examples of bibliometric citation analysis studies in social sciences and humanities fields and subfields include works on: psychology, anthropology, linguistics, literature, and history (For example: Meertens et al., 1992; Nederhof, 1989; Nederhof et al., 1989; Nederhof & Noyons, 1992; Nederhof et al., 2000 as cited in Nederhof, 2006, p. 83). The only SLW bibliometric analysis has been conducted by Arik and Arik (2017). In their first-of-its-kind paper, they have attempted to provide an overview of SLW research by offering frequency measures that include the number of publications, distribution of SLW document types (e.g., journal articles; book reviews), and research areas provided by the databases. Nevertheless, Arik and Arik (2017) have acknowledged the limitations of their paper and recommended more research into SLW research topics, which are explored in this current paper.

Firstly, this paper begins by introducing its conceptual framework by offering a brief historical overview of SLW and its growth to better explain its disciplinary roots. Secondly,

the paper introduces the recent scholarship on SLW disciplinarity from Shneider (2009) and Tardy (2016) and professionalizing prospects in SLW from Matsuda (2016) highlighting the contribution of this paper and the gap this paper aims to fill. Then, the paper outlines its methodological considerations. After that, the bibliometric findings on SLW research topics and its academic units are discussed and situated within the existing work on SLW organizational and institutional contexts. Finally, the paper concludes by sharing its implications in addition to its limitations.

Conceptual Framework

The conceptual framework starts with a brief overview of SLW research drawn and synthesized from various seminal works on SLW. This review is provided because the current conversation about professionalizing SLW is often based on discussion of disciplinarity. Furthermore, understanding SLW's disciplinary roots will help in further understanding the overall goal of this paper, which is examining SLW's various organizational contexts. More specifically, understanding the historical disciplinary roots of SLW can shed some light on the institutional and organizational contexts in which SLW teaching and research take place.

Historical Bird's-Eye View of SLW Research

The historical review of SLW's research, presented below, and its expansion is relevant to this paper because it showcases the disciplinary growth in SLW research, which will further help in understanding the relevance of examining SLW's research foci, and how they have grown over the years.

Since the 1960s, SLW research has emerged in response to a lack of research that focuses on L2 students learning how to write in another language. Robert Kaplan's (1966) ground work on contrastive rhetoric at the University of Southern California in the English Communication Program and the Linguistics department where he held a joint appointment was the earliest start of intellectual contribution to the field. Kaplan's work resulted in further inquiries aiming to enhance writers' learning while considering their linguistic and cultural backgrounds. As the field started growing in the later decades, Silva (1993) made an early call for more balanced and rigorous SLW research while noting that it still remains as new area of inquiry (p. 669). By the early 2000s, the growth of SLW and "its disciplinary infrastructure replete with a journal, monographs, edited collections, a book series, annotated bibliographies, graduate courses, and conferences as well as symposia has been rapid (Matsuda *et al.*, 2003, p.152). SLW research has expanded with the introduction of more contexts for thinking about SLW, which led to the emergence of various subfields to the extent that Leki et al (2010) pointed out that it became hard to stay abreast of findings in subdisciplinary areas outside SLW practitioners' area of expertise (p. 1).

"Family Matters": Disciplinary Roots and Organizational Realities

The disciplinary growth of SLW out of its two feeder disciplines, Applied Linguistics and Composition Studies, impacted SLW on different levels beyond the intellectual. Some of SLW's organizational realities are shaped by its own disciplinary and intellectual roots, which were first examined in Silva and Leki's (2004) "Family Matters: The Influence of Applied Linguistics and Composition Studies on Second Language Writing". Their review of SLW's growth explored the influences of its feeder disciplines, composition studies and applied linguistics, as well as *their* parent disciplines, rhetoric and linguistics. They pointed out differences and similarities between composition studies and applied linguistics, which are both young areas of inquiry and interdisciplinary by nature and definition.

One key aspect of their work is their examination of the organizational contexts for teaching and researching SLW in North American contexts. Silva and Leki (2004) state how SLW teaching and research often occurs in English and/or Linguistics departments. However, SLW teachers and researchers are not typically the dominant faculty group in these departments; specialists in literary subjects are the dominant faculty group in English department, and pure linguists are the dominant faculty group in linguistics departments. Both compositionists and applied linguists are often tasked with teaching undergraduate and graduate majors in their respective department. The burden of administering and teaching first-year language courses for ESL/L1 students while struggling for recognition and resources also falls on the hands of applied linguistics and compositionists (Silva and Leki, 2004, p. 9). While doing so, both applied linguists and compositionists offer supporting work for the dominant faculty group in their respective academic units (p. 10).

Shneider's (2009) "Four Stages of a Scientific Discipline"

Building on the review of the historical and disciplinary growth of SLW, the last aspect of the conceptual framework for this paper examines disciplinary growth using biomedical scientist Shneider's (2009) "Four stages of a scientific discipline" as detailed by *JSLW* former editor Christine Tardy (2016). Drawing on her six years of editorial experience and employing Schneider's (2009) model that characterizes both the nature of the research and the researchers at each stage of the development, Tardy explores SLW disciplinary development. In that model, disciplinary development is characterized by the establishment of paper topics, research methodologies, specialized language, and theories and increased sophistication of research (p. 6). Shneider's (2009) model divides the stages of discipline development into four stages: pioneers; developers; producers; and applications.

Using these four stages, Tardy attempts to map out the disciplinary development in SLW. Tardy's analysis is relevant to this paper because its characterization of researchers and their work helps to answer and further contextualize this paper's questions about the research foci in SLW. Furthermore, unlike Tardy's analysis of the disciplinary growth in the field that relied on her editorial knowledge, this paper examines the disciplinary growth in SLW by examining its research foci from SLW bibliometrics records in WoS from 2002-2017.

Tardy argues that the disciplinary growth of SLW has not reached the fourth stage yet, at least through the lens of *JSLW*. In her analysis, the pioneers stage is marked by the earlier work of Kaplan and the work in contrastive rhetoric which voiced the need for writing research that went beyond the sentence level (grammar and punctuation issues). The developers stage is characterized by the development of the major tools and approaches for studying a broader range of phenomena as seen in Silva's (1993) ambitious attempt to analyze research reports. The producers stage refers to research that is highly professionalized in the sense that both the subject matter and methods have become increasingly sophisticated, the leaders in the field tend to be the neatest, most hard working and detail oriented. In her view, the research written from the early 2000s falls under the developers stage.

Interestingly enough, Tardy argues that SLW has not reached the last stage, application, in which prior disciplinary knowledge is applied to practical activities keeping the knowledge alive and relevant. To support her claim that is later opposed by Thonus (2018), Tardy refers to the results of a survey distributed to graduate students and earlier contributors to *JSLW* about the perceived rigor in the review process that is considered limiting by some. Several regular *JSLW* contributors have noted in their survey responses how some of their graduate students are treated poorly by the reviewers in *JSLW*.

Methods

The database Web of Science (WoS) was used to locate and identify bibliometric publications concerning SLW research. For many, WoS is arguably the world's leading indexed database with authoritative content covering the highest impact journals worldwide (Wang et al., 2010 as cited in Li et al., 2017). WoS covers more than 188,000 titles in SLW feeder discipline (Linguistics) and 33,000 titles under educational sciences where SLW research also falls. WoS has a reputation for higher data quality governed by their long-established practices developed across five decades of work, unlike other citation indexes that relied heavily on metadata for indexing (Sugimoto and Larivière, 2018; Nederhof, 2006).

To locate SLW publications, the search was performed with the WoS Core Collection, which includes the Social Science Citation Index (SSCI) and the Science Citation Index Expanded (SCIE¹), using a topic search. Topic search in WoS searches for text in titles as well as in abstracts, addresses, and keywords (Jonkers and Derrick, 2012, p. 830). In addition, topic searches include article keywords provided by the author(s) and additional keywords

¹ WoS Core Collection also includes a third index: the Arts and Humanities Citation Index (AHCI) that is not available in the institution where this study was conducted.

generated on the basis of the article's reference list ("keyword plus"; Garfield and Sher, 1993 as cited in Jonkers and Derrick, 2012, p. 830).

Search Strings' Strategies

Initially, several search strings were tested without setting date limitations and for all sources, including articles, book reviews, conference proceedings, bibliographies, opinion papers, and editorials. First, the search string Topic= ("Second Language Writing") was used. Second Language Writing is the name of the field's top journal aptly named *Journal of Second Language Writing*. Second Language Writing is also widely used in books (see: Kroll (1990) *Second language writing: Research insights for the classroom;* Casanave (2004) *Controversies in second language writing;* Silva, and Matsuda, (2006) *Second-Language writing in the composition classroom;* Leki (2010) *A synthesis of second language writing research;* and Matsuda (2017) *Professionalizing second language writing.* The string "Second Language Writing" yielded 512 sources from 1992-2018. After limiting the search for original articles, the number of sources listed under the search string was 246 original research articles from 1999-2017.

Consequently, a second search string (Topic="L2 Writing") was used. The term L2 Writing is often used in the field, and in some instances interchangeably with SLW (see: Ransdell and Barbier (2002) *New directions for research in L2 writing*; Hedgcock and Ferris (2013) *Teaching L2 composition*; Hinkel, (2015) *Effective curriculum for teaching L2 Writing*. The search string initially yielded 541 sources, not limited to original articles or date. The higher number of results in ("L2 Writing") suggested also using the search string ("L2 Writer") since most of SLW/L2 writing research focuses on pedagogical and instructional matters.

Thirdly, the terms ("ESL Writing"); ("EFL Writing") were used to ensure broader coverage of SLW/L2W research that is rooted in different disciplines as remarked by Silva and Leki (2004) above. Similarly, Polio and Friedman (2017) note how the wide range of topics in L2W research reflect the field's roots in areas of both second language acquisition (SLA) and first language (L1) composition. The detailed results of all of the search strings used in the experiments are in Table 1. The results cover all sources in WoS.

Table 1 List of search strings (n=1733) *2

Number	Search Strings (1981-2018)	Number
512	"ESP Writing"	7
541	"English for Specific Purposes Writing"	0
145	"EFL Writing"	267
35	"EFL Writer"	43
16	"ESL Writing"	121
0	"ESL Writer"	46
0	"SLW Contrastive Rhetoric"	0
	512 541 145 35 16	 "ESP Writing" "English for Specific Purposes Writing" "EFL Writing" "EFL Writer" "ESL Writing" "ESL Writer"

² Results include: Articles, book reviews, conference proceedings, editorials, and opinion papers

After finalizing the selection of the search strings, a meeting with the university librarian was arranged to ensure reliability and robustness of the selected search strings in additional to institutional accessibility. The meeting and the different experiments held in it ensured the reliability of the search strings in Table 2. A final reliability test was carried out by searching under WoS categories using advanced search. Queries using advanced search and Boolean operators were used as in the following example WC=(Linguistics)+TS= (Second Language Writing) to check if they yielded the same results as topic search. The results from the advanced WoS categories search were similar to the results from the topic search above.

After removing duplicates, 813 original articles and their document information from the period 2002-2017 were retrieved from WoS core collection using the search strings in Table 2. The reason for restricting the publications to 2002-2017 is that the Journal Citation Report (JCR) data available through the institutional subscription of the university where this paper was conducted dates from 2002 for most journals listed in the SSCI and SCIE indices. However, there are 52 articles dating from 1981-2001. All papers (n=813) were downloaded and stored in the same day to compile a bibliography of all papers related to SLW research. Document information included title, abstract, author keywords, names of authors, contact address, year of publication, WoS subject categories, research categories, names of journals publishing the articles, and the count of total times cited in WoS.

Articles' Coding Procedures

The manual coding process started with coding the title and the keywords. Then the abstract was read/scanned to ensure the accuracy of the coding. In cases of uncertainty and/or missing abstracts, the whole article was skimmed, and further subcategories were developed if needed. For example, an article about freshmen summary writing was added under writers' texts similar to articles about coherence and cohesion in graduate writing. Articles that examined the use of rubrics were added under assessment, for example. Because of the large numbers of documents that fell under the coding category (instruction and Assessment), 5 subcategories were added (as seen in table 2).

Table 2 SLW Research categories used for coding articles

SLW research area	Description
Practitioners	Teachers' perspectives /teachers' attitudes/ teachers' practices/teacher education/ student
	teachers/teacher training
Writers' texts	Writing topics/ paraphrase and summary writing/ cohesion and coherence/ mechanics/
	citations/ thesis and dissertations writing/ vocabulary
Writers' processes	Process-oriented assessment/ process writing/ planning and revising/metacognition/
	transfer
Identity	International students/ gender/ nationality/ adaptability
Backgrounds and goals	Disciplinary issues in SLW/theory/policy/research methods/genre research
Context for L2 writing	Undergraduate writing/graduate writing/professional writing/ writing centres
Instruction and assessment	Learning/teaching/teacher-student writing conferences
Technology	Use of blogs/Wikis/social media/online resources
Peer-feedback	Peer-review/peer-revision
Assessment	Corrective feedback/scoring/rating/rubrics/placement tests
Rhetoric	Greek rhetoric/ Aristotle/ Plato/ Roman rhetoric/Cicero
Argumentation	Argument modes/classical argument/ Rogerian Argument/logic

This method posed some complexity in determining the appropriate code for each article which is common in similar studies (see: Pehl, 2012). For example, an article about Hong Kong students' use of quotations in essays could fall under writers' texts or identity. Yet, considering that all of the articles examine second language writing, it was decided that it falls under texts. Technology was classified under instruction because all articles examine technology from a pedagogical perspective. Contexts for L2 writing were defined in the same manner used in Leki (2010), and writing centers were added as one more context for SLW writing. Conceptual Genre research was classified under background and goals because it has been at the forefront of L1 and L2 writing research (Hyland, 2007; Johns, 2011; Jonkers and Derrick, 2012).

Departments' Coding Procedures

Since the goal of this paper is understanding the organizational and institutional contexts of SLW research, the different departments in which SLW research is produced the departments that were provided in SLW research records were coded. 7 codes were used to categorize the departments provided by the first, second and third authors. 77% of the 813 included articles only provided the address of the first author. When the primary author has not provided a department, the department of the second author was used if it was provided.

The departments were coded when available, following the coding scheme in Table 3 below.

Table 3 Departments Coding Schema

Department	Total
Education; Curriculum and Instruction; Teacher Education; Teaching and	170
Learning	
Linguistics; Applied Linguistics	83
English	147
ESL departments and programs; Foreign Language Departments and	159
Centres	
Academic Literacy	4
Others: Business; Phycology; media	58
Writing	6
N/A	186

Results and Discussion

Search Strings Overview

A quick review of the use of the search strings may offer some indications about the growth in the specialty of the field similar to how Tardy (2016) noted that the terms "SLW" / "L2 Writing" are becoming the norm to introduce SLW research with lesser use of the earlier term "ESL writing".

In this paper, 67% of the results were yielded from using two search strings ("SLW" and "L2 Writing"). The changes in the use of the search strings are presented in figure 1 below. A two-sample t-test was performed to examine the use of the two strings by comparing their means. The means were (\overline{x} L2 Writing= 20.125, \overline{x} SLW= 14.375, p=0.027). A one-way ANOVA was performed to compare the means of the 3 most used search strings: "L2 Writing"; "SLW" and "EFL Writing". The analysis was not significant, p=0.064.

Table 4 Search Strings' Use from 2002-2017

Year	L2 Writing	SLW	EFL Writing	L2 Writer	ESL Writing	EFL Writer	L2 Academic Writing	ESL Writer	ESP Writing	Academic Literacy	Grand Total
2002	6	3	1	1		1			1		13
2003	6	7							2		15
2004	5	6	3	1	1			1	1		18
2005	2	4	1	1		1					9
2006	4	5	3	1	1			1			15
2007	8	6	4		4						22
2008	9	7	7			2					25
2009	15	17	3		3		1	1			40
2010	8	13	5	5	5		1				37
2011	17	13	3	3		1	1				38
2012	19	21	2	4	2	1	1				50
2013	23	17	9	1	1	1	2	2			56
2014	34	26	10	7	4		1	1			83
2015	49	24	25	6	7	3	3	1		1	119
2016	61	32	27	8	9	3		1		1	142
2017	56	29	20	8	6	3	5	2		2	131
Total	322	230	123	46	43	16	15	10	4	4	813

In spite of the use of the terms "L2 Writing" and "SLW" recognized by Tardy (2016) as a sign of growth in the field, the term "EFL Writing" is still used with 15% of SLW research in WoS classified under it. When it comes to professionalizing SLW, there could be an advantage for using the two terms "SLW" and "L2 Writing" when referring to writing research, especially for the starting SLW practitioners who may benefit form a more recognizable body of SLW/L2W research as Matsuda (2013) wrote in the disciplinary dialogue about SLW future:

Many of us who are contributing to this disciplinary conversation can afford to live without the term second language writing [italics added] or the collective sense of the field it refers to. We also have enough symbolic capital to negotiate the intellectual currents that surround us—through venues such as these disciplinary dialogues. For graduate students and novice scholars who are starting out in the field, however, being able to identify with a socially-recognized intellectual formation is going to be useful as they try to establish themselves in their respective institutional and disciplinary contexts. (p.450)

SLW Research in WoS Overview

SLW research has grown in WoS from 2002 to 2017, where the number of SLW articles increased from 13 in 2002 to 132 articles in 2017, as can be seen in the table 5 below. This growth possibly captures Shneider's (2009) third stage of disciplinary development as mapped out by Tardy (2016). The increase in the number of articles and the emergence of new areas of specializations are key characteristics in the developer's stage in Shneider's model.

Topic	Year: 2002	Year: 2017
Practitioners	0	6
Writers' Texts	3	23
Writers' Processes	1	7
Identity	4	7
Background and Goals	2	6
Contexts for L2 writing	2	13
Teacher Research	0	1
Instruction and Assessment	0	18
Technology	0	19
Feedback	0	14
Peer Feedback	0	5
Assessment	1	9
Rhetoric	0	2
Argumentation	0	1
Grand Total	13	131

Table 5 SLW Topics in 2002 vs. 2017

To account for the growth in WoS research categories, SLW research growth was calculated following two steps:

- (1)- Calculating the growth rate in the different WoS categories that include SLW research outputs by dividing the numbers of articles produced in each year from 2002-2017 by the numbers of journals in each category. This information was obtained from the Journal Citation Report (JCR). The growth rate was calculated for the education and linguistics categories since 52.40% of SLW research appeared in the education field, and 39.48% of it appeared in the linguistics field. The results of the increase of articles in the education and linguistics categories is presented in figure 4.
- (2)-Then, to calculate SLW growth rate, the number of SLW articles published in each year was divided by the corresponding WoS category average for each year.

The results of the increase in the WoS categories and SLW increase as normalized by JCR is presented in figure 1 below.

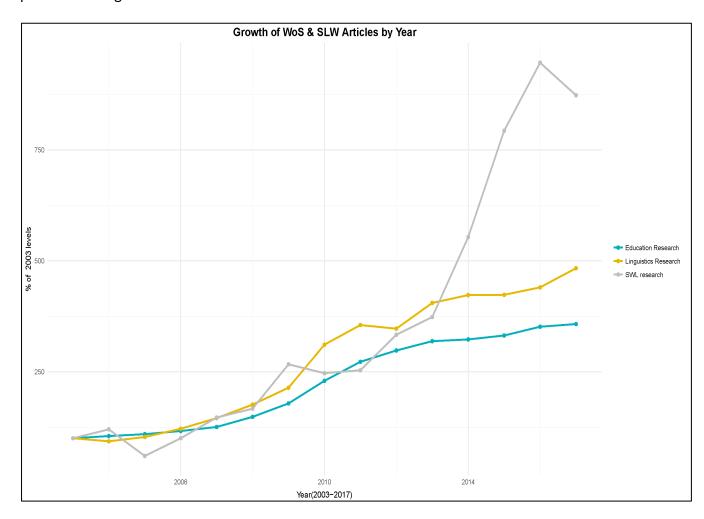


Figure 1 Increase in Articles in Education and Linguistics Normalized by JCR

SLW Research Topics

Research that examines issues related to instruction and assessment and its subcategories represents 43.7% of all SLW published research in WoS from 2002-2017. Instruction and assessment topics were further categorized to include research on: technology; feedback; peer-feedback; assessment; rhetoric and argumentation. The second researched topic in SLW is writer's texts, which represents 17.7% of the published research in WoS. These findings are similar to the earlier reviews of SLW research that noted how it focused on instructional and pedagogical matters (See: Leki, 2010; Silva, 2016; and Polio, 2016 in their books reviewing SLW research trends and foci). Table 6 below represents all of SLW topics in WoS from 2002-2017.

Table 6 SLW Research Topics in WoS from 2002-2017

Topic	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Grand Total
Practitioners			2			4	1		3	3	1	7	2	12	12	6	53
Writers' Texts	3	3		1	3	4	3	7	5	3	16	6	19	23	26	23	145
Writers' Processes	1	2	1		1	1	1	3	3	2	2	6	7	10	6	7	53
Identity	4			3	1	2	3	2	1	3	4	3	4	14	11	7	62
Background and Goals	2	5	3	2	1	3	1	6	5	12	7	3	7	6	13	6	82
Contexts for L2 writing	2	1	4		1	1	2	1	4	1	2	4	6	5	15	13	62
Teacher Research			1													1	2
Instruction and Assessment		2	4	1	1	1	3	3		5	6	9	7	13	15	18	88
Technology			1	1	2	1	3	6	5	6	3	5	18	12	17	19	99
Feedback		1	2	1	2	4	6	5	6	2	4	5	4	12	11	14	79
Peer Feedback		1			3		1	1	2			1	1	1	8	5	24
Assessment	1					1	1	6	3		4	6	8	10	7	9	56
Rhetoric												1		1	1	2	5
Argumentation										1	1					1	3
Grand Total	13	15	18	9	15	22	25	40	37	38	50	56	83	119	142	131	813

In fact, the relatively large proportion of research on instruction and assessment could indicate that SLW has reached its fourth stage of disciplinary development, according to Shneider's model, in developing applications. Similar to Thonus (2018) who rejected Tardy's (2016) claim that SLW research has not reached the application change by pointing out how most of *JSLW* articles are targeting teaching and learning practices (p. 90), the proportion of teaching-centric research in this paper suggests that there is a body of SLW research geared for application in the classroom.

A one-way ANOVA was performed to compare the means of the 8 coded SLW research topics and their 6 subcategories. As expected, there was a variance in the researched topics (p < 0.05).

Yet, it is important to point out how that varied SLW research topic are often seen as a good sign of SLW disciplinarily or (trans)disciplinarily that is enriching SLW professionals' options. Several SLW scholars perceive its expansive research foci as delimiting it and broadening its (trans)disciplinarily by increasing its areas of inquiries. Silva (2016), for example, argues that a multi-disciplinary approach would seem quite appropriate and also salutary in keeping SLW professionals' options open and working to prevent them from being limited by the rigidity of a single theoretical or methodological paradigm (p. 33). Silva's approach toward disciplinarity in expanding SLW professionals' options is also echoed by others such as Kubota (2013) and Polio and Friedman (2016).

In spite of that varied researched topics in SLW, argumentation is the least researched topic. As Atkinson (2013) and later Hirvela (2017) pointed out that there is ample scholarship and significant debate about subjects like corrective feedback, plagiarism, peer review, and voice, but argument has somehow escaped our attention as a topic of significant discussion, despite its manifest importance in SLW instruction (p.70).

SLW research across departments

Departments and topics

The different academic units/ departments that produce SLW research could represent how SLW work is motivated by a wide variety of issues pertinent to writers, language and texts. It follows that the "transdisciplinary" view of SLW brings with it a diversity of viewpoints and identities, as well as disciplinary and institutional affiliations from which scholars seek answer to their research questions (Kim, 2018, p.55).

This paper's analysis of the departments that produce SLW research indicates that education departments lead SLW research as the research produced in education departments represents 21% of SLW research in WoS from 2002-2017. Research produced in language departments and/or centres, and English departments represents 20% and 18% of SLW research in WoS, respectively. Research produced in language centres represents 19.56% of SLW research in WoS followed by research produced in English departments, which is 18.08%. SLW research produced in Writing Departments is only 0.47% in WoS.

Despite that SLW research takes place across different departments and continues to absorb ideas from different fields (Silva, 2016), its research still focuses on issues related to writers and texts as asserted by Polio and Friedman's (2016) recent review of it. The distribution of the coded SLW research topic across departments is presented in table 7 below.

Table 7 SLW research topics across departments

Topic	Education Depts.	Linguistics Depts.	English Depts.	Language Departments and Centers	Academic Literacy Depts.	Others	Writing	N/A	Grand Total
Practitioners	10	10	9	9		4	1	10	53
Writers' Texts	26	20	30	27	1	6		35	145
Writers' Processes	14	5	17	8		2		7	53
Identity	15	7	12	10	1	4		13	62
Background and Goals	14	8	12	19	1	4	1	23	82
Contexts for L2 writing	14	5	12	18	1	7		5	62
Teacher Research	1							1	2
Instruction and Assessment	14	7	13	20		8	1	25	88
Technology	15	7	23	17		10	2	25	99
Feedback	21	5	8	17		7		21	79
Peer Feedback	6	1	4	4		2		7	24
Assessment	19	7	5	10		4	1	10	56
Rhetoric	1		1					3	5
Argumentation		1	1					1	3
Grand Total	170	83	147	159	4	58	6	186	813

To examine the variance in the coded researched topics across the departments, a one-way ANOVA was performed to compare the variance in the research topics across the 7 departments. There was no significant variance (p>0.05). With 7 different departments researching topics that pertain to issues related to text and writers, or "issue-driven", Matsuda's (2013) remark about the field is driven by the shared sense of problems and issues that need to be addressed seems plausible, and even more plausible when he proceeds to state: "In a transdisciplinary field, we do not define the issues; issues define us" (p. 448).

Institutional Contexts

Arguably, examining the institutional contexts in which SLW research takes place could be helpful in shedding some light on the recent observations made about its (trans)disciplinarily and professionalizing. However, most of the existing, and only, scholarship on SLW's institutional contexts is based on personal experiences and/or limited to North-America (e.g., Kim, 2016; Silva, 2016; Matsuda, 2013; Lee, 2013; Atkinson, 2000; Sliva and Leki 2004). These North-American, first-hand testimonials are not always necessarily fully representing the international SLW contexts.

One of the first reviews of SLW institutional and disciplinary contexts is in "Family Matters" where Silva and Leki (2004) pointed out how SLW professionals are often housed in Linguistics and/or English/ Composition departments where they are not the dominant faculty group (p.9). Similar to Silva and Leki (2004) who based their review on personal experiences and North-American universities, Kim (2016) offers a recent review of the different academic units that house SLW scholars, which is also based on personal experience in North-America. According to Kim (2016), SLW scholars are based in academic homes within academic units such as Linguistic, rhetoric, and composition, English, education, TESOL and bilingual education (p. 54)

Although education departments represent 21% of SLW research in WoS from 2002-2017, the current North-American reviews of SLW research do not fully account for the expanding roles of education departments, across the world, in producing SLW research similar to Kim (2016) and Silva and Leki (2004) who still refer to English and linguistics departments as the major academic units that house SLW scholars. For example, 66% of SLW research in China is produced in education departments. On the other hand, 32% of SLW research in the US is produced in linguistics departments, and 9% of SLW research in China is produced in linguistics departments. Figures 2, 3 and 4 below represent SLW research in education, linguistics, and English departments worldwide.

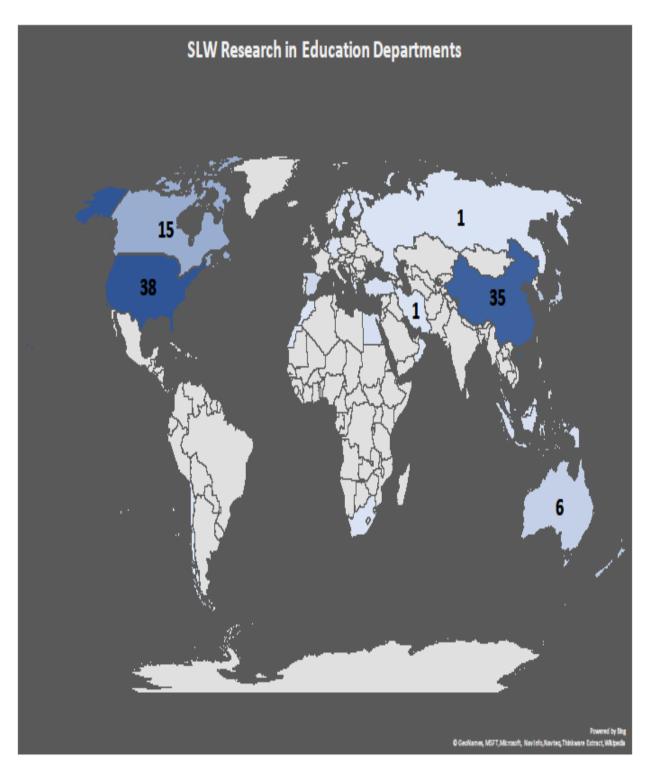


Figure 2 SLW Research in Education Departments



Figure 3 SLW Research in Linguistic Departments

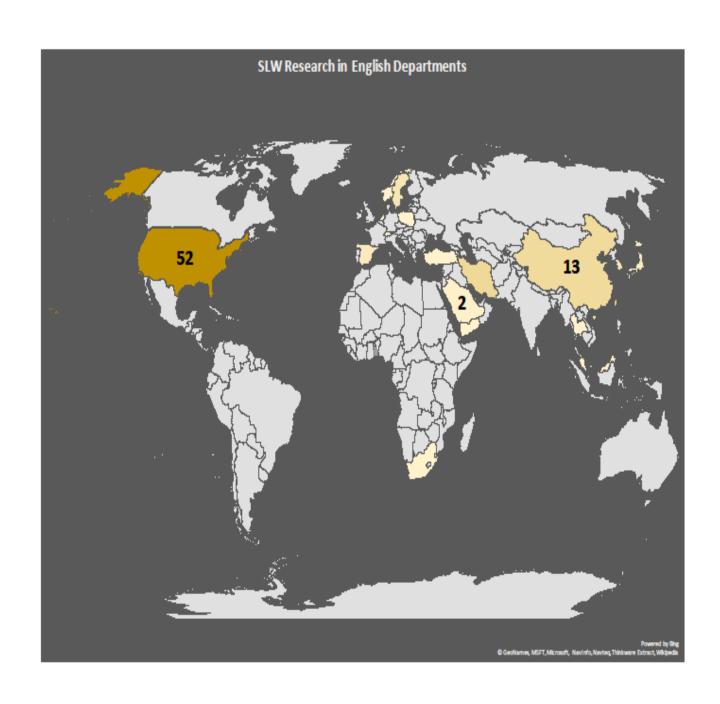


Figure 4 SLW Research in English Departments

SLW Research across Countries

Due to its North-American origins, most SLW research is produced in North America, with research produced in it representing more than 37.76% of all SLW research articles in WoS from 2002-2017. Table 8 below presents SLW research across different regions as visualized in figure 5 .

Region	Percentage	Region	Percentage
North America	37.76%	Middle East	8.36%
Asia	30.99%	Oceania	5.41%
Europe	14.76%	Africa	1.49%

Table 8 SLW Research by Region in WoS from 2002-2017

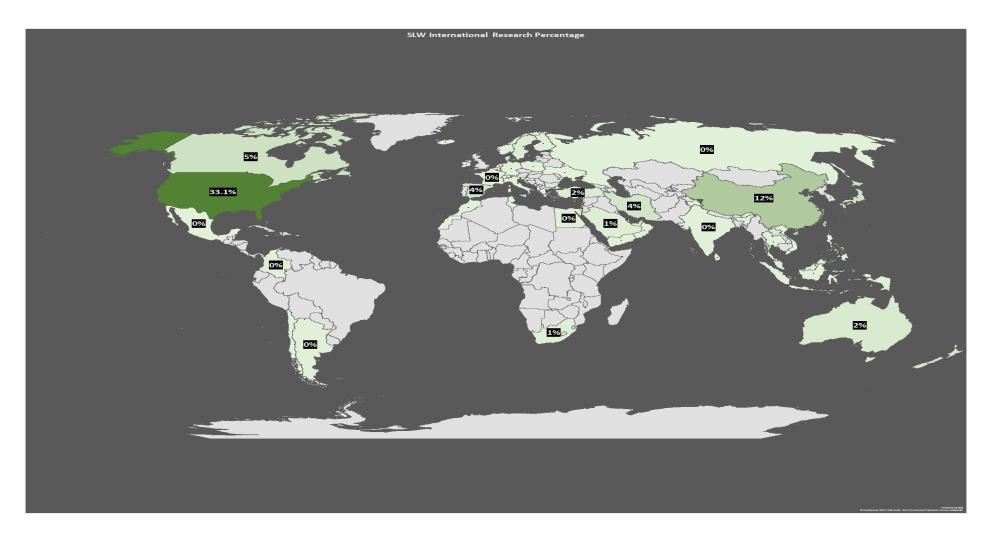


Figure 5 SLW international research

SLW Journals

According to Silva (2016) many SLW leading journals are based in the U.S such as *JSLW*; *TESOL Quarterly; Modern Language Journal* with many leading SLW pioneers and developers based in the US as pointed out by Tardy (2016). Similar to the U.S.A, Canada, with its research representing 4.67% of SLW research in WoS, has graduate programs in SLW for both writing in English and French at the University of British Columbia; University of Toronto; l'Université de Montreal; l'Université Laval (p. 28). SLW research produced in mainland China represents 11.80% of SLW research in WoS. The organizational support that SLW research receives in China is acknowledged by Silva who refers to The National Association of EFL Writing Teaching and Research (NAEWTR), which was established in 2006, with SLW research as its main focus (p. 31). NAEWTR organizes annual SLW conferences and publishes different proceedings.

Although there are several SLW leading journals and conferences in England and Oceania such as *English Language Teaching Journal* in England and the Applied Linguistics Association of Australia that holds an annual conference and publishes the *Australian Review of Applied Linguistics*, SLW research from England, New Zealand, and Australia in WoS represents 3,69% 3.08%, and 2.34% respectively. Iran leads the research in the Middle East with it producing 3.57% of SLW research in WoS from 2002-2017. Figure 6 below includes a chart of the top 10 SLW journals according to topic. Silva (2016) who is also the editor of the Bibliography section in *JSLW* provided a list of top SLW journals, which included all of these titles. However, the chart below categorizes the journals according to specific topics.

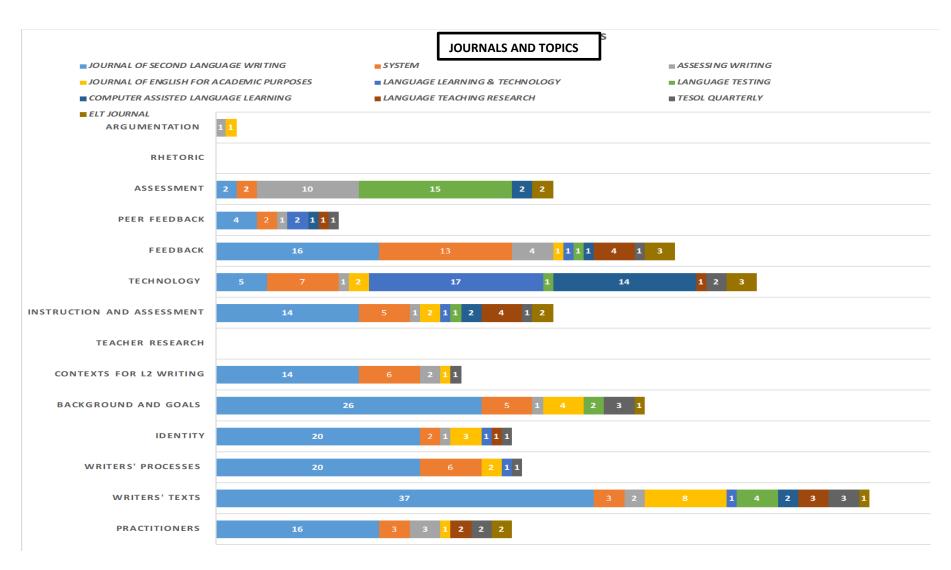


Figure 6 SLW journals

Conclusion and implications

This paper in its review of SLW research outputs in WoS from 2002-2017 attempted to provide a systematic review of SLW research and explore some of the issues that surround its disciplinarity and institutional contexts to fill an existing gap in the field that lacks international evidence-based accounts of these issues. Using bibliometrics data form WoS, the paper's findings indicate how the varied research foci in SLW have grown in 7 departments with education departments leading the international SLW research with 21% of it produced in education departments. The increasing SLW research production in education departments also suggests how SLW research has expanded to include other disciplines than its parent disciplines: linguistics and composition studies. In reviewing SLW research on instruction and assessment that represents more than 43% of its published research, the paper's findings suggest that SLW research is geared toward application in the classroom, which represents the fourth application stage in Shneider's model. In its review of the academic units that produce SLW research across the world, the paper's findings suggest how the traditional North-American institutional contexts in which SLW is usually housed in linguistics and/or English departments do not apply to other regions, and particularly China.

Through its review of some of the characteristics of SLW research topics and its different institutional contexts, the paper aims to contribute to the emerging professionalizing conversation in by providing evidence-based review of some of these characteristics. This paper's review of SLW research foci and academic units aims to offer a level of understanding of SLW research that was lacking in the first and only bibliometric SLW paper conducted by Airk and Arik (2017) that only reported frequency measures of SLW research items in 3 databases. Additionally, this paper's review of some of the "tacit" issues surrounding SLW research aims to encourage and call for a more rigorous conversation about the professionalizing prospects in SLW by drawing on evidence-based data about the state of the field instead of the personal experience accounts that are shaping the current conversation (Colavizza et al., 2018, para. 38). (More on this in the implications later)

Before discussing the implications of the paper, its limitations should be cautioned against. first one is related to the use of WoS as opposed to other databases such as Scopus. While it is true that Scopus could have more coverage of SLW research, Scopus data still lacks the high level of indexing available in WoS. Although data quality has improved in Scopus, it remains below that of WoS, especially in terms of institutional addresses of authors, which were of relevance for this paper (Sugimoto and Larivière, 2018). The second limitation is related to the bibliometrics scope of this paper. This paper has not examined SLW's research impact through bibliometrics citation analysis, which could offer helpful indicators for examining the disciplinarity in any field. However, since the primary goal of this paper was to contribute to its pressing professionalizing conversation, the review of its institutional and organizational contexts was more adequate and even necessary. Yet, future citation analysis studies in SLW should be conducted to inform and complement the different views about its disciplinarity.

Despite these limitations, the paper has at least two clear implications. The first one is related to the value of having a field identity that can help SLW intellectual traditions to find a place in a larger conversation that is happening outside their traditional disciplinary contexts (Matsuda, 2013). The (trans)disciplinarity of the field is often celebrated and viewed as "delimiting" SLW professionals in extending their professional options (Kubota, 2013), but With SLW research extending over seven different academic units in different organizational and institutional contexts, having an articulate field identity could benefit SLW professionals in defining what they do for non-SLW professionals. As the title of this paper suggests, the familial relations of SLW that were earlier identified by Silva and Leki (2004) still affect SLW, with its research expanding outside the departments of its parent disciplines in what should create SLW's Modern Family. The second implication relates to the necessity of including international SLW organizational and institutional contexts in any future conversations about its professionalizing. Several SLW scholars are quick to acknowledge the limitations of their SLW contexts similar to Atkinson (2000) who discussed the geographical limitations of the North-American view of SLW research. However, international SLW professionals should start contributing to SLW professionalizing conversations by accounting for the different organizational and institutional contexts in which they conduct their SLW research, similar to what their American peers did in Professionalizing SLW.

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