Revisiting "Family Matters": How Citation Patterns in the *Journal of Second Language Writing* Reveal the Changing Nature of the Second Language Writing Field and the Decreasing Role of Composition Studies in It

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Structured Abstract

- **Background:** Examination of the disciplinary relationship between second language writing and other fields has previously relied on synthesis of literature in the field, archival work, and theorizing. This study augments the discussion using a combination of quantitative bibliometric methods to investigate the interdisciplinary nature of the second language writing (SLW) field and its shifting nature. We examined one area of research activity: the research communities that contribute to the field of second language writing, as seen through citation patterns in the *Journal of Second Language Writing* (*JSLW*)

publications. Our report adds a line of inquiry into the field's specialty structures as well as the changing role of composition studies body of knowledge in the field of second language writing.

The relationship between second language writing and composition studies has been examined by scholars such as Silva and Leki (2004) and Matsuda (2003), as well as scholars aligned with composition studies or writing studies (i.e., MacDonald, 2007 and, more recently, Donahue, 2018). Discussion surrounding language issues in composition studies centers around monolingual bias, the consequence of which has been the erasure of language, neglect of language studies, or view of SLW as oppressive (Canagarajah, 2013). More recently, the rise of translingualism brought language and language studies back to the fore in composition, with SLW scholars calling for more attention to the SLW research (Atkinson et al., 2015; Atkinson & Tardy, 2018; Gevers, 2018; Matsuda, 2013a; Tardy, 2017a, 2020). This article takes up this question of the relationship between composition studies and SLW from a new perspective, namely, the citation of composition and rhetoric research within *JSLW*. In doing so, we interrogate how composition scholarship is being integrated or responded to by SLW scholars.

- **Literature Review:** In this article, we are drawing on one of the key texts on the SLW disciplinary development by Silva & Leki (2004), "Family Matters: The Influence of Applied Linguistics and Composition Studies on Second Language Writing Studies—Past, Present, and Future," following in the tradition of previous examinations of the key journal for the SLW community—*Journal of Second Language Writing* (see Riazi et al., 2018)—to theorize about the changing nature of SLW and its relationship to rhetoric and composition knowledge domain. In 2004, Silva & Leki positioned SLW as "[lying] at crossroads of composition studies and applied linguistics" (p.1), invoking a spatial metaphor that suggests SLW is centrally placed between the two. There, they also introduced the term *intellectual inheritance*—denoting the dependent and familial relationship with its parent (composition studies, applied linguistics) and grandparent (rhetoric, linguistics) fields. In this article, we focus on the concept of *intellectual inheritance* as traced through the network of journals used to contextualize intellectual work represented in *JSLW*, and we visualize the journal's position in relationship to other journals using network analysis. Using well-established methods of co-citation analysis (Small, 1973), we use the results of our analysis with the growing tension (Tardy, 2017a) between SLW and the composition studies field. Specifically, the citation data serves as material examination of decreasing engagement with composition studies scholarship, which might contribute to the growing tension between the fields.

- **Research Questions:**

    1. What is the *intellectual inheritance* of second language writing as represented through the *Journal of Second Language Writing* citations to other journals?

    2. How has the pattern of citations to other journals changed over time?

        a. What does the change of citations over time tell us about the *intellectual inheritance* of the second language writing field?

        b. How has the position of the flagship composition journals cited in the *Journal of Second Language Writing* changed over time?

- **Research Methodology:** We used quantitative archival methods from the scientometrics field (journal co-citation analysis; Small, 1973; McCain, 1991) to examine the citation practices of *JSLW* authors between 1992 and 2021. Previous research in scientometrics used journals as a unit of analysis to understand the structure of scholarly fields (McCain, 1991). Our dataset comprised metadata of 488 research articles (i.e., article titles, abstracts, journal titles). The dataset was checked for quality, and inconsistent names of journals were unified. Co-citation analysis using VOSviewer software revealed five clusters of co-cited journals. The clusters were then analyzed with the aim to describe the knowledge domains they represented. We triangulated results of open coding, corpus approaches to keyword analysis, and indexing categories to arrive at labels that would sufficiently describe the underlying knowledge domains. Five domains (clusters) emerged in the process:

    1. Literacy, Teaching, Sociolinguistics, and Education

    2. Applied Linguistics, Second Language Acquisition (SLA), and Technology

    3. Testing, Assessment, Psychology, and Studies in Higher Education

    4. Composition and Rhetoric

    5. International Language Teaching Journals

    We extracted data using VOSviewer software and visualized it using Flourish Studio online data visualization tools.

- **Results:** The results show the growing importance of studies on writing in second language acquisition and applied linguistics journals for authors publishing in the *Journal of Second Language Writing*. Concurrently, a substantial decrease in the presence of cited research from composition studies journals is visible in the citation patterns, signaling the decreasing role of the field that was once considered foundational to SLW research. We concluded that the citation patterns

of authors who published in *JSLW* position the SLW research community increasingly close to the growing area of language studies (inclusive of second language acquisition and applied linguistics), reflecting the global, multilingual focus of the field. The growing tensions between SLW and composition studies might be viewed through the diverging trajectories of development between the two fields. Such divergence suggests that it might not only be the composition scholars who are no longer keeping up with SLW scholarship, but also SLW scholars increasingly relying on non-composition scholarship/knowledge domain for research and theorizing.

Keywords: writing analytics, bibliometrics, second language writing, composition studies

1.0 Background

The field of second language writing (SLW) has an established research tradition of self-examination through synthesis and critical analysis of its publications. The *Journal of Second Language Writing* (*JSLW*), founded in 1992, is often the focal subject of these explorations. Tardy (2017b), the past co-editor of *JSLW*, presented it as a venue where the SLW community can find "constructions of 'the field' through *JSLW*'s mission and scope, manuscript submission and published papers, peer reviews, editorial decisions, special issue topics" (p. 2). Because of this central role for the SLW field, *JSLW* has been examined through a series of studies providing a periodic snapshot of the SLW field's development (see Riazi et al., 2018).

While such introspective analysis—taking stock of the topics being researched and methods used to explore them—is fundamental to understanding the field's identity, just as important is the question of the relations to other fields. While the research articles published in *JSLW* have been examined regularly, the citation practices of the authors who publish in *JSLW* have not been previously explored. These practices, examined as a whole and across time, can reveal how the community of researchers who conduct research on second and foreign language writing draw on adjacent fields to construct the transdisciplinary field of second language writing. Matsuda (2013b) commented,

> In the era of transdisciplinarity, a field is what people in the field do, which in turn is driven by the shared sense of problems and issues that need to be addressed. In a transdisciplinary field, we do not define the issues; issues define us. As such, the scope of the field changes along with the ways in which we, self-identified second language writing specialists, understand and work with particular groups of second language writers in our respective local contexts. (p. 448)

As the researchers move through contexts, groups of learners, and research foci, they necessarily draw on previous research to contextualize their findings, often reaching across adjacent fields for concepts, methods, and knowledge.

One of the key texts in the field of SLW, "Family Matters: The Influence of Applied Linguistics and Composition Studies on Second Language Writing Studies—Past, Present, and Future," was authored by the founders of *JSLW*—Tony Silva and Ilona Leki (2004). They positioned SLW as "[lying] at crossroads of composition studies and applied linguistics" (p.1), invoking a spatial metaphor that suggests SLW is centrally placed between the two. There, they also introduced the term *intellectual inheritance*—denoting the dependent and familial relationship with its parent (composition studies, applied linguistics) and grandparent (rhetoric, linguistics) fields. In this article, we focus on the concept of *intellectual inheritance* as traced through the network of journals used to contextualize intellectual work represented in *JSLW*.

The question of *intellectual inheritance* and the direction the field is developing into, as well as its relationship with other fields, has been the subject of recent discussions around the role of the research trends of written corrective feedback and translingualism in research on writing. These two areas of research pull SLW towards second language acquisition (SLA) and composition studies fields respectively, placing the SLW field at a "crossroads" (Atkinson & Tardy, 2018) yet again. This broader relationship, which involved a bidirectional movement with other fields, can be traced not through citations, but also in other areas such as pedagogical and institutional practices, conference presentations, and professional organization relationships. Given the limited scope of this research article, we focus only on the *intellectual inheritance* as seen through one limited fragment of the field's activity: citation patterns of the authors who publish in *JSLW*.

2.0 Literature Review

2.1 Research on Citation Practices in the Second Language Writing Field

Citation—the textual trace of the writer's debt to others' work—is an essential component of constructing disciplinary knowledge (Hyland, 2004). Citation practices have often been investigated in second language writing because of their pedagogical importance in SLW instruction. Applied linguistics research, such as Hyland's (2004) *Disciplinary Discourses: Social Interactions in Academic Writing*, examined academic attribution as textual evidence for the interactive nature of academic writing, in which citation is used for reporting and referencing the work of other scholars. The rhetorical role of citations serves as a "footprint" for more elaborate, highly social dimensions of the act of citing: "by acknowledging a debt of precedent, a writer is also able to display an *allegiance* [emphasis added] to a particular community or orientation, create a rhetorical gap for his or her research, and establish a credible writer ethos" (Hyland, 2004, p. 342). Their potential to document researchers' interactions through networks, however, has been at the core of the fields of information and library science, sociology of

science, as well as bibliometrics and scientometrics. Thus, citations can be investigated on the most basic level as acknowledging others' (e.g., authors, fields, disciplines) work.

Previous explorations of the SLW field's allegiances have been hermeneutic in nature, employing a mix of theoretical and historical approaches. Silva and Leki (2004) discussed the intellectual inheritance of the SLW field based on their vast knowledge and experience with the developing field, while Matsuda's (2003) early studies relied on archival work that traced the tenuous and imbalanced relationship between composition studies (CS) and SLW fields. The recent discussion on translingualism and translingual writing, in part, relied on the argument of composition studies neglecting the research done in the SLW field (Atkinson et al., 2015; Atkinson & Tardy, 2018; Gevers, 2018; Matsuda, 2013a; Tardy, 2017a, 2020). This omission of readings of SLW scholarship from composition scholars cannot be answered throughout this study, but the question of how our uptake of others' literature (including composition studies) can, thus adding insight into the relationship between CS and SLW.

2.2 Bibliometric Methods and Data Quality Issues in Mapping Fields

The use of citations for study of science is closely tied to development of citation databases (indexes)—with *The Science Citation Index* (SCI) created by Eugene Garfield in 1964 being the first one. SCI allowed for systematically collecting references in major scientific publications stored in formats that can be used for quantitative analysis (Garfield, 2007). Over the past decades, a wide array of indexes has been developed and used to study scientific communication, paving the way for new approaches to researching history and sociology of science (van Raan, 2019). Two methods introduced early in the 1960s examined the relationships between publications through the analysis of shared references. *Bibliographic coupling*, introduced by Michael Kessler, depends on showing strength between items with shared references—the more two articles share references, the closer they are together on a map and their strength score is higher; the second method, *co-citation analysis*, introduced by Henry Small in 1973, shows the relationships between publications based on how often they are cited together by other publications in the dataset (van Raan, 2019). Co-citation, the method used in this article, is used in scientometrics for "the study of the dynamics of disciplines as reflected in the production of their literature" (Hood & Wilson, 2001, p. 291) by examining and grouping items that are often cited together in a dataset. These citation analysis methods used in bibliometrics rely on publication-attribute network, in which each datapoint (e.g., publication) has specific attributes, such as authors, their institutions, author affiliation location, and references (cited papers).

Mapping a field relies on quantitative analysis, such as co-citation, which can be performed to obtain a matrix that will present the relationships between attributes visually in the form of a network. With the help of such visualizations and matrices, it is possible to understand the subject distributions of the fields, core working groups, or prominent institutions publishing on different subjects. The bibliometric network analysis of items (nodes) connected by links (edges) can reveal clusters in data—items that are positioned close together because of the strength of

their relationship (e.g., clusters of authors who publish papers together, clusters of articles that are often cited together in other articles). There is various analysis software in the literature (such as VOSviewer, CiteSpace, Pajek) that can provide network diagrams based on data from citation indexes. The key methodological issue with network analysis studies lies in their dependence on the data quality. Manual data collection and analysis can provide the most inclusive dataset (i.e., data from non-indexed independent journals) but requires considerable labor. If citation indexes are used as a data source, the limited coverage of certain fields and unreliable or partial data need to be considered as limitations of the study.

It is important to note that second language writing, unlike composition and rhetoric, has one flagship journal that is owned by a major publisher (Elsevier). Journals that are owned by large corporations, such as Elsevier or Springer Nature, have more support for processing their data for indexing than independent, open-access journals. For fields like rhetoric and composition, there are a variety of journal ownership models and operation structures, from independent open-access approach (such as *Kairos* and *Composition Forum*) to professional organization ownership (National Council of Teachers of English's *College Composition and Communication*) to publisher-owned (such as *Rhetoric Review,* a Taylor & Francis journal). The diversity of models creates opportunities for researchers to publish research that can later be accessed by anyone (open access). The unintended consequence of the independent model, however, is the fragmented coverage of the field, with non-overlapping indexes that offer only partial and sometimes incompatible data to map a field.

3.0 Research Questions

In this short research article, we focus on *JSLW* as a site of field construction that allows for tracing aggregate academic interactions of *JSLW* authors with adjacent, and often themselves interdisciplinary fields. Continuing the line of research into disciplinary formation of SLW, we employed bibliometric analysis, specifically co-citation analysis, to examine which journals and journal groups its authors draw on most often and how the trends change across time. Because we focus on *JSLW* as a unit in our dataset, rather than specific researchers (micro level) or field relations (macro level), to examine interactions between research communities (meso level), we investigate citations to other journals. The research questions that guided this study are as follows:

1. What is the *intellectual inheritance* of second language writing as represented through *JSLW* citation to other journals?
2. How has the pattern of citations to other journals changed over time?

   a. What does the change of citations over time tell us about the *intellectual inheritance* of the SLW field?

   b. How has the position of the flagship composition journals cited in *JSLW* changed over time?

4.0 Research Methodology

4.1 Co-Citation Analysis of Journals

JSLW References Dataset was created to examine the intellectual inheritance of the field, i.e., which journals are the source of the most citations in *JSLW,* and the co-citation patterns that emerge from the data. We chose to examine journals because of their dynamic nature: As the interests of research communities change, the research published in the journals can follow or shape these research foci. Scopus database was selected to collect publication data because it offers comprehensive, high-quality indexing for *JSLW*. *JSLW* References Dataset includes metadata from items published between January 1992 and June 2021. It contains a total of 488 original articles, including short pieces for the *Disciplinary Dialogues* and other short communication articles. The annotated bibliographies, book reviews, and editorials were excluded from the dataset. The analyzed attribute of all the articles was their references section.

 JSLW References Dataset was analyzed using the co-citation method. Data was exported from Scopus in csv format and uploaded to VOSviewer software, which allows for full counting of citations for each article (e.g., if one *JSLW* article cites five articles from *Assessing Writing*, each instance is counted). The list of sources used in *JSLW*, including non-journals, was exported from VOSviewer into a spreadsheet, where it was edited to exclude non-journals (e.g., edited collections, monographs, dissertation abstract databases). The journals that were referred to at least 15 times in the whole dataset were analyzed using the co-citation method to obtain clusters. The clustering feature of VOSviewer calculates the strength of a link between two nodes and the position in the network in the dataset. We examined these emerging clusters of co-cited journals to detect the existence of underlying specialty structures (Small, 1973) in the dataset. Each specialty cluster was examined in detail and labeled by the researchers. It is important to note that given the nature of *JSLW*, a journal firmly focused on writing research, the references will inherently link to research on language and writing in the other journals. Six clusters were identified with the use of the software. One cluster that contained only one journal (*International Journal of Corpus Linguistics*) was merged with the nearest cluster (5).

4.2 Cluster Labeling

As the clustering results from co-citation behavior of the authors who publish in *JSLW*, the differences between clusters are not immediately obvious and open to interpretation. Labeling procedure was used to provide a concise way to refer to the five clusters, rather than to discover all the differences between them. Thus, labeling of the clusters relied on triangulation of expert open coding, disciplinary indexing, and keyword analysis. Every method separately is unreliable due to expert knowledge subjective judgment, indexing not being fine-grained to capture subfields, and a not fully reliable keyword analysis due to keyword corpora size (e.g., Cluster 4 and 5 being small, and Cluster 4 including journals that usually do not require an abstract).

4.2.1 Open Expert Coding

The expert most familiar with the field coded each journal in the cluster based on the predominant research focus, scope, and its field. For example, *College Composition and Communication* was categorized as "Composition, Rhetoric, English Education" because it is the flagship composition journal operated by the National Council of Teachers of English. For journals that are no longer active or that the expert was less familiar with, the historical volumes, aims, and scope were examined to determine field.

4.2.2 Keyword Analysis

Five corpora consisting of titles and abstracts for the referenced articles were created, each corresponding with the cluster obtained in the previous step. The sixth, reference corpus, was created from all five corpora as a reference corpus used for comparison. Top 50 keywords specific to each cluster were extracted from corpora using AntConc by consecutively comparing each cluster corpus to reference corpus. Keyness was measured using log-likelihood.

4.2.3 Disciplinary Categorization

Lastly, broad disciplinary categorization drawn from Scopus and Web of Science was examined to place the journals into broad disciplines.

Figure 1

Triangulation in Cluster Labeling Procedure
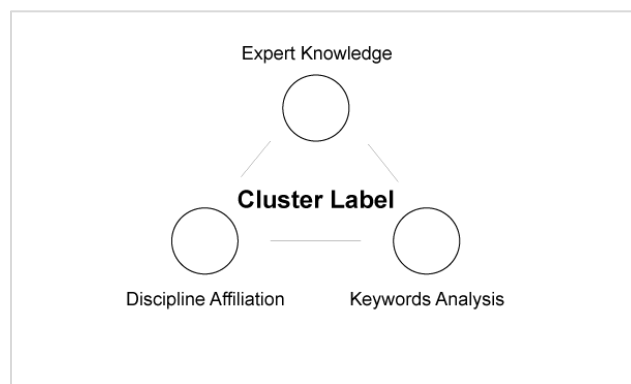
The triangulation procedure concluded with labeling the cluster using the predominant code. For example, Cluster 4 contains seven journals categorized as "Composition, Rhetoric, English Education"; keywords such as *ESL*, *teaching*, and *composition*; and Scopus and Web of Science categories such as Literature, Language & Linguistics or Literature & Literary Theory (firmly setting it in English as a home base); therefore, the cluster took on the name of the most common code. Cluster 4 also contains the second most cited journal in the dataset (*TESOL Quarterly*),

whose dominance in the dataset (alongside *JSLW's* self-citation) is an outlier. We decided to retain it in Cluster 4, despite its unexpected position stemming from the limitation of the method (i.e., flattening the network into groups). Each cluster was additionally described qualitatively and contrasted with other clusters to determine its character. While naming the clusters aids in understanding the data, the names themselves should be used as informative labels rather than definite categories.

4.3 Cluster and Journal Ranking Over Time

The collected dataset was also divided into six time periods, each covering five years, from 1992-2021 (June). Figure 2 presents how the position in the top 30 overall most often cited journals has changed over the analyzed period. Further, aggregate cluster trends over the six periods have been visualized to show the increase/decrease in citation of the journals. Two journals were removed from this analysis because of their outlier status: *JSLW*, which self-cites 2,073 times and *TESOL Quarterly*, which is cited 1,362 times and whose position in Cluster 4 is arbitrary as it is central to the whole dataset (it is also cited almost three times as often as the next journal, *Language Learning*: 504 times). *JSLW* and *TESOL Quarterly* were removed to highlight the changes in the cluster positions, without the impact of the two most core journals. These two core journals, in a network placed most centrally, are co-cited across all clusters and are important contributors for all of them. Additionally, as seen in Figure 2, both removed journals hold a dominant and constant position in the references, with changes in the position of other journals shifting over time. Removing these two journals for this analysis allows for highlighting the dynamics of changes.

5.0 Results

5.1 SLW Intellectual Inheritance as Documented in *JSLW* References

Co-citation analysis revealed five clusters of journals that are used most often to situate the published research in *JSLW* (see Table 1). The first cluster, "Literacy, Teaching, Sociolinguistics, and Education," is the most diverse, with the least obvious theme emerging from the grouping. The top cited journals (*JSLW*, *Written Communication*, *English for Specific Purposes* [*ESP*], and *Journal of English for Academic Purposes* [*JEAP*]) all focus on writing as a phenomenon in particular context, with *ESP*, *World Englishes*, and *JEAP* investigating English language writing. The focus here is on *writers*. Additionally, journals that represent subfields in applied linguistics, such as pragmatics and sociolinguistics, are present alongside educational journals. This cluster may also be representative of journals that use a wide array of research methodologies—qualitative, theoretical, and more descriptive research on writing—when compared to the next cluster. The second cluster, "Applied Linguistics, SLA, and Technology," contains journals that research second language acquisition (*Language Learning*) and applied linguistics, which publish a mix of quantitative, qualitative, and theoretical research. The key

referent to subject of studies in this cluster is *learners*. However, in comparison to the first cluster, journals in the second cluster publish more quantitative, experimental research on learning, with a clear focus on multilingual research beyond the English language (even if it is likely the most often studied language). There are also journals which focus on multilingual instruction and teaching with technology (*CALICO*, *ReCALL*, and *CALL*). The third cluster, "Testing, Assessment, Psychology, and HE Studies," has a distinctive profile, with top journals in the cluster focusing on assessment, testing, and psychology (including educational psychology). *Raters* and *rater* emerge as the focus. As an interdisciplinary cluster, it is firmly set in the social science research tradition, including educational research, literacy, and research on reading. The fourth cluster, "Composition and Rhetoric," contains the key The National Council of Teachers of English journals related to composition studies and post K-12 English education, and *TESOL Quarterly*. It also includes the independent, open-access journals related to research on writing and journals that are no longer active (e.g., *The Writing Instructor*). The last cluster, "International Foreign and TESOL Teaching Journals," contains teaching-oriented international journals which represent foreign language instruction, mixed with journals focusing on teaching English to Speakers of Other Languages (TESOL).

Table 1

Results of Co-Citation Analysis for JSLW *Reference Section (1992-2021). Journals Listed in Descending Order from Most Often Cited to Least Cited in Dataset 1.*

Clusters					
	1	**2**	**3**	**4**	**5**
List of top 10 most cited journals in each cluster in descending order	Journal of Second Language Writing	Language Learning	Assessing Writing	TESOL Quarterly (TQ)	Foreign Language Annals
	Written Communication	Applied Linguistics	Language Testing	College Composition and Communication (CCC)	RELC Journal
	English for Specific Purposes (ESP)	System	Language Teaching		TESL Canada Journal
	Journal of English for Academic Purposes (JEAP)	Studies in Second Language Acquisition	Journal of Educational Psychology	Research in the Teaching of English (RTE)	CATESOL Journal
	ELT Journal	Modern Language Journal	Review of Educational Research	College English	Hispania
	Annual Review of Applied Linguistics	Language Teaching Research	Reading and Writing	TESOL Journal	Computers and Composition
	Linguistics and Education	Language Learning & Technology	Reading Research Quarterly	Text	International Journal of Corpus Linguistics
	World Englishes	Canadian Modern Language Review	Studies in Higher Education	The Writing Center Journal	
	Harvard Educational Review	CALICO Journal	Language and Education	Journal of Basic Writing	
	Journal of Pragmatics	International Journal of Applied Linguistics	Learning and Instruction	Discourse Processes	
				The Writing Instructor	

Table 1 (Continued)

	Clusters				
	1	**2**	**3**	**4**	**5**
Discipline	Language and Linguistics	Language and Linguistics	Language and Linguistics, Social Sciences	English (Literature, Literary Theory), Language and Linguistics	Language and Linguistics, English
Keywords in descending order based on keyness	writing academic genre writers students EAP published source rhetorical disciplinary scientific texts publication discourse	language learners learning acquisition club L (as in L2) Michigan task modern recasts second learner output interaction	assessment test raters rater scores rating children reading spelling performance feedback scale tests grade	ESL teaching composition article teachers coherence nonnative TESOL national literacy center communicative content readers	Anxiety foreign signalling corpus screencast actfl multimodal hl Hong Kong idioms language nouns abstract
Cluster label	Literacy, Teaching, Sociolinguistics, and Education	Applied Linguistics, SLA, and Technology	Testing, Assessment, Psychology, and Studies in Higher Education	Composition and Rhetoric and *TESOL Quarterly (TQ)*	International Language Teaching
% of all top citations	37%	23%	9%	25% (with *TQ*) 12% (without *TQ*)	4%

Figure 2

Most Cited Journals (Full Count) in the JSLW *References Section, 1992-2021*
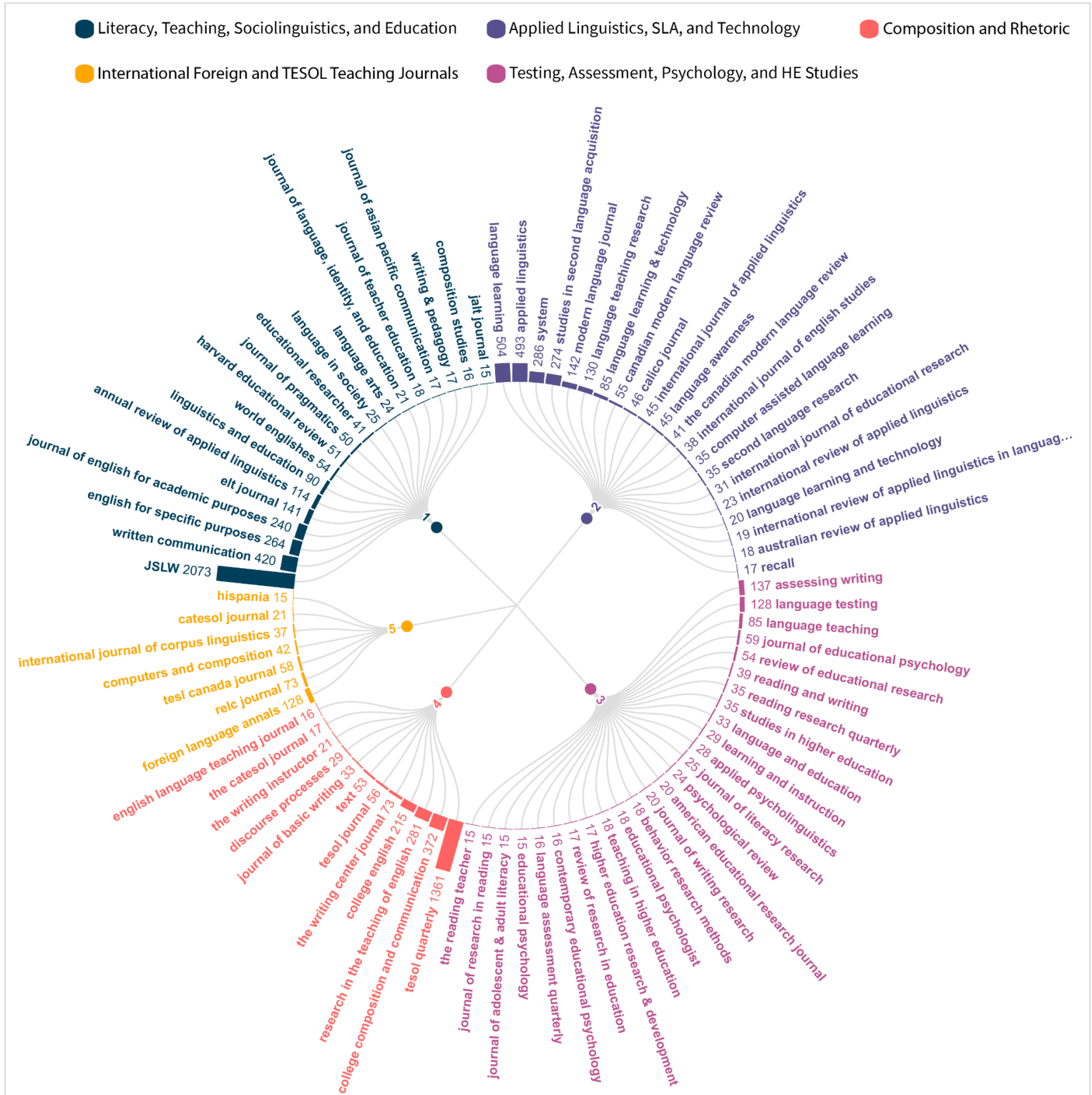
Because *JSLW* represents only a fragment of the SLW research activity, the specialty structures emerging from the collective research work of scholars who conduct SLW research present a limited view. However, this limited scope of research activity can add another dimension to our understanding of the SLW field and its intellectual inheritance. The first and second cluster that constitute half of the citations are representing subfields in broadly conceived language studies. These areas also represent various methodological approaches to SLW research from qualitative, quantitative, and mixed research design, with some journals occasionally publishing more theoretical work. Compared to Silva and Leki's (2004) articulation of the field's intellectual inheritance, co-citation patterns suggest that during the three decades researchers in SLW drew predominantly on research in language studies, social sciences, and to a far lesser extent composition and rhetoric. In fact, none of the strictly rhetoric-oriented journals (*Rhetoric Review*, *Rhetoric Society Quarterly*) emerge as cited more than 20 times in the history of *JSLW*. Confirming Belcher's (2012) critical analysis of the second language writing field, *JSLW* also shows a gap in literature related to research on writing in non-educational settings, such as professional settings.

Over the years, *JSLW* authors have drawn on more diverse set of journals in comparison to the first decade (1992-2001) Results of the *JSLW* reference analysis shed light on the *intellectual inheritance* (Silva & Leki, 2004) of the SLW field. In this one dimension of SLW discipline formation, *JSLW* authors do not position their work equally between applied linguistics and composition studies (the "parent" disciplines; Silva & Leki, 2004). In fact, in the past three decades of *JSLW* research, the movement of the field closer towards language studies and applied linguistics is clearly visible. The movement can also be understood in terms of the growth of language studies fields globally: The research in SLA and applied linguistics is an international endeavor. Journals that did not exist in 1992 have become prominent sources of research in the last five years (e.g., *Journal of English for Academic Purposes*, *Language Teaching Research*). With more venues for publishing and a thriving global community that researches SLW, the field is relying on that diverse research more and more.

5.2 Change in Citation Patterns in *JSLW* Over Time

The results of analysis of how citation patterns in *JSLW* have changed over time show a citation increase in research from applied linguistics and SLA journals and the growth of the importance of assessment and testing literature. The two key journals, *JSLW* and *TESOL Quarterly*, have switched positions between 1997 and 2002 in terms of the leading source of cited journals. After a decade of activity, *JSLW* became the top cited journal in the reference sections, with researchers clearly relying on its body of research to position their work. Over the past three decades, *JSLW* authors have also increased their citation of assessment and testing literature related to L2 writing, showing how important that area of research has become to the field.
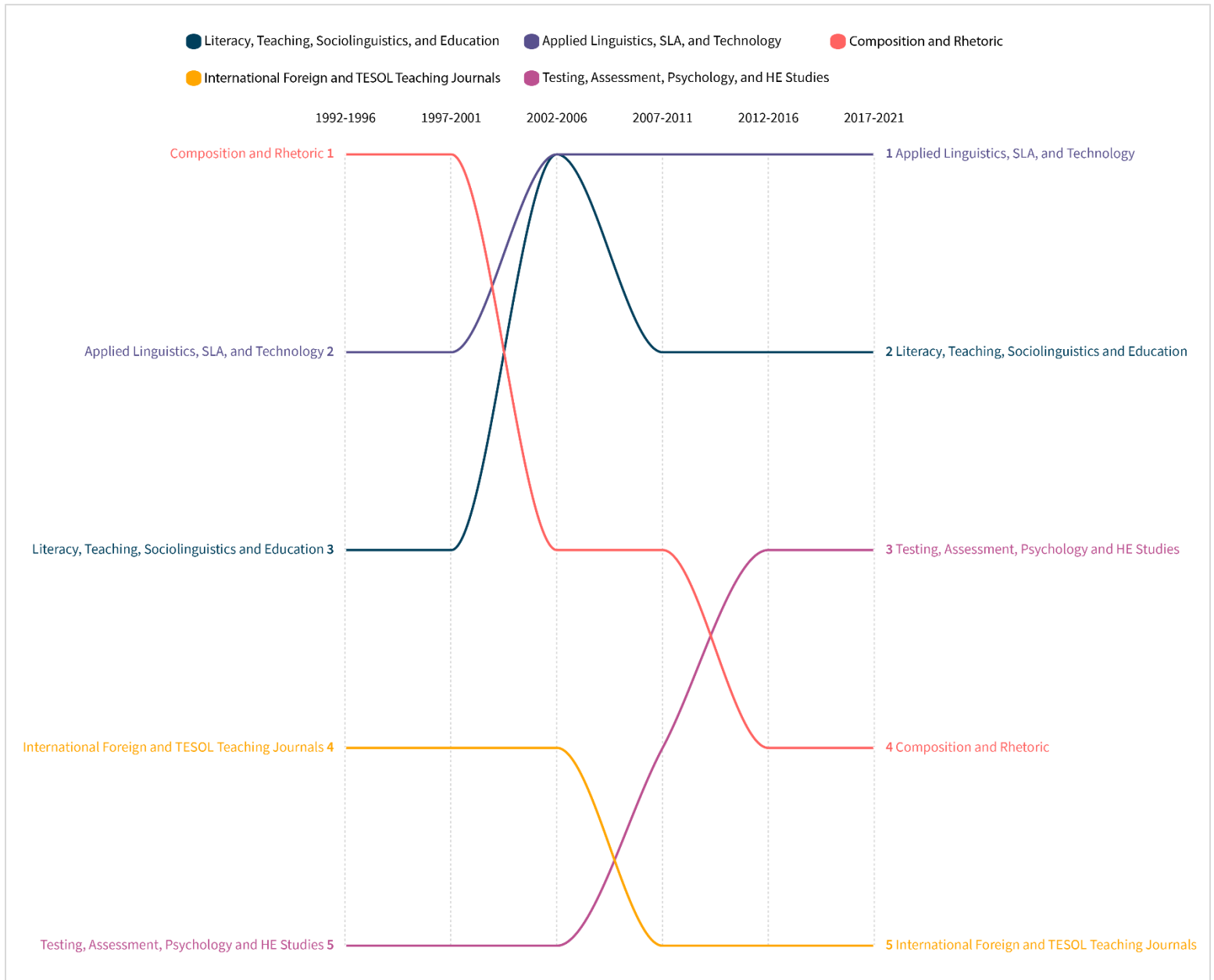
Figure 3

Change in Most Cited Journals in JSLW *Reference Section: Five 5-Year Periods (1992-2021)*

Figure 4

Ranking of the Most Cited Clusters Over 5-Year Periods in JSLW *References Section*
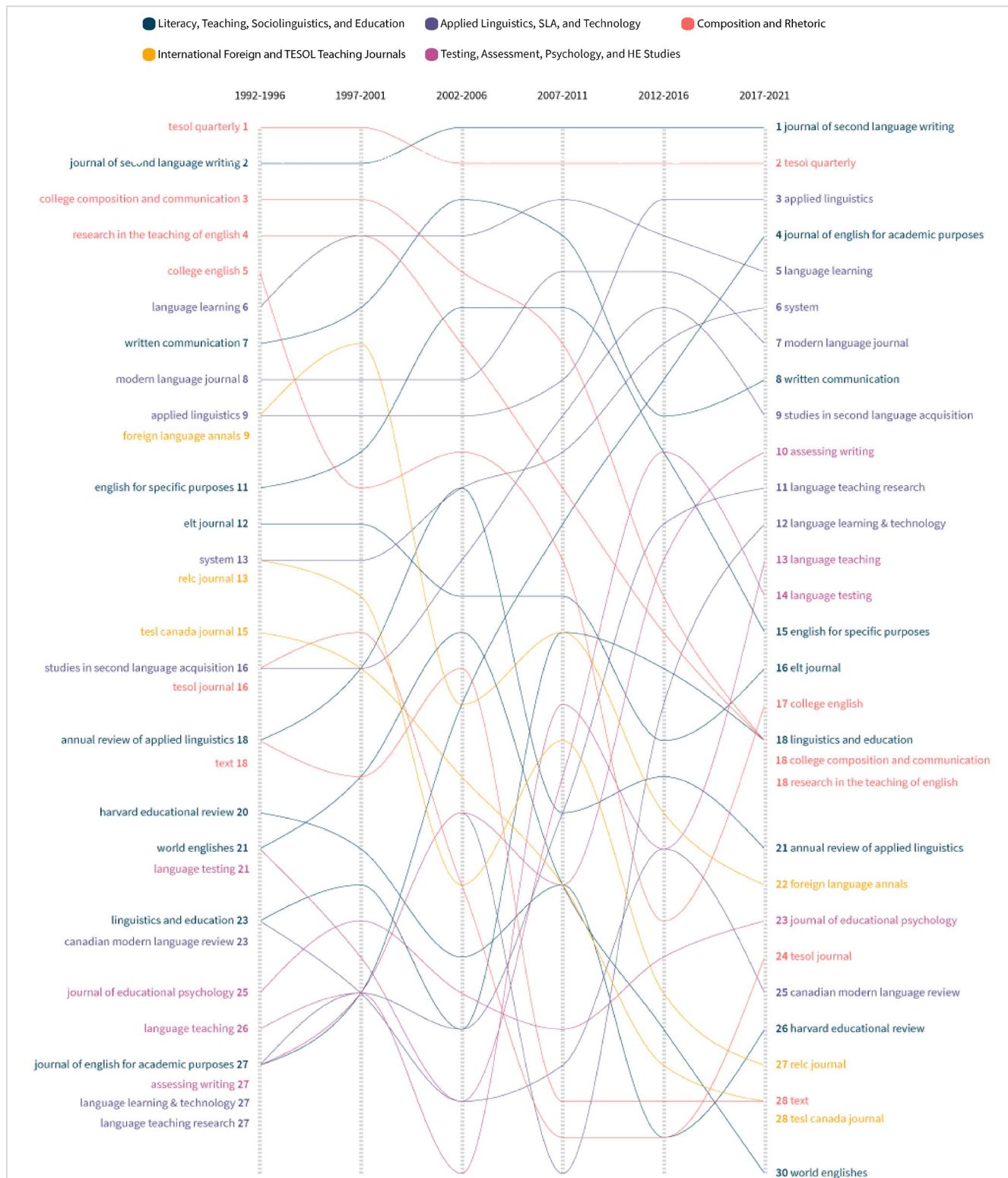
Note. Interactive chart can be found here: https://public.flourish.studio/visualisation/6465863/.

Note. JSLW and *TESOL Quarterly* were removed to obtain a more accurate picture of cluster position change over time.

The most dramatic change has been exemplified by the Composition and Rhetoric cluster. At the journal's inception, *JSLW* authors were drawing on the key The National Council of Teachers of English journals most often after core journals (*JSLW* and *TESOL Quarterly)*. Over the past three decades, their use has decreased as the source for citations, dropping from being ranked at the position of 3ʳᵈ, 4ᵗʰ, and 5ᵗʰ most cited journals to position 17 and below, and as measured through cluster rank from the position of the most often cited cluster of journals (1) to the fourth position (out of 5).

5.3 Decrease in the Citation of Composition Studies Clusters

The recent debates over the neglect of the SLW field's literature (Tardy, 2017b) by composition studies scholars as they venture into research on writing across languages can be contextualized with the results of our research. The SLW field has been moving away from composition studies as the parent discipline towards applied linguistics and SLA. The decreasing role of composition studies in SLW literature, with the absence of other related writing studies fields such as professional and technical communication or rhetoric, suggests that it is also second language writing that is moving away. As researchers in SLW draw on writing research that usually investigates locations other than the US and (second) languages other than English, the rise of translingualism in composition studies, an attempt to take up language as focus, is not enough reengage the interest of SLW scholars. Moreover, in areas that could provide missing theoretical and empirical background for SLW, such as professional and technical communication (PTC) research output, there is a stark gap in researching non-U.S. contexts. Boettger and Friess (2020) investigated key professional and technical communication journals and came to the conclusion that they remain centered on the English language and the US as a site for research. The *ESP* journal, however, works as the key source for examination of writing for specific purposes in SLW.

In a recent description of the (inter)disciplinary nature of SLW, Silva (2016) provided a summative statement on how the field "has continued to absorb ideas from different fields: from linguistics (formal and functional), applied linguistics, psychology (behavioral and cognitive), rhetoric, composition studies, education, anthropology, sociology, the philosophy of science, and others" (p. 27). We traced that process of absorption, representing it materially in a series of charts to produce a more detailed and data-driven examination of its identity.

Not surprisingly, the analysis confirms the interdisciplinary nature as reflected in the limited area of *JSLW* article data. In fact, it also provides material evidence to how the field was conceptualized in the early years—the first decade of *JSLW*, in which applied linguistics and composition studies were playing a leading role. In 2004, when Silva and Leki published their article, references to language studies research were slightly below double of those to composition studies works. Currently, the references to composition journals have decreased by almost 20 percent of what they were in the first decade of *JSLW* scholarship. They also show predominance of language studies, with a smaller share of research cited from composition and

rhetoric, education, and psychology. This trend shows that *JSLW* authors have been reading and positioning their own work in line with the language studies community more, drifting apart from the other "parent" discipline. As the SLW field becomes more engaged with global sites of L2 writing, there is a notable lack of engagement with rhetoric and linguistics (Silva & Leki's "grandparent" disciplines), suggesting they might be important for other aspects of disciplinary work (e.g., pedagogy), or in longer academic forms (e.g., monographs).

6.0 Conclusion

The aim of this short research article was to provide a quantitative historical inquiry into disciplinary formation as seen through the citation patterns in the flagship SLW writing journal. *JSLW*'s references—the footprint for reading and acknowledging indebtedness to research from adjacent fields and disciplines—provide evidence for the interdisciplinary nature of SLW writing and reveal five clusters of research communities that feed into the field formation over time. As seen through this restricted lens of field construction, second language writing has been moving closer and closer towards applied linguistics and SLA as its parent disciplines, drawing increasingly more on other social science literature. The *second language* (L2) aspect of the field ties the research on writing to a burgeoning language studies discipline. As composition studies and other North American writing fields (such as professional and technical communication) remain tied to their geo-lingua-political location in the research on writing, their literature might be losing its appeal for the global community of SLW scholars.

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References

Atkinson, D., Crusan, D., Matsuda, P. K., Ortmeier-Hooper, C., Ruecker, T., Simpson, S., & Tardy, C. (2015). Clarifying the relationship between L2 writing and translingual writing: An open letter to writing studies editors and organization leaders. *College English*, *77*(4), 383-386.

Atkinson, D., & Tardy, C. M. (2018). SLW at the crossroads: Finding a way in the field. *Journal of Second Language Writing*, *42*, 86-93. https://doi.org/10.1016/j.jslw.2018.10.011

Belcher, D. (2012). Considering what we know and need to know about second language writing. *Applied Linguistics Review*, *3*(1), 131-150. https://doi.org/10.1515/applirev-2012-0006

Boettger, R. K., & Friess, E. (2020). Content and authorship patterns in technical communication journals (1996–2017): A quantitative content analysis. *Technical Communication*, *67*(3), 4-24.

Canagarajah, A. S. (2013). The end of second language writing? *Journal of Second Language Writing*, *22*(4), 440-441.

Donahue, C. (2018). "We are the 'other'": The future of exchange between writing and language studies. *Across the Disciplines*, *15*(3), 1–14. https://doi.org/10.37514/atd-j.2018.15.3.17

Garfield, E. (2007). The evolution of the science citation index. *International Microbiology*, *10*(1), 65.

Gevers, J. (2018). Translingualism revisited: Language difference and hybridity in SLW. *Journal of Second Language Writing*, *40*, 73-83.

Hood, W. W., & Wilson, C. S. (2001). The literature of bibliometrics, scientometrics, and informetrics. *Scientometrics*, *52*(2), 291-314.

Hyland, K. (2004). *Disciplinary discourses: Social interactions in academic writing* (Michigan Classics ed.). University of Michigan Press.

MacDonald, S. P. (2007). The Erasure of Language. *College Composition and Communication*, *58*(4), 585–625. http://www.jstor.org/stable/20456967

Matsuda, P. K. (2003). Second language writing in the twentieth century: A situated historical perspective. In B. Kroll (Ed.), *Exploring the dynamics of second language writing* (pp. 15-34). Cambridge University Press.

Matsuda, P. K. (2013a). It's the Wild West out there: A new linguistic frontier in U.S. college composition. In A. S. Canagarajah (Ed.), *Literacy as translingual practice: Between communities and classrooms* (pp. 128-138). Routledge.

Matsuda, P. K. (2013b). Response: What *is* second language writing—And why does it matter? *Journal of Second Language Writing*, *22*(4), 448-450. https://doi.org/10.1016/j.jslw.2013.08.011

McCain, K. W. (1991). Core journal networks and co-citation maps: New bibliometric tools for serials research and management. *The Library Quarterly: Information, Community, Policy*, *61*(3), 311-336.

Riazi, M., Shi, L., & Haggerty, J. (2018). Analysis of the empirical research in the *Journal of Second Language Writing* at its 25th year (1992–2016). *Journal of Second Language Writing*, *41*, 41-54. https://doi.org/10.1016/j.jslw.2018.07.002

Silva, T. (2016). An overview of the development of the infrastructure of second language writing studies. In R. M. Manchón & P. K. Matsuda (Eds.), *Handbook of second and foreign language writing*. (pp. 19-44) De Gruyter. https://doi.org/10.1515/9781614511335-004

Silva, T., & Leki, I. (2004). Family matters: The influence of applied linguistics and composition studies on second language writing studies—Past, present, and future. *The Modern Language Journal*, *88*(1),1-13.

Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for Information Science*, *24*(4), 265-269. https://doi.org/10.1002/asi.4630240406

Tardy, C. M. (2017a). Crossing, or creating, divides? A plea for transdisciplinary scholarship. In B. Horner & L. Tetreault (Eds.), *Crossing divides: Exploring translingual writing pedagogies and programs* (pp. 181-189). Utah State University Press. https://doi.org/10.7330/9781607326205.c010

Tardy, C. M. (2017b). Representations of professionalization in second language writing: A view from the flagship journal. In P. K. Matsuda, S. E. Snyder, & K. D. O'Meara (Eds.), *Professionalizing second language writing* (pp. 3-20). Parlor Press.

Tardy, C. M. (2020). The discursive construction of "translingualism vs. second language writing": What we've created and how we might move on. In T. Silva & Z. Wang (Eds.), *Reconciling translingualism and second language writing* (pp. 13-24). Routledge. https://doi.org/10.4324/9781003003786

van Raan, A. (2019). Measuring science: Basic principles and application of advanced bibliometrics. In W. Glänzel, H. F. Moed, U. Schmoch, & M. Thelwall (Eds.), *Springer handbook of science and technology indicators* (pp. 237-280). Springer. https://doi.org/10.1007/978-3-030-02511-3_10