

Commentary

A Proposed 3CC Model for Academic Writing Competence

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Abstract

Academic writing plays a crucial role in disseminating scientific knowledge, advancing academic careers and fostering a harmonious academic community. To produce successful academic writing, the competence of writers in this domain is of paramount importance. The success of academic writing is significantly dependent on a writer's academic writing competence in this specialized form of communication. Despite the recognized importance of academic writing competence, the specific elements or components it should encompass have yet to be rigorously investigated. Based on previous studies and prior exploration into academic writing, this paper attempts to propose a three-core competences (3CC) model for academic writing competence, including conscious competence, cognitive competence and constructive competence. These three competences are interrelated, indicated by conscious competence as a representative of the initial starter, constructive competence as a revelation of the writing process and the final product, and cognitive competence as a bridge and macro-regulator throughout the writing process. Specifically, conscious competence embraces elements as *genre awareness, awareness of stance and voice, awareness of disciplinary norms, awareness of cultural values, awareness of putative participants and institutions*. Cognitive competence includes writers' *meta-cognition and agency*. Constructive competence is composed of *linguistic choices, grammatical expression, discursive practice, disciplinary knowledge construction, stance taking and voicing, and recontextualization*. It is hoped that this proposed 3CC model could shed lights on enhancing genre-based instruction and academic writing practices.

Keywords

Academic Writing, Writing Competence, 3CC Model

1. Introduction

Academic writing is widely acknowledged in academic community for its central role within the knowledge production, the legitimization of claims and disciplines [1], and the attainment of reputations for its practitioners [2]. However, novice and non-native writers often find it challenging to express their ideas and articulate their claims as concisely and accurately as advanced experts or native speakers when publishing their research articles (hereinafter RAs) [3-5]. Consequently, numerous studies have addressed the issue of writing compe-

tence. For instance, Bhatia suggested that writers should possess social competence, generic competence, and textual competence to produce effective writing [6]. Furthermore, genre competence for writers should encompass genre knowledge, genre awareness, recontextualization, conditional knowledge, and meta-cognition [7]. One study has discussed the components of academic writing competence, which include the discourse structure of an RA, scientific thinking and reasoning, and academic language [8]. The discourse structure is the genre structure, namely, moves and steps. Scientific thinking

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and reasoning can be viewed as a form of logical coherence. Academic language comprises interpersonal stance, lexical choices, information load, organization of information, and representational congruence. These elements can be further categorized into lexical choices, grammatical expressions, disciplinary content, stance taking and discursive practices. Recently, the author proposed an analytical framework grounded in findings related to genre integrity and genre innovation in RAs [9]. This framework is designed to help writers balance generic integrity with generic innovation when constructing RAs.

Based on previous discussions on writing competence [6-8], profound thoughts of genre analysis [11, 12], and the author's prior research [2, 9], this study aims to propose a model of academic writing competence that academic writers must possess to produce effective written work.

2. A Proposed 3CC Model for Academic Writing Competence

Inspired by the three components of discursive competence [6] and the three components of academic writing competence [8], this study aims to propose a model of writing competence model based on existing literature. It is widely acknowledged that genre studies have sought to delineate the dimensions or parameters of the genre knowledge necessary for communicative success. On one hand, this encompasses knowledge of textual form, which includes elements such as text organization, disciplinary terminology, and citation practices [12]. On the other hand, it also involves knowledge of content [1]. Further, it is about the knowledge that “requires writers to understand the discourse community’s ideologies and discursive

practices, as well as domain-specific knowledge” (p. 701) [13]. This type of knowledge can be interpreted as a foundation for successful academic writing. Moreover, according to Bruce, social genres may “draw upon knowledge relating to context, discipline-specific content, epistemology, writer stance and the related textual conventions” (p. 39) [14]. Thus, writers should be well-versed with knowledge in various fields, including textual, discipline-specific, ideological, contextual, and cognitive knowledge. The ability to integrate these aspects into the writing of academic discourse is closely linked to writing competence. As regards academic writing, we should “consider the nature of processes as well as of final products” (p. 563) [15]. This necessitates the writers to master the conscious competence as a representative of the initial starter and constructive competence as a revelation of the writing process and the final product. Additionally, Widdowson refers to “developing learner writers’ competence (involving social rules and linguistic systems) rather than their capacity, which requires the development of procedural knowledge, such as those operationalized in this study by the cognitive genre model” (pp. 7-8) [16]. This appeals to the needs of cognitive competence. Therefore, the proposed model for academic writing competence encompasses three interrelated types of competences, namely, conscious competence, cognitive competence, and constructive competence (abbreviated as the 3CC model), as illustrated in Figure 1. It is important to note that conscious competence focuses on awareness, cognitive competence centers on the willingness to take action and the monitoring of the process, while constructive competence involves writing practices that draw upon knowledge and language repertoire.

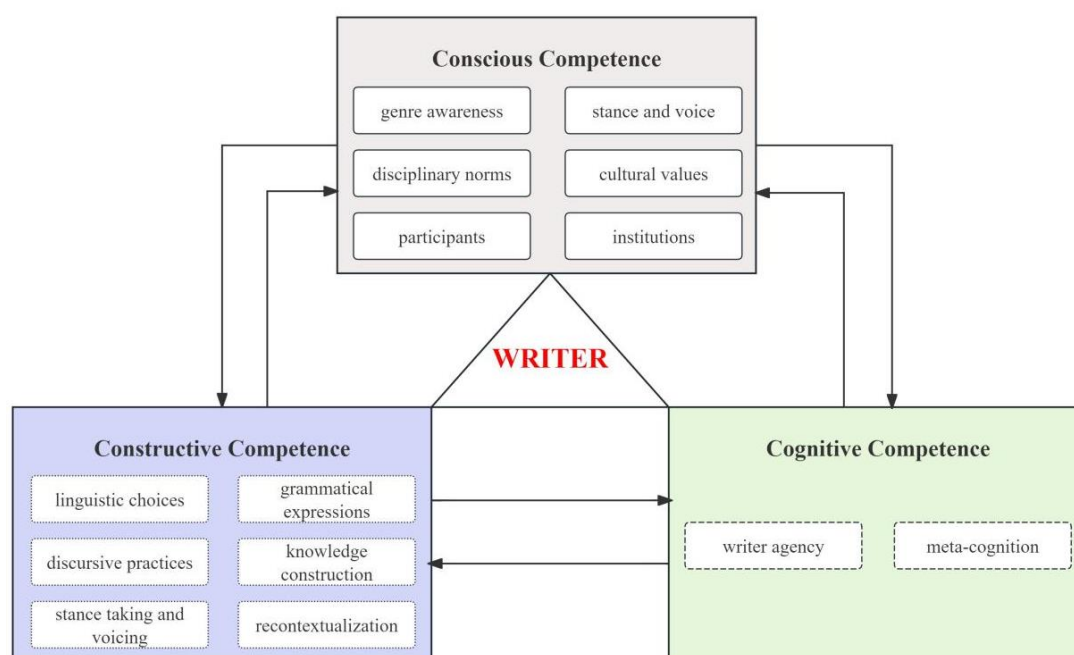


Figure 1. The proposed 3CC model for academic writing competence.

2.1. The Conscious Competence

The first aspect is conscious competence, which pertains to the writer's awareness of what they intend to write. This awareness may encompass *genre awareness*, *awareness of stance and voice*, *awareness of disciplinary norms*, *awareness of cultural values*, *awareness of potential participants and institutions*. As highlighted by Bhaita, the writer must be cognizant of what type of genre he/she is going to write, what communicative purposes, whether socially recognized or private intentions are, what kinds of conventions or boundaries of this genre are and the accessible and available mode the writer can employ [6]. Stance and voice are also critical elements of social interactions in academic writing [17]. Stance is defined as "attitudes, feelings, judgments, or commitment concerning the propositional content of a message" (p. 93) [18]. Extensive research has demonstrated that the ability to establish an appropriate stance is an essential aspect of competent academic writing [19, 20]. Voice is defined as "the amalgamative effect of the use of discursive and non-discursive features that language users choose, deliberately or otherwise, from socially available yet ever-changing repertoires" (p. 243) [21]. McCambridge refers to voice as the way a writer "sounds" in a text [22]. According to McCambridge, every text possesses a voice that results from the combination of its discursive and non-discursive features, which together convey an impression of the writer that may be perceived positively or negatively [22]. Thus, a writers' voice connects their stance to a particular viewpoint. Numerous studies have examined the influence of cultural values and disciplinary norms on academic writing, in addition to considerations of stance and voice. Understanding disciplinary differences or interdisciplinarity is essential in academic writing [11, 23], as these norms can significantly shape the written text. As Dahl stated, "academic writing reflects disciplinary as well as national culture" (p. 1807) [24], highlighting the importance of being aware of cultural values. Furthermore, writers assume three primary roles: researcher, arguer, and writer [25]. Cava also emphasizes that "the author presents him/herself as a researcher working towards the achievement of specific research goals" (p. 32) [26] in academic writing. Writers must be aware of their interaction with readers [11]. Thus, for a researcher, one must be familiar with various participants, including authorities, sponsors, supervisors, and reviewers. In addition, as an arguer and writer, one should bear the readers in mind. This type of engagement reflects the "ways writers rhetorically acknowledge the presence of their readers in a text" (p. 1) [27]. Consequently, academic writers need to recognize the role of the participants of "literacy brokers" when they embark on their work [28]. Finally, the institutional context also exerts influence on academic writing [10], and writers should be aware of this, including factors such as journals, research institutions, and universities.

2.2. The Cognitive Competence

The second aspect is cognitive competence, which is composed of the *meta-cognition* and *agency* of writers. One component is meta-cognition. Several scholars [29, 30] have argued that meta-cognition enhances L2 writers' academic writing, particularly in the transfer from L1 to L2. Meta-cognition is most commonly understood as cognition about cognition, or simply, thinking about thinking [31]. This concept comprises two facets, i.e., learners becoming "aware of and reflective about their own thinking" and being "able to monitor and manage the ways in which it is influenced by external sources" (p. 181) [32]. Meta-cognition reminds writers of how to plan, organize, manage, and evaluate their writing by utilizing their knowledge base, expertise, or strategies [30]. Furthermore, as a form of mental operation, the transfer of L1 writing knowledge or skills is linked to L2 writers' agency, which is central to their conscious actions during L2 writing [33]. Many scholars have emphasized the role of writer agency in academic writing [29, 33]. Agency refers to "the socio-culturally mediated capacity to act" (p. 112) [34] and can also be understood as "the capacity to act independently and to make one's own choices" (p. 223) [35]. Writer agency can therefore be defined as "the process of an informed action by an individual in a particular context for the sake of successful completion of a given L2 writing task" [33]. It pertains to the individual's will and capacity to act [36] or "a sense of agency" and "being able to exercise this agency" (p. 226) [35]. Bown highlights that "writers must be aware of their own agency and must believe themselves capable of exercising that agency" (p. 580) [37]. Although these two aspects, namely, the sense of agency and the exercise of agency, are closely interrelated, they do not have a direct correlation. This is because being aware of one's agency does not always lead to the actual exercise of that agency, as Mercer insightfully points out [38]. Therefore, academic writers must cultivate both their cognitive and constructive competencies. Additionally, the self-conscious or regulatory actions involved in the writing process are central to writers' agency [33, 39]. Consequently, cognitive competence serves as a bridge between conscious competence and procedural constructive competence.

2.3. The Constructive Competence

The third aspect pertains to constructive competence, which plays a vital role in both contributing to and shaping the writing process, ultimately resulting in a polished and coherent final product. In alignment with conscious competence, constructive competence involves the intentional construction of writing with a heightened awareness. This competence encompasses various elements, including *linguistic choices*, *grammatical expression*, *discursive practices* (such as generic structure, genre integrity, innovation, and writer-reader-text

interaction), *disciplinary knowledge construction*, *stance taking and voicing*, and *recontextualization*. The agency of L2 writers drives them to employ “various writing strategies perceive different writing activities to be difficult or easy; and adopt various lived experiences in composing” (p. 275) [33]. Furthermore, the interaction between writer agency and contextual factors reveals distinct stances and voices [40]. Stance is expressed through a variety of grammatical devices and genre constraints, influencing the selection of discourse structures and lexico-grammatical resources. Taking these into account, the first two components of constructive competence are linguistic choices and grammatical expressions. Undoubtedly, discursive practices play a crucial role in academic writing, as they encompass the generic structure of an article, the integrity and innovation of the genre, and the writer-reader-text interaction. Again, the nature of writing is both a process and a final product [15], making recontextualization during the writing process essential to align with distinct disciplinary norms, cultural values, and institutional regulations. Ultimately, in academic writing, it is vital to disseminate disciplinary knowledge while also conveying the stance and voice of the writers.

Put simply, the three competences are interrelated. Conscious competence refers to the awareness of the necessity of writing. Cognitive competence governs this awareness while also facilitating its application in practice. Constructive competence emerges from cognitive competence, enabling the writer to implement their awareness throughout the writing process. These three competencies are integral to the writing process, from initial planning to the final product, ultimately ensuring that the writing is both acceptable and appropriate. To facilitate a practical analysis of the three competencies model, various components of the 3CC model for academic writing competence are illustrated in Figure 1. Writers should keep these components in mind and apply them in practice, for instance, by composing an academic article or analyzing well-known articles to understand how these components interact with one another.

3. Conclusion

The proposed 3CC model of academic writing competence may enhance the exploration of academic literacy by encompassing three distinct yet interrelated competencies that address all the three stages of academic writing. This model can further contribute to the development of cognitive process theory in academic writing, as supported by the quantitative and qualitative findings and discussions of the study. Additionally, the 3CC model for academic writing competence can assist novice scholars in identifying the most critical aspects they need to focus on at each stage of the writing process, thereby making their writing efforts more efficient and effective.

Abbreviations

3CC	Three-Core Competences Including Conscious, Cognitive and Constructive Competences
RAs	Research Articles

Author Contributions

Ping He: Conceptualization, Resources, Visualization, Writing – original draft, Writing – review & editing

Conflicts of Interest

The author declares no conflicts of interest.

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