

Critical thinking in research writing: A transferable inter-disciplinary skill or an integral element of disciplinarity and subject-specific genre knowledge

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Overview

1. context and conceptual framework
2. study and its findings
3. implications for teaching the writing of critical literature reviews



1. Context and Conceptual Framework

- ▶ the research article introduction and its literature review
- ▶ critical thinking as part of discourse competence
- ▶ the social genre/cognitive genre model



Research Article Introductions

“in the fierce academic competition to get papers published in reputable academic journals, the Introduction is extremely important in positioning the writer as having something to say that is worth publishing” (Paltridge & Starfield, 2007, p. 82).

“the [literature] review is more than a summary . . . it includes a critique that . . . assesses or weighs up the value of theories, ideas, claims, research designs, methods or conclusions” (Bitchener, 2010, p. 61).



Defining Critical Thinking

1. application of logic to argument and problem solving
2. social practice
(Atkinson, 1997, pp. 72-74)



Defining Critical Thinking

- ▶ an evaluative judgement made within any field of human activity in relation to some object, behaviour, event or other aspect of that field
- ▶ in relation to written text, critical thinking refers to the propositional content of any text that encodes such an evaluative judgement



Discourse Competence

“the ability to communicate through extended spoken and written texts that are characterized by an *appropriate*, integrated arrangement of content and language”

(Bruce, 2011, p. 46)



Dual Approach to Genre

Theorist	Socially recognized category of text	Text segment realizing a single rhetorical purpose
Werlich (1976)	text form	text type
Adam (1985, 1992)	texte	séquence
Virtanen (1992)	discourse type	text type
Pilegaard and Frandsen (1996)	text genre	text type
Biber (1989)	genre	text type



Social Genres and Cognitive Genres

social genre - socially recognized constructs according to which whole texts are classified in terms of their overall social purpose . . . purpose here is taken to mean the intention to communicate consciously a body of knowledge related to a certain context to a certain target audience

cognitive genre – refers to the overall cognitive orientation and internal organisation of a segment of writing that realizes a single, more general rhetorical purpose

(Bruce, 2008, p. 39)

Genre Knowledge: Constituent Elements

social genre elements

- ▶ context (*Widdowson, 2004*)
- ▶ epistemology (*Lea & Street, 1998*)
- ▶ stance (*Hyland, 2005*)
- ▶ content schemata (*Hasan, 1989; Swales, 1990*)

cognitive genre elements

- ▶ gestalt patterns of ideas (*Johnson, 1987*)
- ▶ general textual patterns (*Hoey, 1983*)
- ▶ relations between propositions (*Crombie, 1985*)

Researching Genres

- ▶ ethnographic interviews (*Bruce, 2009*)
- ▶ textual analysis (*Bruce, 2008a, 2009, 2010, 2011b, in-press*)
- ▶ corpus analysis (*Bruce, 2008, 2009*)



2. The Literature Review Study

- ▶ aim
- ▶ sample and analytical method
- ▶ findings
- ▶ conclusion



Aim of the Study

To examine the expression of critical thinking in the literature review of the introduction sections of research-reporting journal articles in two disciplines – applied linguistics and social psychology



The Samples

Sample 1: Applied Linguistics

15 articles reporting research on the role of written corrective feedback in second language writing instruction

Sample 2: Psychology

15 articles reporting research on issues relating to the acculturation and adjustment of immigrant youth, such as stress and identity



Analysis of Texts

- ▶ preliminary rater analysis
- ▶ detailed rater analysis



The Findings

Critical thinking in the literature review expressed through three elements of genre knowledge:

- ▶ content schema organization (move structure)
- ▶ the metadiscourse device of *attitude markers*
- ▶ a recurrent *concessive contrast* relation between propositions - *Concession Contra-expectation* (Crombie, 1985)



Use of Content Schema (move structure)

recursive use of the Swales' move structure, usually involving:

- ▶ an abbreviated statement of the three moves,
- ▶ expanded versions of Move 1b (review of prior literature) and Move 2 (the research space)



Metadiscourse Device *Attitude Markers*

- ▶ linguistic devices that “express a writer’s attitude to a proposition” (Hyland, 2005, p. 49)
- ▶ usually noun phrases and verb phrases used by writers to express an evaluative comment
- ▶ used to *deficitize*, or portray negatively, aspects of the research that is being reviewed
- ▶ relatively infrequent – average of 8.8 occurrences in the applied linguistics texts and 4.4 in the psychology texts



Use of an Interpropositional Relation

- ▶ critique role of concessive-contrast relation between two propositions (Crombie's *Concession Contraexpectation*)
- ▶ “In this relation, the truth of an inference is directly or indirectly denied” (Crombie, 1985, p. 23)
- ▶ order of propositions is affirmative/negative – to critique others' work
“While the findings of these three studies signal a positive effect for written corrective feedback on error reduction, two further studies report the opposite” (Text 3)
- ▶ order of propositions is negative/affirmative – to evaluate writer's own work or viewpoint positively
“Previous written CF studies have not convincingly demonstrated that written CF has a positive effect on learning. However, Sheen's (2007a) studies and more recent studies [refs.] . . . provide counterevidence to Truscott's (1996, 1999, 2007) claim that written grammar error correction is ineffective” (Text 9)



Summary of Findings

- ▶ the literature review plays both a contextualizing and a justificatory role
- ▶ a strong need to critique aspects of the prior research of others in order to establish one's own research space
- ▶ this criticality is achieved through:
 - ▶ recursive use of Moves 1b and 2
 - ▶ attitude markers and the concessive contrast relation to critique others' work in Move 1b
 - ▶ attitude markers and the concessive contrast relation to evaluate writer's own research approach positively in Move 2



3. Implications for teaching research writing



A Genre-based Pedagogy

- ▶ guided analysis of research article Introduction texts
 - ▶ macro-level move structure
 - ▶ use of attitude markers
 - ▶ use of the *Concession Contra-expectation* relation
- ▶ individual analysis of texts from the student writer's own discipline
- ▶ joint/individual construction of examples of the genre



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