

A multidimensional analysis of student writing across levels and disciplines

Hilary Nesi h.nesi@coventry.ac.uk

www.coventry.ac.uk/bawe

The BAWE corpus:

- 6,506,995 words
- 2,896 texts
- 2,761 assignments
- 627 contributors
- 30+ disciplines
- 13 genre families

Tagged for 67 linguistic features, grouped into 16 grammatical/functional categories:

- | | | | |
|------------------------------|---------------------------|--|---|
| 1. Tense and aspect markers | 4. Questions | 9. Prepositional phrases, adjectives and adverbs | 13. Specialized verb classes |
| 2. Place and time adverbials | 5. Nominal forms | 10. Lexical specificity | 14. Reduced forms and dispreferred structures |
| 3. Pronouns and pro-verbs | 6. Passives | 11. Lexical classes | 15. Coordination |
| | 7. Stative forms | 12. Modals | 16. Negation |
| | 8. Subordination features | | |

Dimension 1: Involved v. Informational

1st & 2nd person pronouns, *Wh* questions etc. Verbal v Nominal style (CONVERSATION = +35)

Dimension 2: Narrative v. Non-narrative

past tense verbs, 3rd person pronouns, perfect aspect verbs (FICTION = +7)

Dimension 3: Explicit v. Situation-dependent

Wh relative clauses, phrasal coordination, nominalizations (OFFICIAL DOCUMENTS = +7)

Dimension 4: Persuasive

modals, persuasive verbs, conditional subordination (PROFESSIONAL LETTERS = +3)

Dimension 5: Abstract v. Non-abstract

passives, conjuncts, passive adverbial and postnominal clauses (ACADEMIC PROSE +6)

Multiple Range Test Scores for levels

	Involved ¹	Narrative ²	Explicit ³	Persuasive ⁴	Abstract ⁵
Level 1	-12.8	-2.7	5.1	-1.4	5.9
Level 2	-13.9	-2.8	5.6	-1.5	6.2
Level 3	-14.8	-3.0	5.7	-1.4	6.4
Level 4	-17.3	-3.2	6.4	-2.0	5.4

Multiple Range Test Scores for disciplinary groups

	Involved ¹	Narrative ²	Explicit ³	Persuasive ⁴	Abstract ⁵
Arts and Humanities	-13.4	-2.1	5.7	-2.3	5.5
Social Sciences	-15.3	-3.0	6.5	-1.3	6.2
Life Sciences	-15.6	-3.0	5.7	-1.5	5.7
Physical Sciences	-13.4	-3.7	4.4	-1.2	6.5

Multiple Range Test Scores for Genre Families

	Involved ₁	Narrative ₂	Explicit ₃	Abstract ₅	Persuasive ₄
Essay	-14.3	-2.5	6.2	5.9	-1.8
Meth. Recount	-15.8	-3.7	4.5	7.3	-2.5
Critique	-14.8	-3.1	6.0	6.4	-1.6
Explanation	-15.4	-3.6	5.0	5.8	-2.3
Case Study	-16.4	-2.9	5.8	4.5	-0.5
Exercise	-12.1	-3.9	4.6	5.7	-1.3
Design Specs	-13.1	-4.0	4.1	6.8	0.7
Proposal	-16.4	-3.8	6.3	4.8	1.3
Narrative Recount	-4.8	-1.1	3.8	4.0	-0.7
Research Report	-16.2	-3.1	5.5	7.2	-2.4
Problem Question	-12.0	-2.8	5.2	6.4	1.6
Literature Survey	-17.9	-2.6	6.3	5.0	-3.4
Empathy Writing	-11.5	-2.7	4.5	4.5	0.8

¹General academic prose = -15. ¹Fewer verbal features at each level of progression – less “author-centred”, more “object centred”. Significant differences between levels 1/2 and 3/4.

²Academic prose typically falls between -2 and -3.

A steady decrease in narrative features

³Increasingly explicit.

⁴General academic prose = 0 (neutral). BAWE corpus writing scores are consistently negative.

⁵Highly passivized, scores similar to general academic prose. A steady increase in abstraction, reversed at Masters level.

different colours = significant differences

Involved / Narrative

Entirely negative scores on the ‘involved’ and ‘narrative’ dimensions indicate a high informational focus and a low level of narration.

Explicit / Abstract

Entirely positive scores on the ‘explicit’ and ‘abstract’ dimensions indicate lexically dense text containing passives, past participle clauses, and other features typical of academic prose.

Persuasive

Mixed scores on the ‘persuasive’ dimension indicate variation in the degree of argumentation (Problem questions and Proposals being the most persuasive, and Literature Surveys the least).

Distribution of factors across genres

Involved ¹	narrative	empathy	problem q.	exercise	design spec	essay	critique	explanation	methodology	research	case study	proposal	literature	Informational ¹
Narrative ²	narrative	essay	literature	empathy	problem q.	case study	critique	research	explanation	methodology	proposal	exercise	design spec	Non-narrative ²
Sit-dependent ³	narrative	design spec	methodology ³	empathy	exercise	explanation	problem q.	research	case study	critique	essay	literature	proposal	Explicit ³
⁵ Non- abstract ⁵	narrative	case study	empathy	proposal	literature	exercise	explanation	essay	critique	problem q.	design spec	research	methodology	Abstract ⁵
Non-persuasive ⁴	literature	methodology	research	explanation	essay	critique	exercise	narrative	case study	design spec	empathy	proposal	problem q.	Persuasive ⁴

Acknowledgement

Multidimensional analysis for this study was carried out by Douglas Biber and his research team at Northern Arizona University. Basic information about the five dimensions can be found in Biber (1988) and Conrad & Biber (eds) (2001).

An Investigation of Genres of Assessed Writing in British Higher Education
ESRC Award RES-000-23-0800
November 2004 – December 2007