

EVALUATION SOFTWARE IN ASSESSMENT OF L2 ACADEMIC WRITING

A Report on the conference "MOOCs, Language Learning and Mobility"

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Annotation

Tertiary education oriented on the English language places L2 students between Scylla and Charibdis of high assessment standards and the lack of writing practice in Academic English. The task of giving students a tool to learn English for Academic Purposes (EAP) and providing their teachers with a tool to assess students' papers efficiently made a group of researchers from Higher School of Economics (HSE) develop an application which fulfils twofold task: it analyses subject-determined written academic discourse of competent writers against a set of formalized criteria (academic style markers) and compares the results with those of research papers written by students.

We assume that evaluating students' written papers in terms of style can be automated by using a special software tagging style markers in the text. Evaluation of statistical bounds of style markers occurrence requires implementing methods and tools of corpus linguistic. To annotate texts GATE Developer software is used, which provides a wide range of capabilities for text processing.

Introduction and Motivation

English has become a language of global communication in various spheres of life; education and science are no exceptions. Students have to acquire effective academic writing skills to cope with writing tasks important both for their studies and future career. Whenever acquiring academic writing skills is vital for university students, testing them is equally important. With the growing importance of academic writing skills acquisition in English, the role of valid and reliable assessment tool increases proportionally.

Academic writing assessment for L2 teachers of English may be challenging due to a number of reasons, one of the most important is the novelty of the discipline and natural limitations which L2 student faces with in Russia: lack of practice and limited language environment. Academic writing has been developing rapidly in Russia only last decade, and only few universities provide students with serious training in academic writing, HSE being one of them.

Existing assessment practices at Russian universities involve checking papers manually and generally are based on teachers' personal aptitudes to academic writing conventions. Numerous EAP course books, hand books, reference books and other instructional sources cover a vast area of academic writing in English in full variety of its genres, aspects and modifications but still do not provide a clear and objective assessment instruction derived from the analysis of writing produced by competent academic writers.

Standardized scales typically implemented in a number of test systems (IELTS, TOEFL, GRE) assess relevantly some rubrics (coherence/cohesion) but fail to assess some aspects of writing, for example, meeting genre conventions, complexity and adequacy of syntactic, grammar and vocabulary level and choice; what is more, stylistic relevance of the texts produced by advanced graduate students remain unaddressed.

Taking everything into consideration, it can be said that practical experience of the last decade in teaching academic writing to students and professors and an urgent need in the reliable instrument of academic writing assessment motivated us to develop a special software allowing to teach and assess academic writing to graduate students as well as research it.

In the context of L2 academic writing for educational purposes it should be mentioned that the degree at which graduate students have mastered it is essential for their success in university environment and their further study for master degree and career. Paraphrasing the same idea negatively 'a lack of writing expertise is frequently seen as sign that students do not possess the appropriate thinking and reasoning skills that they need to succeed' (Weigle, 2011 – p. 5). As Weigle puts it, style, accuracy and mechanics are of more significance for L2 writing comparing with L1 when ideas and the soundness of the logic are seen as dominating rubrics in writing assessment.

What is tend to be a peripheral field of assessment or being vaguely (or too straightforwardly) formulated in curricula assessment criteria of academic writing of L2 Russian speaking students at HSE is academic writing style. Typically it is described in curricula as logical, persuasive formal writing, with excessive use of terminology and passive voice, avoiding phrasal verbs and short forms. Obviously, it is not enough either for teachers or for students.

The answer might be found in corpus stylistics research (Jeffries and McIntyre 2010, Leech and Short 2007, McIntyre and Busse 2010) which grew out of previous statistical stylistics, but nowadays is concerned more with giving qualitative interpretation of empirical data received from corpus examined.

Novelty of the software and the methods implemented

A wide variety of software tools (desktop, mobile and web applications, language labs etc.) cover different aspects of teaching and learning of foreign languages, and provide a lot of useful functions, but many of them fail to meet the need of creating a reliable and valid assessment tool performing particular tasks. Popular web applications fulfil functions of text checkers and text editors; they provide advice how to improve the text and correct major mistakes but tend to be based on general English patterns – stylistically neutral language while graduates usually have to write within the frameworks of academic discourse in a particular subject domain which have a set of conventions to be followed by students.

To meet the needs of students, teachers and researchers of academic writing we suggest using special software created to execute this manifold task of learning, teaching and assessing stylistic relevance of academic writing as well as providing empirical data for linguistic corpus research.

Before creating an assessment tool several questions addressing assessment of writing ability as formulated by Weigle (2011) should be considered:

- What to test/assess in academic writing? To be exact, which language (grammar, vocabulary, communicative function, etc.) to evaluate?
- Which criteria and standards will be used? Is scoring valid and reliable?

Considering practical implications of the data received for both teaching and research purposes the following questions should be addressed:

- How can the information received from the assessment task be used?
- What can be done with the information got from the assessment task?
- Who will use the information that assessment task provides?

Software created for assessment of academic writing addresses these questions: it evaluates the relevance of usage of core grammar patterns, choice of vocabulary and cohesive devices against the standards identified in the model corpus. Statistical approach is used to measure how relevant are the texts produced by students to writing produced by competent writers. The information received from the assessment task might be used to teach (improve writing skills through “process writing technology” or “data driven learning”, control the level of acquisition (assessment per se) and provide empirical data for research of academic writing produced by students.

Methodology

In this experience-based research pilot testing of the set of annotations was implemented to experimental and model corpora both produced within the framework of the same subject domain – computer science, but on different level of writing expertise. The database of the study is made up of two specialized corpora which were compiled to serve the needs of creating a corpus of model writing and a learner’s experimental corpus. The model corpus is a collection of the articles published in most prominent academic journals in Computer science. Experimental corpora – is a collection of students’ research proposals based on their final research papers in English in a written form.

It might be argued that implementing genre based approach will be beneficial in the view that genre conventions may determine academic writing significantly and choosing different forms for a contrastive study can blur the result. But it was suggested that including published articles in a model corpus is more preferable than project proposals (i.e., papers of the same genre) since articles represent conventions of competent academic writing in their purest form – peer-reviewed and thus proved as significant and persuasive achievement in the subject domain, what is even more important – thoroughly edited.

The set of annotations chosen (see Appendix 1) is based on typical recommendations given by popular reference books and course books on EAP but can be extended easily depending on particular needs of a teacher or a researcher. Annotations reflect key features of academic writing in English – cohesiveness, a high level of abstraction (abstract vocabulary and desemantized verbs), particular verb forms, voice and personal stance.

Practical implications

The results of the research can be used in academic writing analysis to identify most significant features of domain academic discourse and will allow to evaluate the quality of papers written by students against a number of standardized formal criteria.

Conclusion

Assessment in academic writing should be set on a number of valid criteria reflecting holistic approach to evaluation of students’ papers. Implementing Evaluation Software and a corpus-based approach assessment of academic writing gave evidence to the level of confidence students demonstrated completing their writing assessment tasks. Statistics show that some aspects of EAP demonstrated by L2 Russian students need more serious training (excessive use of logic connectors and verbs of broad semantics), while frequency of some patterns is close to the level demonstrated by competent L1 writers: use of nouns, postpositional and prepositional attributes; percentage of words with abstract suffixes, etc.). Accordingly, the results of this pilot research in “data driven

learning” (Johns, 1991) gave basis for further improvements of the Evaluation Software and facilitated methodology development for learning through a corpus-based approach.

Appendix 1

Morphology of Academic written discourse

1. Nominalization

- Noun
- Noun with abstract suffix (-ment, -ion, -ation, -ition, -tion, -sion, -f, -ness, -ce, -cy, -ity, -dom, -th, -ery, -ry, -ise, -ice, -hood, -ics, -ship)
- Noun with -or suffix

2. Semantics of Verbs

- desemanticised verbs (be, become, seem, remain, grow, consider)
- verbs of broad abstract semantics (be, exist, have, appear, occur, alter, continue, contribute, discuss, involve, investigate, conduct, consider, illustrate, assume, find, calculate, demonstrate, identify, analyse, support, challenge, examine, affect, provide, include, classify, establish)

3. Choice of the voice and tense

- Present Forms
- Past Forms
- Future Forms
- Passive Voice

Preciseness of speech

1. Adverbs

clearly, dramatically, completely, considerably, essentially, significantly, markedly, perfectly

2. Attributes

- prepositive attributes
- postpositive attributes

Personal Stance

1. pronoun I
2. pronoun we
3. pronoun he/she
4. pronoun you

Cohesiveness

1. complex conjunctions (not merely, but also, both and, as ... as, neither ... nor, the ... the, not so ... as)
2. archaisms (thereby, therewith, hereby)
3. complex prepositions (throughout, within, in accordance with, instead of, according to, because of, due to, regardless of)

