Curriculum Development
Academic Writing: 
Background
+ 
Key Concepts

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Survey

1. What is required in existing BA/MA programmes?
2. Why is it necessary to learn/teach Academic English/Writing?
3. What are central linguistic concepts in academic writing?
   metalanguage: stance/hedging/modality, cohesion
4. How can we analyse what we (Germans/students) do and what others (Czechs/native speakers) do?
5. How can we learn/teach it?
6. Can we agree on a common curriculum/syllabus?
1. Academic Writing in the curriculum

BA3 S: ESP/EAP

In practical language use experts usually deal with special texts (English for Special Purposes and/or Academic Purposes). That is relevant for text reception as well as for text production.

Objectives:

- Students will learn about the specialties of academic texts – about their vocabulary, structures, style etc. Academic writing will be acquired through practice.

*can be improved!*
BA5: „Auslandssemester“


„a critical evaluation of the achievements in academic and intercultural experience during the semester abroad“
This is a practical course designed to improve students’ academic writing. Students will analyse a number of genre-based academic pieces of writing before producing a number of pieces of their own. Students will be required to critically evaluate their own and peers’ work and suggest and implement revisions.

**Objectives:**

By the end of the course, students will

- be able to critically analyse academic writing samples from a variety of genres and Englishes
- have an awareness of the standards and conventions that exist in the English as a lingua franca world
- be able to produce a variety of academic text-types in student’s field of study
- be able to critically evaluate their own and peers’ work
- be able to revise texts based on personal, peer and lecturer feedback
- have been exposed to a variety of tools available to aid academic writing
MA1 V: English as an International Academic Language

This course introduces students to a broad variety of “Englishes” that are used as a lingua franca in science and technology. I will present a wide range of theoretical and practical approaches, from concepts to practical text optimisation. Students will learn to improve their own drafts. Student suggestions are very welcome.

Objectives:

By the end of the course, students

- have a basic idea of different genres/text-types of English as a lingua franca worldwide,
- can distinguish academic genres and sub-genres according to level and audience/readership (from student papers to PhD theses, from conference talks to research articles),
- have developed an awareness of basic linguistic means that help to create effective academic texts (like “hedges”, “cohesion”, etc.)
- have a broad survey of research methodologies (using computerised text-collections to analyse different surface features),
- have a clear idea of conventions in different culture-specific traditions,
- have tried to write small research texts (abstracts, proposals, reviews) by themselves, etc.
Basis: personal working habits/skills

working habits: your preferred workplace, time;
general study skills: IT, Presentation Techniques;
reading skills as a basis;
brainstorming;
structuring/organisation skills;

academic thinking skills:
- research field, question, title?
**Basis: writing before AcWriting**

general „texting“ skills:
- hierarchy: text, paragraph, sentence
- title, introduction, main part, conclusion

distinguishing text-types:
writing an “essay” (“Laziness”) or even argumentative essay (“Death penalty, pros & cons”)

styles (writing for a specific readership/medium):
registers?

contrast creative vs. academic writing
(literature vs. literary criticism)
2. Practical examples BA “reflective essay”:
“before you do ac. writing, you do writing;
before you do writing, you do English”

The next course, The History of the Scottish Book, was a complete new topic for me. The lecturer, Mr X, had a pleasant character. He always had a sympathetic ear for questions and problems of the students. His class was not constantly serious but I learned enough. The content was most of the time exciting. ...

Despite I spent the remaining time of semester abroad in Glasgow, I was never bored. After the first weeks, I had good orientation in the city and I managed the former problems with the Scottish accent. ...

When I talked to people there and they noticed my foreign accent, they asked where I come from, what I do here and if I like Glasgow.
2. Practical examples: post-MA research article

The aim of this paper was to show the usability of two common data elicitation methods to obtain data for the use of reflexive pronouns among native and non-native speakers of English. The first method was an online questionnaire which was used in two ways: The first approach examined the use of *themself* as an anaphoric reference to seven grammatically and semantically different antecedents. The second approach was a web-as-corpus query that investigated the general utilisation of reflexive pronouns with the indefinite pronoun *anyone* as antecedent.
2. Practical examples: post-MA more explicit version

The aim of this paper was to show the usability of two common data elicitation methods to obtain data on the use of reflexive pronouns from native and non-native speakers of English:

The first method was an online questionnaire (that was) used in two ways: First to examine the use of *themself* as an anaphoric reference to seven grammatically and semantically different antecedents, and second to examine attitudes towards this usage.

The second method was a web-as-corpus query that investigated the general usage of reflexive pronouns after the indefinite pronoun *anyone* as antecedent.
3. Concepts / Principles

- adapt the text to medium, culture, reader, ...
  - in English AcWr much more than in German AcWr

- structuring:
  - argumentation structure incl. repetition
    (not: “beauty of variation”),
  - clarity, transparency, explicitness

- “metalanguage”:
  - cohesion,
  - author commitment: hedging (-boosting)
3.1. Social constructivism

Social constructionism and social constructivism are sociological theories of knowledge that consider how social phenomena develop in social contexts. Within constructionist thought, a social construction (social construct) is a concept or practice that is the construct (or artifact) of a particular group. When we say that something is socially constructed, we are focusing on its dependence on contingent variables of our social selves.

Constructivism applied to Englishes of Science

writers and readers interact in a discourse community on the basis of accepted institutionalised conventions of metadiscourse

- Swales (1990): genre approach to academic writing
- Hyland (2005, 2009): author stance and engagement are crucial variables in academic interaction

“writing is always a personal and socio-cultural act of identity whereby writers both signal their membership in a range of communities as well as express their own creative presence” (Hyland 2006: 35)
**Discourse community**
(Swales 1990: 24 -27)

- A discourse community utilizes and hence possesses one or more genres in the communicative furtherance of its aims.
- In addition to owning genres, a discourse community has acquired some specific lexis.
- A discourse community has a threshold level of members with a suitable degree of relevant content and discoursal expertise.

→ specialised and popular academic discourse
Engishes of Science according to discourse community

- research discourse
- instructional discourse
- popular discourse
- student discourse
- newspaper science discourse
Engishes of Science according to genre/text-types in community

**research “output”**
- research articles
- book reviews
- books and handbook articles
- project proposals, reports
- conference presentations

**teacher “talk”/e-learning**
- ppt presentations
- lectures
- student presentations
- textbooks
- www pages
- Wikis and other platforms

**student "literacy"**
- fieldwork notes/essays
- Mag/BA thesis
- seminar presentations

**science “journalism”**
- popular science articles
- popular science books
- newspaper science articles
3.2 Hedges
complex, gradient, culture-specific

more than 60 'hedges and related phenomena', including sort of, kind of, rather, basically, very, often, almost, as it were, in one sense, a regular, so to say, in name only, really, pseudo-, etc.

Brown/Levinson (1987: 145) "a particle, word or phrase that modifies the degree of membership of a predicate or a noun phrase in a set; it says of that membership that it is partial or true only in certain respects, or that it is more true and complete than perhaps might be expected".

Ventola/Mauranen (1996): Finns writing in English showed the tendency to stick to a few 'safe' expressions of epistemic modality, had less variation in the expressions than did native speakers of English, i.e. they did not behave in a native-like manner

→ def.: hedging = down-(up)-scaling author commitment (cf. stance)
3.2.1 Overlapping functional concepts

key terms: stance > hedging > modality

- “personal feelings, attitudes, value judgments, or assessments” (Biber et al. 1999: 966)
- “subjective” evaluation on the basis of own knowledge, experience, etc.
- context-dependency
  academic culture in the discourse community determines how stance is expressed!
3.2.2 Formal indicators of hedging

standard example: modal auxiliaries
in epistemic use (Greek: “knowledge”)
in decreasing strength/propensity:
must, will, would, should, can, could, may, might, ...

but also modal adjuncts / adverbs / nouns
Table 3: A sample of modal adjuncts (from Huddleston/Pullum 2002:768)

<table>
<thead>
<tr>
<th>Strong</th>
<th>assuredly</th>
<th>certainly</th>
<th>clearly</th>
<th>definitely</th>
<th>incontestably</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>indubitably</td>
<td>ineluctably</td>
<td>inescapably</td>
<td>manifestly</td>
<td>necessarily</td>
</tr>
<tr>
<td></td>
<td>obviously</td>
<td>patently</td>
<td>plainly</td>
<td>surely</td>
<td>truly</td>
</tr>
<tr>
<td></td>
<td>unarguably</td>
<td>unavoidably</td>
<td>undeniably</td>
<td>undoubtedly</td>
<td>unquestionably</td>
</tr>
<tr>
<td>ii</td>
<td>apparently</td>
<td>doubtless</td>
<td>evidently</td>
<td>presumably</td>
<td>seemingly</td>
</tr>
<tr>
<td>iii</td>
<td>arguably</td>
<td>likely</td>
<td>probably</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv</td>
<td>conceivably</td>
<td>maybe</td>
<td>perhaps</td>
<td>possibly</td>
<td></td>
</tr>
<tr>
<td>Weak</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Curriculum examples concepts analysis teaching outlook
3.3 Cohesion / coherence

3.3.1 Definitions

cohesion = extralinguistic factors contributing to the creation of texture in the mind of the hearer/receiver!

cohesion = linguistic means which create texture
3.3.2 Formal indicators: cohesive devices

formal:

  conjunctions:  but, while
  adverbs:       first, then, finally

functional:

  sentence adverbials, e.g. clause-initial adverb *ly,
List 1: AntConc concordance for *ly, in the first few SPACE Corpus files

- Subsequently, Braunstein et al. [5] presented a quantum analogue to classical Huffman coding. Because a general unit on in Section 2.5, below.) More recently, Chuang and Modha have developed a quantum version of arithmetic coding as a route to quantum data compression.
- Obviously, all simply condensable codes are condensable, but the converse is not true. 4 The condensability of the code is prefix-free.
- In the section, we will show how the register is called Riki.
- Initially, each register contains a zero codeword from a fixed prefix-free quantum code. 13 Tape There is a list of words that can be made as small as desired.
- Conversely, in a simple condensation process, we must keep at least hii qubits per signal to maintain high fidelity.
- Useless quantum coding theorem.
- Equivalently, we can fix one of the purifications |II and maximize over the other purification |I. The fidelity will never be less than 1, so this code will achieve high fidelity using about $S(\mathcal{A})$ qubits per signal. An alternate scheme is to find a bound to the codeword length in the codewords themselves are stored.
- In entangled strings of qubits. This means that the average number of qubits used to store the individual codeword from the string immediately, before the remainder of the string is received [3]. But this terminology is inapplicable to the quasiparticles with a new kind of quasiparticle.
- A simple toy model range delay.
- Astonishingly, these quasiparticles obey their own version of special relativity. For example, there's an absolute one revolution per minute (rpm), mena with fore and aft elements.
- A differential switch by ground command or even from distances beyond 67 AU. Starting in the spring of 1996.
- Unfortunately, an instantaneous comparison was not possible in this case. The reason is that the signal-to-noise ratio was hard to quantify. But in the literature [59]-[62].
- F. Chandler wobble is obtained.
- and different constant batch sizes are necessary.
- For the spin period, a few maneuvers can be obtained.
- Finally, the parameter $a'(U)$ was determined by linear least squares. The bestfit value was obtained. 28 maneuvers in all. As noted, the spin rate typically tends to increase at a rate of ~ $(+0.0033\pm0.0003)$ $s$ per maneuver. In fact, this phase is typically...
List 2: occurrences of *unfortunately* in SPACE07

1. It is unfortunately not the case that knowledge of the mechanical...
2. Unfortunately, an instantaneous comparison was not possible...
3. Unfortunately, exact information on gas usage is unavailable...
4. Unfortunately, one has no a priori way of predicting...
5. Unfortunately, neither easily works...
6. Unfortunately, there are as yet no reliable calculations that...
7. Unfortunately, our experience is confined to an equilibrium ...
8. Unfortunately, the energy resolution of a neutrino telescope is ...
9. ... technique to obtain black hole masses which, unfortunately, is unfeasible...
10. Unfortunately, lack of information about the collective ...
11. Unfortunately, the complexity of each subprocess also grows ...
12. Unfortunately, these theorems tell us practically nothing about ...
13. Unfortunately, there are very few analytic results available...
14. Unfortunately, all recent experiments are, in principle,
15. Unfortunately, all those exciting recent experiments are...
16. Unfortunately, those prior art solutions require daunting experiments...
17. Unfortunately, the NID is uncomputable since the constituent ...
18. Unfortunately, in many places such information is getting harder ...
19. it's a good protective barrier," says Hildebrand, "unfortunately.
20. Unfortunately, because of the rarity of plant data from this ...
List 3: occurrences of undoubtedly in SPACE07

1. Undoubtedly the best-studied explanation, however, is ...

2. and so undoubtedly contributes something to Google pagecounts.

3. But one reaction would undoubtedly be near the top of both:

4. undoubtedly protects stocks during periods of poor productivity

5. developing new cultivars ... would undoubtedly have an enormous impact

6. Although these resources undoubtedly included plants, nearly all ...

7. Over time he acquired many imitators; undoubtedly some ... were eager to
4. Analysis and quantification

- hedging: pop < spec
  - modal auxiliaries
  - frequency and propensity
- cohesion:
  - sentence adverbs
# 4.2 Hedges according to word-class in SPACE subcorpora

<table>
<thead>
<tr>
<th></th>
<th>nouns</th>
<th>verbs</th>
<th>modal verbs</th>
<th>adverbs</th>
<th>adjectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>curriculum</td>
<td>970</td>
<td>1218</td>
<td>3161</td>
<td>1493</td>
<td>970</td>
</tr>
<tr>
<td>examples</td>
<td>1218</td>
<td>1517</td>
<td>6654</td>
<td>2953</td>
<td>1218</td>
</tr>
<tr>
<td>concepts</td>
<td>1962</td>
<td>2661</td>
<td>11195</td>
<td>4422</td>
<td>1962</td>
</tr>
<tr>
<td>analysis</td>
<td>1218</td>
<td>1517</td>
<td>10782</td>
<td>4422</td>
<td>1218</td>
</tr>
<tr>
<td>teaching</td>
<td>1218</td>
<td>1517</td>
<td>5592</td>
<td>4422</td>
<td>1218</td>
</tr>
<tr>
<td>outlook</td>
<td>220</td>
<td>269</td>
<td>5031</td>
<td>1493</td>
<td>11195</td>
</tr>
<tr>
<td>frequency per 100,000 words</td>
<td>2000</td>
<td>4000</td>
<td>6000</td>
<td>8000</td>
<td>10000</td>
</tr>
</tbody>
</table>

**Legend:**
- quantum S
- quantum P
- astro S
- astro P
- particle S
- particle P
Epistemic *can/could* and *may/might* in specific and popular sciences (per 100000 words)
5. Learning/Teaching

get to know the community of practice by reading? are there textbooks?


is 10 % study skills, 80 % “writing” and only 10 % AcWr
5.1 Text analysis as awareness raising

popularisation features

- simplification
  - lexical
  - syntactic
- explicification
  - stance / hedging
  - cohesive devices
- personalisation
- sensationalism?
Tumor cell surface heparan sulfate as cryptic promoters or inhibitors of tumor growth and metastasis

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Heparan sulfate glycosaminoglycans, present at the cell surface and in the extracellular matrix that surrounds cells, are important mediators of complex biological processes. Furthermore, it is now apparent that cells dynamically regulate the structure of their heparan sulfate “coat” to differentially regulate extracellular signals.

In the present study, the importance of sequence information contained within tumor cell-surface heparan sulfate was investigated. Herein, we demonstrate that the heparan sulfate glycosaminoglycan coat present on tumor cells contains bioactive sequences that impinge on tumor-cell growth and metastasis. Importantly, we find that growth promoting as well as growth inhibiting sequences are contained within the polysaccharide coat.

Furthermore, we find that the dynamic balance between these distinct polysaccharide populations regulates specific intracellular signal-transduction pathways.

http://www.pnas.org/content/99/2/568.full
From the Times
July 28, 2005

Cancer drug 'smart cell' can attack tumours from inside
By Mark Henderson, Science Correspondent

AN ANTI-CANCER “smart cell” that uses nanotechnology to penetrate tumours and destroy them from the inside has been developed in America. The drug-packed “nanocell” has been successfully tested on two forms of cancer in mice, shrinking tumours and prolonging survival far more effectively than other therapies.

If the technique works as well in human beings, it could transform the treatment of many cancers, allowing doctors to harness nanotechnology to kill tumours without affecting healthy tissue.

At present, cancer is generally treated by surgery, or by chemotherapy and radiotherapy, which cause serious side-effects as they destroy healthy cells, too. The potential of nanotechnology to improve on this, creating drugs that attack cancer cells alone, excites many scientists.

Ram Sasisekharan, Professor of Biological Engineering at the Massachusetts Institute of Technology (MIT), who led the research, said: “The fundamental challenges in cancer chemotherapy are its toxicity to healthy cells and drug resistance by cancer cells.”

He said that nanocells promised to overcome both problems. In experiments on mice with melanoma, a form of skin cancer, and the Lewis variant of lung cancer, the nanocell proved considerably more effective than standard treatments.

Some 80 per cent of the mice with melanoma treated in this way survived for at least 65 days. This compared with survival of 30 days for mice treated with the best current therapy, and 20 days for untreated animals. There were also benefits against lung cancer, though these were less dramatic, which suggests that the technology will need to be adjusted to attack different forms of the disease.

http://www.timesonline.co.uk/tol/news/world/us_and_americas/article548769.ece
5.2. Teaching exercises

- reading to get to know the discourse conventions: from surfing the corpus back to the originals including discussion boards, etc.

- find 2 types of titles:
  - simple and transparent NS titles vs.
  - catchy boulevard titles

- re-writing / editing exercises
  - simplify lexical and syntactic structures
  - find transparent, explicit options

- writing popular academic texts and newspaper texts on the basis of specific academic texts
  - 1 sentence per paragraph
  - write freely first and reedit carefully later according to guidelines
6. **Outlook:**

**a joint curriculum/syllabus?**

do Czech and German students (partly) need to learn the same skills? - are the 4 levels similar?

1. what do student bring from school that does not have to be taught?
2. what is taught in grammar, vocab, ... writing classes, so that it can be taken as a basis for AcWr?
3. what needs to be learnt/taught at BA level?
4. what needs to be learnt/taught at MA level?

what can we learn from our own AcWr work/examples?
what do we need to teach from a conceptual perspective? bottom-up/top-down?

where can we learn general self-help skills (not: rules)?
approach

why do we distinguish between 4 levels?
resources:

- native-speakers?
- models, “best practise examples”
- corpora of the discourse community (“more than meets the eye”) (BA, MA, PhD, postdoc)
- even sublevels:
  - BA paper guidelines
  - BA thesis guidelines

function < --- > form
References


