Presenting your research in English

English for Engineers I & II
April 2008
Learning a language via ESP
(English for Specific Purposes)

- **Product-oriented**
  - Genre analysis
    - Language features
      - Rhetorical
      - Grammatical
      - Lexical
      - Technical
      - Phonological
  - Corpus linguistics

- **Process-oriented**
  - OCHA
    - Observe
    - Classify
    - Hypothesize
    - Apply

Trying to get two birds with one stone...AND succeeding!
But first, some questions

- Q1  Why is English so important for science and engineering?
- Q2  Why is the language of science different from other types of English?
- Q3  What is ESP?
- Q4  Why is ESP necessary?
- Q5  How can ESP be efficiently and effectively taught/learned?
Q1 Why is English so important for science and engineering?

- Need to participate in an international dialogue

Gross (1990) *The Rhetoric of Science*:

"facts are by nature linguistic—no language, no facts." [203]
Scientific “facts”

- Must be recognized and acknowledged
- Should be used as part of the knowledge system
- Should be presented in linguistically acceptable form
Knowledge production is an “ongoing process of coordinating action among persons” and “language (and other actions) gain their intelligibility in their social use, as they are coordinated with the actions of others” (Gergen 2001:119).

Not only the **information** being conveyed but the **language** used to convey it is itself an important part of the message.
Q2 Why is the language of science different from other types of English?

Birth of a new genre

- Scientific progress in the 17th century ➞ Need for a new expository genre to describe them

- Traditional literary essays did not suit the epistemic approach used by men of science following the approach of Francis Bacon

Gotti (2005:171)
The language of science differs from other types of English because

It was a new genre specifically developed
to express its **activities and claims**
to discuss its **claims**
to construct **knowledge systems**
based on these claims
Q3 What is ESP?

- EGP = English for General Purposes
  - 個人のための英語
- ESP = English for Specific Purposes
  - プロのための英語
ESP is language that “works”

EAP  English for academic purposes
   An ESP program for students of law
EOP  English for occupational purposes
   An ESP program for international medical graduates
EVP  English for vocational purposes
   An ESP program for union members in 25 factories

Orr, Thomas (ed) 2002 *English for specific purposes*. Alexandria: TESOL
Language is composed of patterns
言語はパターンで構成されている

- Sound patterns form words
  - 音のパターンが単語となる
- Word patterns form phrases and clauses
  - 単語のパターンが句や節となる
- Phrase and clause patterns form sentences
  - 句や節のパターンが文章となる
- Sentence patterns form texts
  - 文章パターンがテキストとなる
- Text patterns form genres
  - テキストのパターンがジャンルとなる

- Pronunciation & prosody
- Collocation
- Grammar
- Text structure
- Genre structure
“Genre’ is a recognizable communicative event characterized by a set of communicative purpose(s) identified and mutually understood by the members of the professional or academic community in which it regularly occurs.”

Q4 Why is ESP (genre) necessary?

- Information **explosion**
  - The amount of information produced in the world increases by 30% every year.

- Going back in **time**
  - A weekly edition of the *New York Times* contains more information than the average person was likely to come across in a lifetime in seventeenth-century England. *(Wurman 1989, 32)*

- Overload **psychology**
  - Only 18% of the stories in an average newspaper are read in full. *(Graber 1988, 249)*
How to deal with the overload

- **Attention arousal**: noticing what you are interested in
- **Selective attention**: ignoring what is not needed
- **Schematic thinking**: using knowledge structures and frameworks to organize information
Q5 How ESP be taught/learned?
Look at the patterns of genre texts!
What is Action?

Action

Substance

Form
Action of a genre text

What is the text trying to do?

- Make a claim based on research
- Present a convincing argument about something
- Appeal for funds
- Promote a product
What is Substance?
Content of a genre text

- What is the message of the text?
  - Description of a newly developed method
  - Presentation of a new discovery
  - Explanation of a mechanism
What is **Form**?

[Diagram showing the relationship between Action, Substance, and Form]
Form of a genre text

- What are the features of the text?
  - Mode: spoken or written
  - Format
  - Rhetorical structure
Effect on the discourse community

Even native speakers of the language need to learn genre awareness!

Information for the discourse community

Linguistic packaging for genre recognition
Using OCHA

- Observe features of a text
  - Rhetorical
  - Grammatical
  - Lexical
  - Technical
  - Phonological
Eyes lock on different letters when reading

YORK (Reuters) - When we read our eyes lock on to different letters in the same word instead of scanning a page smoothly from left to right as previously thought, researchers said on Monday.

Using sophisticated eye tracking equipment, the team looked at letters within a word and found that people combined parts of a word that were on average two letters apart, said Simon Liversedge, a cognitive psychologist at the University of Southampton.

Lexical and Sublexical Influences on Eye Movements During Reading

In this paper, we briefly review some recent studies that have clearly demonstrated the importance of lexical factors on eye movements during reading. We introduce the reader to eye-movement recording and explain its importance within the field of experimental psychology as a tool with which we can examine the psychological processes underlying reading. We then provide a summary of (mainly) eye-movement experiments in three areas: reading disappearing text, reading text with transposed letters, and morphological processing of compound words. Throughout the paper our central claim is that processes associated with lexical identification exert a strong and quite immediate effect on eye-movement behaviour during reading.
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Using corpus linguistics

- **Corpus** = a database of texts of the target genre
- **Concordance** = software to help view text features *AntConc*
- **Collocations** = words that frequently appear together in this genre being examined
Key words to remember

- ESP
- Discourse community
- Genre analysis
- OCHA
- Corpus linguistics
参加前は、「アーもうしこんだのちょっとしっぱいだったかも・・・」と思っていたけど、セミナーを受けて、本当によかったです！！さいこうに”ため”になりました。予想以上にたのしかったです！

たくさん論文を書くゾ！！と思いました。