A Move-analysis-based Approach for Japanese Science & Engineering Students

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Why is ESP Move-analysis-based Approach Effective and Efficient?

ESP Move-analysis-based Approach is **a good start** for Japanese undergraduate students majoring science and engineering **to read research paper articles** (a **genre** text) in their fields and **to raise their genre awareness**.

What is Genre in ESP?

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** (so-called "Discourse community" in ESP) in which it regularly occurs. Most often it is **highly structured** and conventionalized with constraints on allowable contributions in terms of their intent positioning form and functional value.(Bhatia, 1993)

Why you should encourage your students to raise their genre awareness?

They can **achieve the gap between the social needs and the reality** of the Japanese undergraduate students by raising their genre awareness because
1) the students are members in a discourse community which **genre** texts are frequently used for communication. So,
2) the students try to analyze language features of **genre** texts and improve there reading skills using ESP concepts.
3) the students, thus, can develop systemic literacy (Noguchi 2011), such as **genre awareness** via **ESP Move-analysis-based Approach**.

Goal for the students

Developing Learner Autonomy for Life-long Learning

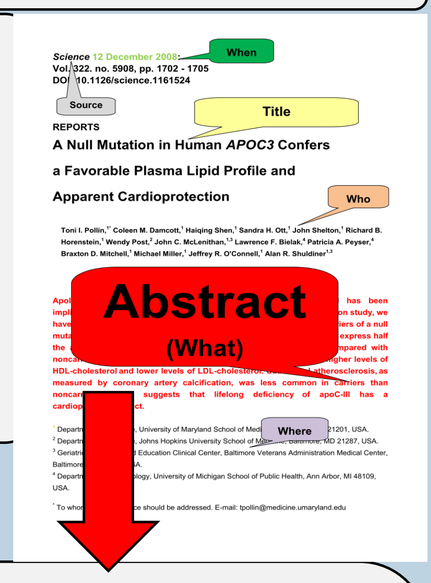
- **Move analysis**
- **Corpus analysis**
- **In-class activities**

ESP concepts include:
1) Texts belong to a discourse community
2) Discourse community uses various **genres**
3) **Genres** can be analyzed via:
- Move analysis (Swales, 1990)
- Corpus analysis (words and collocations)
- In-class activities

Genre Awareness

Same content in different genres:
Amish's special gene
1) News paper article
2) Research paper abstract

Activities in class



Abstract Move Analysis

***Science journal* Information for Authors says:**

Abstracts explain to the general reader why the research was done and why the results are important. They should start with some brief **BACKGROUND** information: …. This should be followed by … an explanation of OBJECTIVES/**METHODS** and then the **RESULTS**. The final sentence should outline the main **CONCLUSIONS** …. The abstract should be 125 words or less.

Apolipoprotein C-III (apoC-III) inhibits triglyceride hydrolysis and has been implicated in coronary artery disease. *Through a* genome-wide association *study*, *we have found that* about 5% of the Lancaster Amish are heterozygous carriers of a null mutation (R19X) in the gene encoding apoC-III (APOC3) and, *as a result*, express half the amount of apoC-III present in noncarriers. Mutation carriers compared with noncarriers had lower fasting and postprandial serum triglycerides, higher levels of HDL-cholesterol and lower levels of LDL-cholesterol. Subclinical atherosclerosis, as measured by coronary artery calcification, was less common in carriers than noncarriers*, which suggests that* lifelong deficiency of apoC-III has a cardioprotective effect.

Move Analysis on a Genre Text in Class

See underlined

Find Technical Terms and Hint Expression(s)

Examples

Abstract Move Analysis: BEFORE

Abs1 Purpose（研究の目的）
Abs2 Background and scope（研究の背景や、どういった内容まで含むのか）
Abs3 Materials and methods/experimental procedure（実験の材料・手順・方法）
Abs4 Results（研究結果）
Abs5 Conclusion（結論）

Characteristics of Roll-Cast Strips of Al-Mg-Si Alloy with Impurity

Recycled aluminum alloys include impurities which have deleterious effects and thus a process is needed to solve this problem. The purpose of this study was to try to solve this problem by minimizing the size of the impurities to reduce the adverse effects. Fe was added as an impurity to aluminum alloy, which was then subjected to twin-roll casting. The results showed that it was possible to produce thin sheets of Al-0.6%Mg-3%Si including Fe as an impurity by the twin roll casting with rapid cooling. Better ductility was obtained than with the conventional casting method. The mechanical properties after T4 treatment showed that even with an increase in the Fe amount, the tensile strength was 0.2% and the elongation did not decrease. Even with an Fe content of 0.7%, 180° bending was possible. The twin roll casting with rapid cooling used in this work should be effective for eliminating the deleterious effects of impurities in recycled aluminum alloys.

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Abstract Move Analysis: BEFORE

Red enhances human performance in contents

Here we show that a similar effect can influence the outcome of physical contents in humans — across a range of sports, we find that wearing read in constantly associated with a higher probability of winning.

These results indicate not only that sexual selection may have influenced the evolution of human response to colours, but also that the color of sportswear need to be taken into account to ensure a level playing field in sport.

Red coloration is a sexually selected, testosterone-dependent signal of mate quality in a variety of animals, and in some non-human species a male's dominance can be experimentally increased by attaching artificial red stimuli.

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学生のコメント：目的と背景はこの Abstract には含まれていなかった。

How ESP Move-based analysis works!