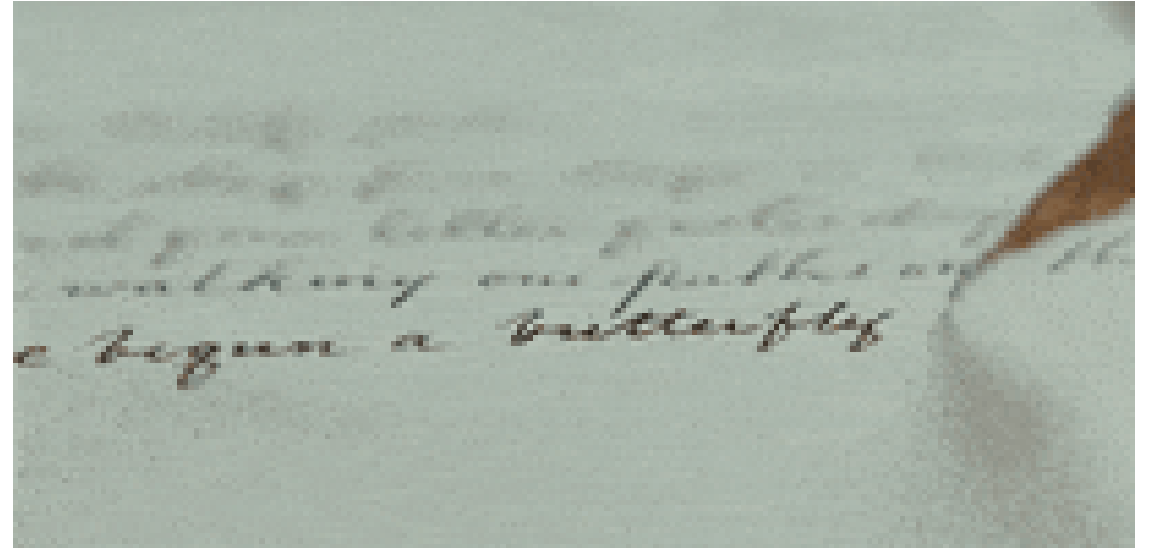


Chapter 04: Research Methodology
Communication Tools for Researchers

Human beings have always tried to communicate with their peers.



From cave paintings to the invention of writing, the aim has always been to share opinions and knowledge.

Seminars/Congress



Videos



Classroom



Scientific Channels

Research Articles/Books

Research Article Structure of Research Article Introductions in Three Engineering Subdisciplines

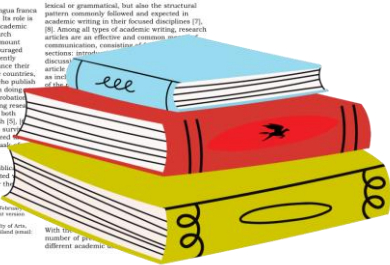
Abstract—This study aims to provide scholars with insight into the task of writing research articles. **Research questions:** (1) What are the generic structures of research article introductions in three engineering subdisciplines? and (2) What are variations that distinguish the introductions of one subdiscipline from the others? **Literature review:** Studies in genre analysis method has proved to be an effective research paradigm to identify the rhetorical structure of research articles. **Methodology:** Based on purposive sampling, three discourses of English research article introductions representing three subdisciplines of engineering (civil, software, and biomedical) were compiled, consisting of 300 introductions with 60 from each subdiscipline. Then, the three discourses were analyzed using Swales's genre analysis methodology to identify the structural features in the introductions of each subdiscipline. **Findings and discussion:** Analysis showed that these introductions generally adhere to a common rhetorical organization across subdisciplines. However, discipline-specific variations are also observed, highlighting the unique characteristics and perspectives of each subdiscipline. The findings have pedagogical implications, allowing English for Specific Purposes practitioners to prepare course materials to be able to publish successfully in their fields.

Index Terms—discourse, civil, engineering, introduction, research article, software, structural pattern.

English has acquired the status of a lingua franca for international communication [1], [2]. Its role is even more prominent in business and academic communication [3]. Academically, research publication in English has earned permanent importance, and academics are encouraged to actively engage in research, subsequently publish their work in English, and enhance their professional status. In addition, in some countries, bonuses are awarded to academics who publish their research internationally because in doing so they successfully earn more credits, appointments, and accreditation [4]. However, publishing research in English is a daunting experience for both nonnative and native speakers of English [5]. Therefore, in order for these scholars to work academically and professionally, they need to understand or be introduced to the task of academic writing in English.

To accomplish the task of writing for publication in English, scholars need to be acquainted not only the linguistic features, whether they are

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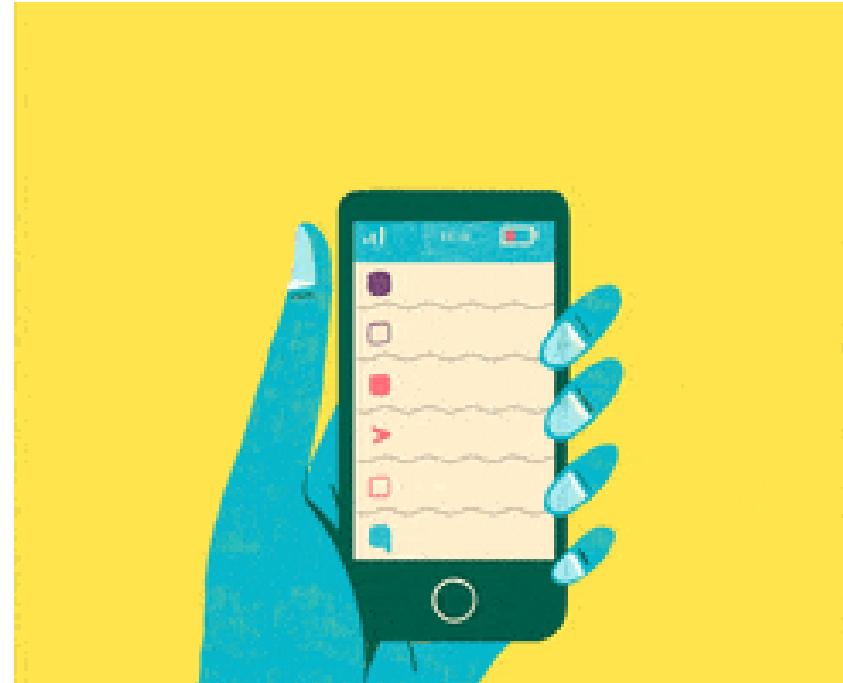
Reports



Lab meeting



Modern communication methods make it possible to share and communicate scientific opinions in a short space of time and larger scale, by using **social networks**



1. LinkedIn

- LinkedIn is a **professional social network online** that works through **websites** and **mobile apps**. officially launched on May 5, 2003.
- LinkedIn runs a **diversified business** and **generates revenue** from:
 - ❑ user subscriptions,
 - ❑ advertising sales
 - ❑ and recruitment solutions.



LinkedIn can be used for everything to do with professional life:

- ✓ finding a job,
- ✓ employers,
- ✓ service providers,
- ✓ developing business, etc.

Characteristics

- LinkedIn works on the principle of connection: to get in touch with a professional,
 - ✓ you need to know him or her beforehand,
 - ✓ or have one of your connections intervene
 - ✓ networking (professional networking).

Thus, there are 3 degrees of connection:

- the **first level**, or **our direct contacts**
- the **second level**, or **our contacts' contacts**
- the **third level**, or the **contacts of our second-level contacts** (It allows you to increase your network)

How to use LinkedIn

To get the best from LinkedIn, use the following strategies:

1. Complete your profile (Diplomas, work experiences, skills...)
2. Contact and connect.
3. Start talking.
4. Give and receive recommendations and endorsements.
5. Use LinkedIn Groups.
6. Produce engaging content (e.g. share an interesting scientific article that you read...)
7. Find new hires – and new opportunities.
8. Boost your organization's profile (e.g. add your CV...)
9. Observe professional etiquette (don't talk about your personal life, keep it professional)

Research gate



ResearchGate is a social network for scientists, started in 2008.

- Connect the world of science and make research open to all.
- Over 20 million researchers, from diverse sectors in over 190 countries,
- This researchers can use ResearchGate to connect, collaborate, and share their work.
- ResearchGate is for a wide range of researchers: scientists, clinicians, students, engineers, public health workers, lab technicians, computer scientists.

Characteristics

- The major disciplines represented in ResearchGate are Biology, Medicine, Computer Science, Physics, and Chemistry.
- You can use ResearchGate to:
 - Share your research publications,
 - Find collaborators,
 - Access job boards
 - Ask and answer questions across disciplines and borders, in real-time.

How to use Research Gate?

- Go to ResearchGate, sign up and complete your profile with the relevant information.
- Add your publications.
- Select one or two research topics to follow if you want.
- ResearchGate also has a public list of researchers that have joined ResearchGate
- Full text publications uploaded to ResearchGate profiles are **indexed** by **Google Scholar**
- ResearchGate also boosts metrics for individuals and institutions: **RG-score** (total activity and weighed interaction, plus publications) and **impact points** (number of publications weighed by journals they are published in). It measures your influence in research in general, and gives you credibility, the higher your score the better