



EXPLORING RESEARCH METHODOLOGY: QUALITATIVE AND QUANTITATIVE RESEARCH

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WHAT IS RESEARCH?





Theoretical Research

Theoretical research is a logical exploration of a system of beliefs and assumptions.

Edgar et.al , 2017

Research is the careful consideration of study regarding a particular concern or **research problem** using scientific methods. According to the American sociologist Earl Robert Babbie, “research is a systematic inquiry to describe, explain, predict, and control the observed phenomenon. It involves inductive and deductive methods.”

What is research methodology?

A research methodology describes the techniques and procedures used to identify and analyze information regarding a specific research topic.

Types of Research Methodology

General Category

- ❖ Quantitative Research
- ❖ Qualitative Research

Nature of the Study

- ❖ Descriptive Research
- ❖ Analytical Research

Purpose of the Study

- ❖ Applied Research
- ❖ Fundamental Research



Research Design

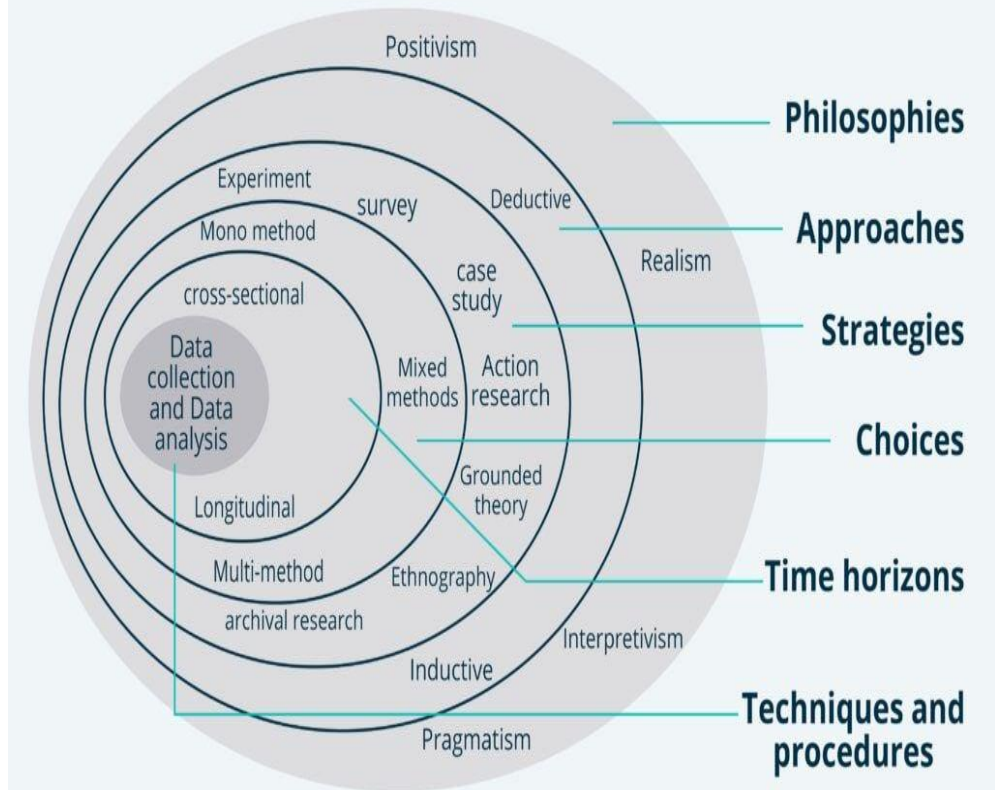
- ❖ Exploratory Research
- ❖ Conclusive Research

Data Type

- ❖ Primary Research
- ❖ Secondary Research



The Research Onion Model



Source: Saunders, et. al

Research.com

WHY DOES RESEARCH NEED METHODOLOGY?

Reasons to Study Methodology

- Methodology is the manner in which we approach and execute functions or activities
 - Consists of approaches or guidelines, not specific details of how we do the task (they are methods)
- Within a discipline, there are accepted rules of evidence and reasoning
- Research methodology provides the principles for organizing, planning, designing and conducting research. (It does not tell you how to do specific research).

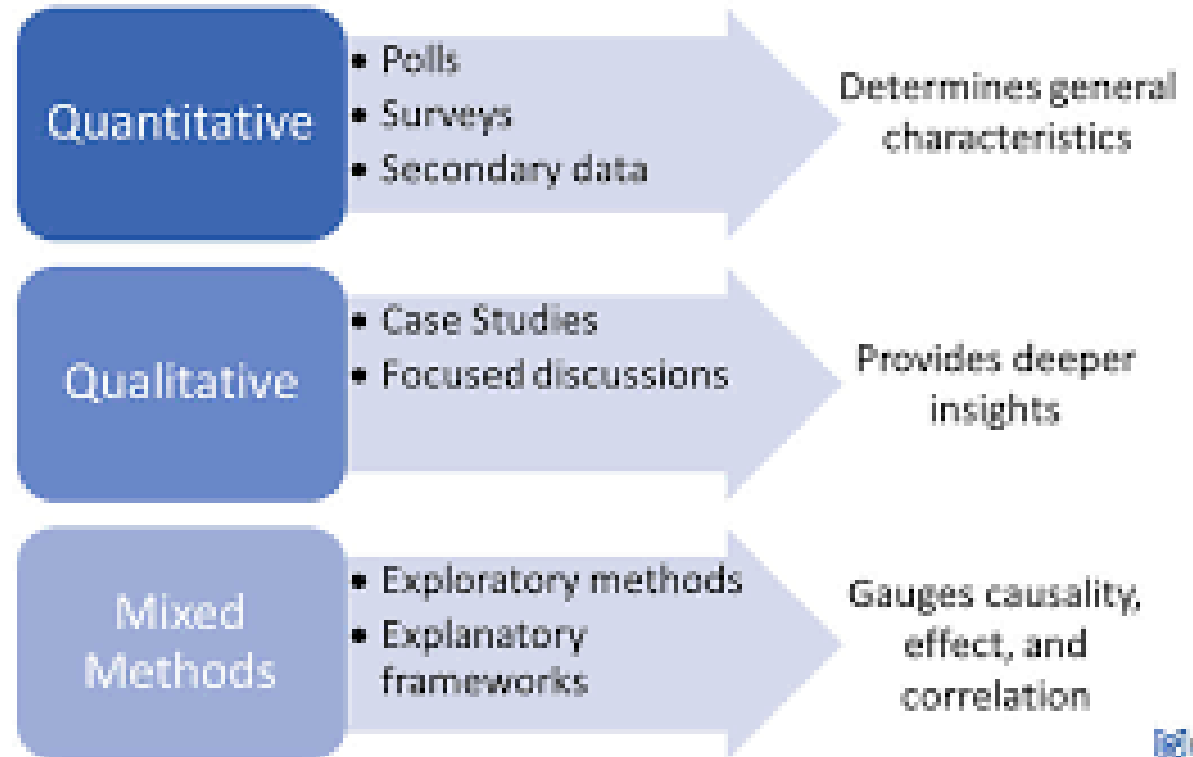
Quantitative Research VS. Qualitative Research

Aspect	Quantitative Research	Qualitative Research
Objective	Quantify, test hypotheses, generalize.	Gain deeper understanding, explore context.
Data Collection	Systematic and structured.	Flexible and open-ended.
Data Analysis	Statistical analysis.	Thematic/content analysis.
Sample Size	Larger samples.	Smaller samples for depth.
Results	Structured and objective.	Narrative, rich descriptions.
Generalizability	Broad generalizability.	In-depth exploration.
Emphasis	Emphasizes objectivity.	Acknowledges subjectivity.

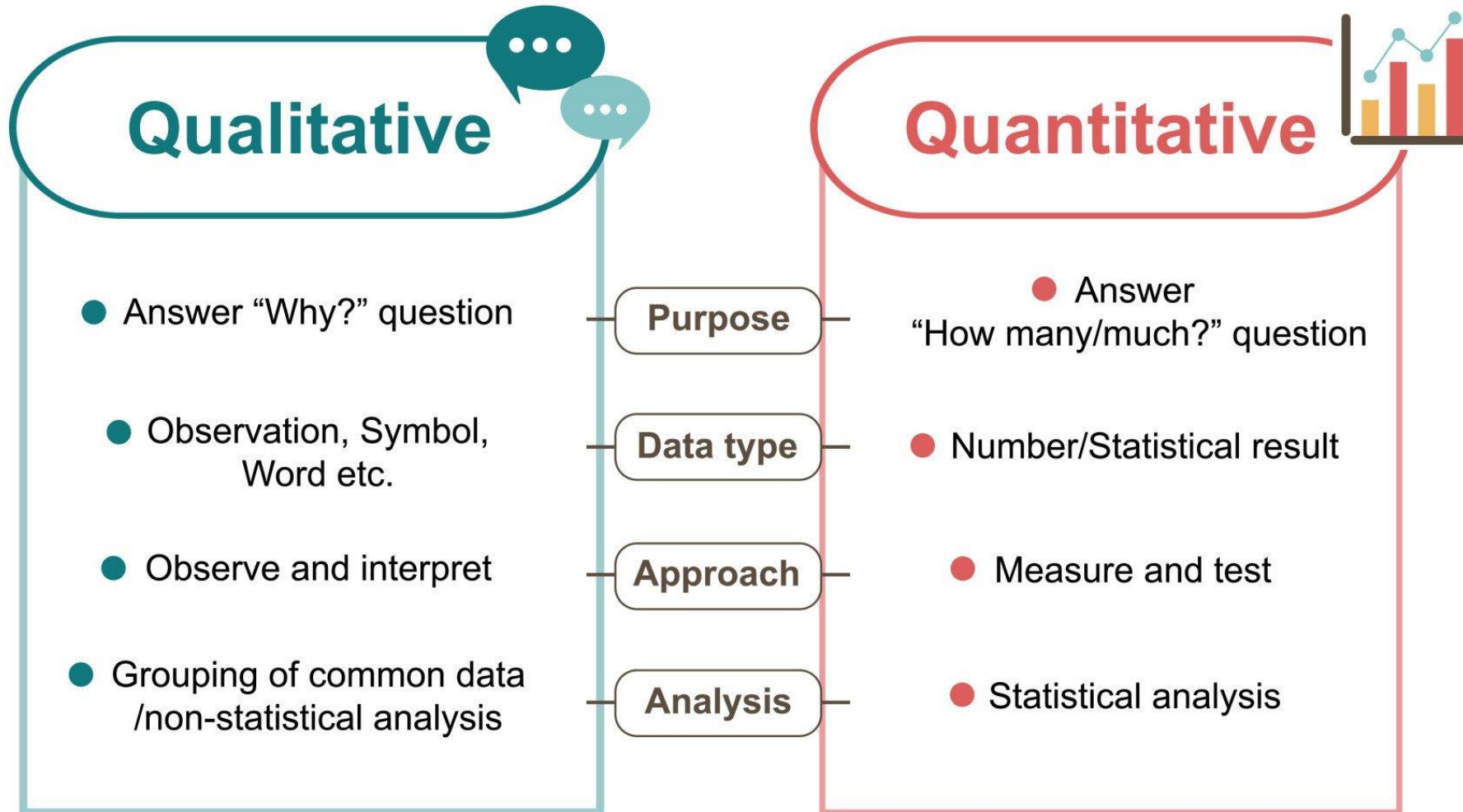


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WHAT TYPES OF RESEARCH METHOD?



Type of research design





A. QUALITATIVE RESEARCH



WHAT IS QUALITATIVE RESEARCH?

According to Creswell (2012), qualitative research is a means for exploring and understanding the meaning individuals or groups ascribe to a social human problem. The process of research involves emerging questions and procedures; collecting data in the participants setting; analyzing the data inductively, building from particulars to general themes; and making interpretations of the meaning of data. The final written report has a flexible writing structure.



EXAMPLES OF QUALITATIVE RESEARCH

- Politeness Strategies in Directive Speech Act in The Greatest Showman (2017) Movie
- Analysis of Intrinsic and Extrinsic Elements Novel Rain by Tere Liye
- TRANSLATING ENGLISH METAPHOR INTO INDONESIAN
- The Cultural Identity of the Main Character of the Film Green Book
- Discourse Markers in President Trump's Interview with The Wall Street Journal: A Pragmatic Study
- An Analysis of Character and Characterization in Novel Entitled “Love & Saffron” by Kim Fay
- Utilization of Digital Media to Improve The Quality and Attractiveness of The Teaching of English

Quantitative Research

(Types of Quantitative Research)



Survey Research



**Correlation
Research**



**Causal-Comparative
Research**



**Experimental
Research**



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Quantitative Research Characteristics



Structured tools



Sample size



Close-ended questions



Prior studies



Quantitative data



**Generalization
of results**

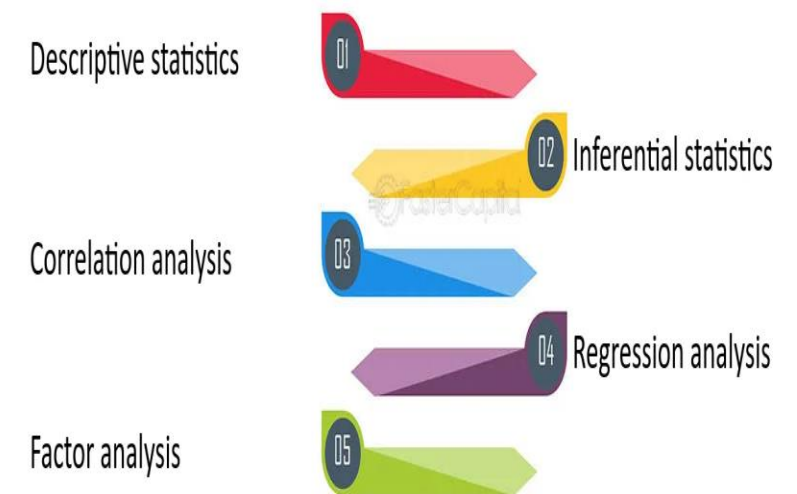
EXERCISE: THE EXPATRIATES' PERSPECTIVES ABOUT LANGUAGE REGULATION IN INDONESIA

- 1. The number of respondents
- 2. Teknik of sampling
- 3. Kinds of variable: age, education, duration of contract , their earning, sex, country of origin
- 4. The types of analysis:

A, The correlation between expatriates' education and their Indonesian language competency

B. The influence of expatriates' duration of contract toward their Indonesian language competency

Data Analysis Techniques in Quantitative Research



NUMBER OF RESPONDENTS:

RECENT DEVELOPMENTS SUGGEST THAT RESEARCHERS SHOULD DETERMINE SAMPLE SIZE THROUGH POWER ANALYSIS (HAIR ET AL., 2018; HAIR ET AL., 2017; HAIRET AL., 2019; KLINE, 2016; RINGLE ET AL., 2018; UTTLEY, 2019).

- 30 respondents should be considered the minimum ((Roscoe, 1975; Chang et al., 2006); , Suki and Suki (2017), Seman et al. (2019), and Sultana (2020).
- $N \geq 50 + 8m$ (Green (1991)
- Kline (2005) offered sample size guidelines for analysing structural equation models, suggesting that a sample of 100 is considered small, a sample of 100 to 200 is medium, and a sample over 200 is considered large.



PENENTUAN JUMLAH SAMPLE: A. TEORI SLOVIN

- Rumus Slovin adalah sebuah rumus atau formula untuk menghitung jumlah sampel minimal apabila perilaku dari sebuah populasi tidak diketahui secara pasti.
- Misalnya sebuah penelitian dengan derajat kepercayaan 95%, maka tingkat kesalahan adalah 5%. Sehingga peneliti dapat menentukan batas minimal sampel yang dapat memenuhi syarat margin of error 5% dengan memasukkan margin error tersebut ke dalam formula atau rumus slovin.
- Berdasarkan notasi rumus besar sampel penelitian minimal oleh Slovin diatas, maka apabila kita punya 125 orang dalam sebuah populasi, kita bisa tentukan minimal sampel yang akan diteliti. Margin of error yang ditetapkan adalah 5% atau 0,05.

RUMUS SLOVIN

$$n = \frac{N}{1 + Ne^2}$$

Jumlah Sampel

PENENTUAN JUMLAH SAMPLE/RESPONDEN

- 1. Formula Jacob Cohen
- 2. Arikunto (2002:112)
jumlah 10%, 15%, 20–25%
- 3. Rumus berdasarkan Proporsi atau Tabel Isaac dan Michael
- Tabel penentuan jumlah sampel dari Isaac dan Michael memberikan kemudahan penentuan jumlah sampel berdasarkan tingkat kesalahan 1%, 5% dan 10%.

CONTOH PENGHITUNGAN JUMLAH RESPONDEN PENELITIAN DALAM TEORI SLOVIN

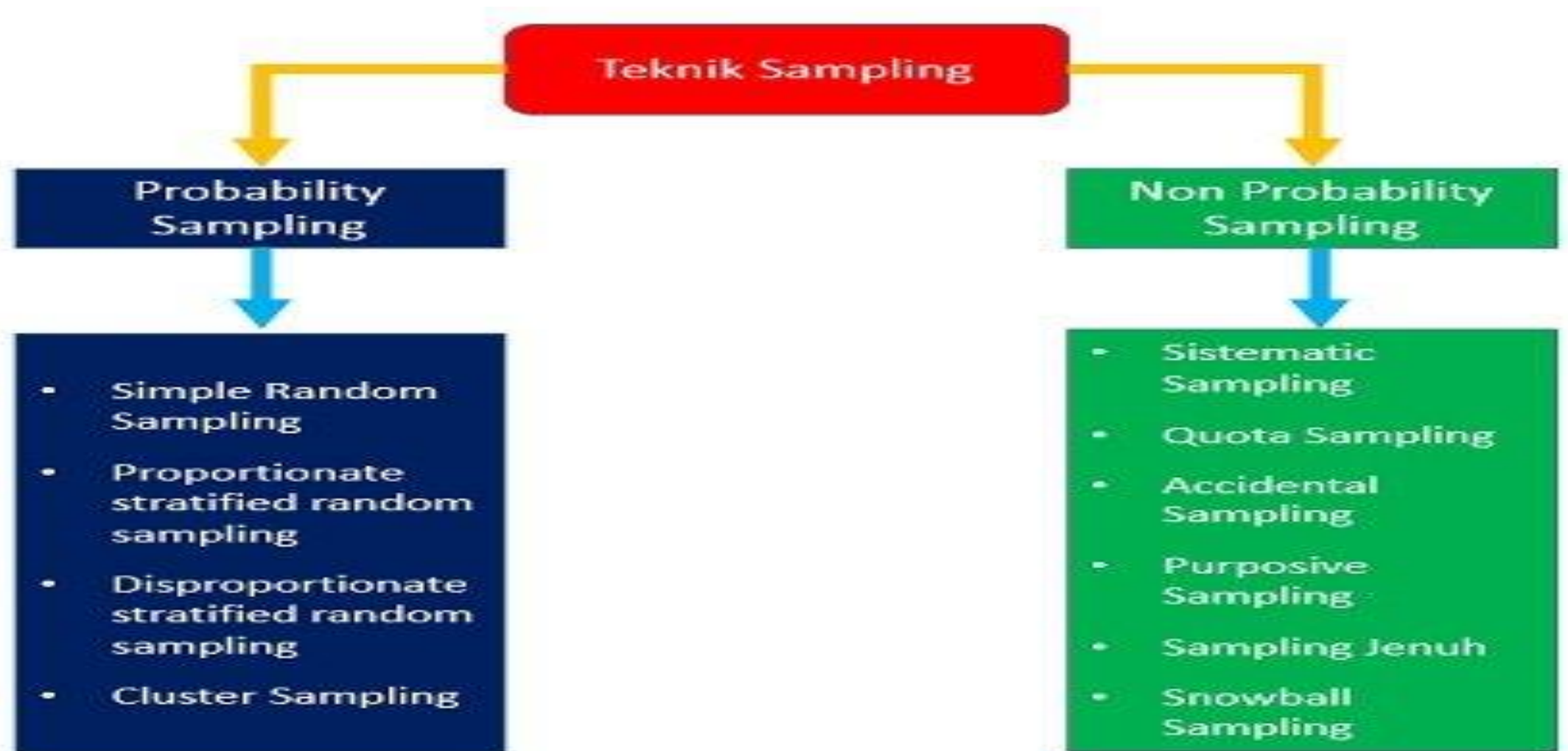
$$n = N / N(e)^2 + 1$$

n = sampel; N = populasi; e = nilai presisi
95% atau sig. = 0,05.

Misalnya, jumlah populasi adalah 125, dan tingkat kesalahan yang dikehendaki adalah 5%, maka jumlah sampel yang digunakan adalah :

$$N = 125 / 125 (0,05)^2 + 1 = 95,23, \text{ dibulatkan } 95$$

SAMPLING TECHNIQUES



TYPES OF ANALYSIS : HOW TO ANALYSIS DATA?

OVERVIEW OF T-TESTS

T-test

Used to compare two samples to determine if they came from the same population.

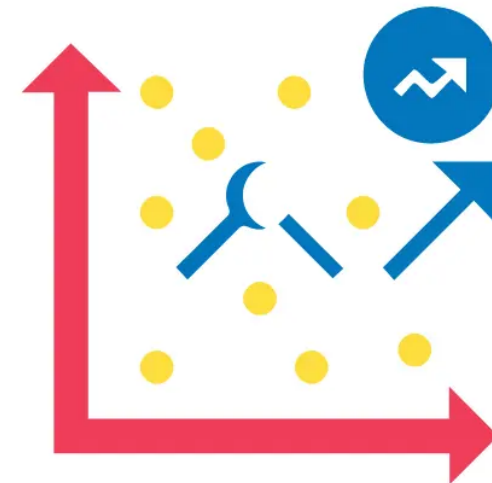


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Regresi

Teknik dalam statistika untuk memprediksi hubungan antar variabel.



<https://revou.co/revoupedia/kosakata>
Sumber: Turing Company

QUALITATIVE OR QUANTITATIVE?

**TRANSLATION APPROACH OF ENGLISH METAPHORS INTO
INDONESIAN (A CROSS CULTURAL UNDERSTANDING STUDY)**



**PENDEKATAN TERJEMAHAN METAFORA BAHASA INGGRIS
KE DALAM BAHASA INDONESIA
(SEBUAH KAJIAN PEMAHAMAN LINTAS BUDAYA)**

The Newest Survey on Language Attitude of Sundanese Urban Community in West Java Province, Indonesia Against Sundanese, Indonesian, And Foreign Language: A Study on Multilingual Speaker

Ade Mulyanah M.Hum

**Cross-Cultural Communication of Foreign Students in
the Indonesian Language Regarding Cultural
Expressions**

Ade Mulyanah, Ekaning Krisnawati

QUIZ: QUALITATIVE OR QUANTITATIVE?

THE CORRELATION
BETWEEN STUDENTS'
READING HABIT AND
THEIR READING
COMPREHENSION

The Stages and
Development of First
Language Acquisition on
Children 1,6 Years Old

The Influence of Learning
Motivation and Discipline
on Learning Achievement
of Islamic Religious
Education in State
Elementary Schools

An Analysis of Ideology
Application in Translating
Next Novel: A Translation
Strategy

The Correlation Between
EFL Students' Attitude
And Their Learning
Achievement

Visual grammar analysis
of tourism promotion on
Instagram:
Representational and
ideational meanings

WHAT IS ACADEMIC WRITING?

Academic writing (or scholarly writing) is the style of writing that is used for scholarly publications, including articles, posters, and reports. This type of writing is formal, concise, and takes an unbiased approach. Academic writing provides relevant evidence to support any claims. This type of writing avoids informal language, like slang or conversational phrases, and long-winded or emotional text. Academic writing is well-structured and uses section headings and paragraph breaks to help readers follow along.

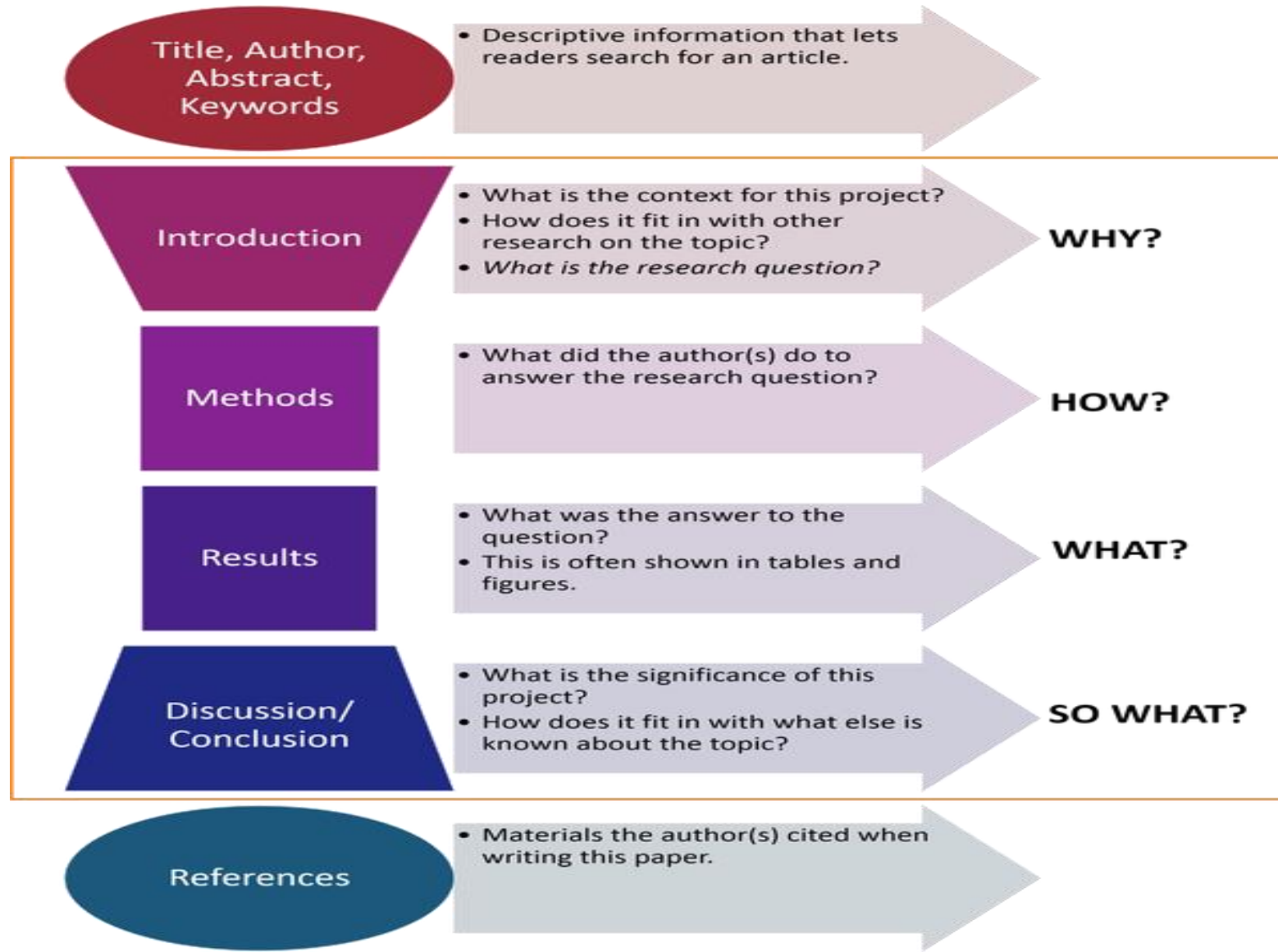
Academic writing involves more than just putting words together. It also involves critical thinking and following a clear and logical process. This skill improves over time.

A BRIEF OF ACADEMIC WRITING



What is
Academic
Writing?

THE STRUCTURE OF ACADEMIC WRITING



What is Included in the Background of a Study?



Existing research on the area of study



Controversies around the topic

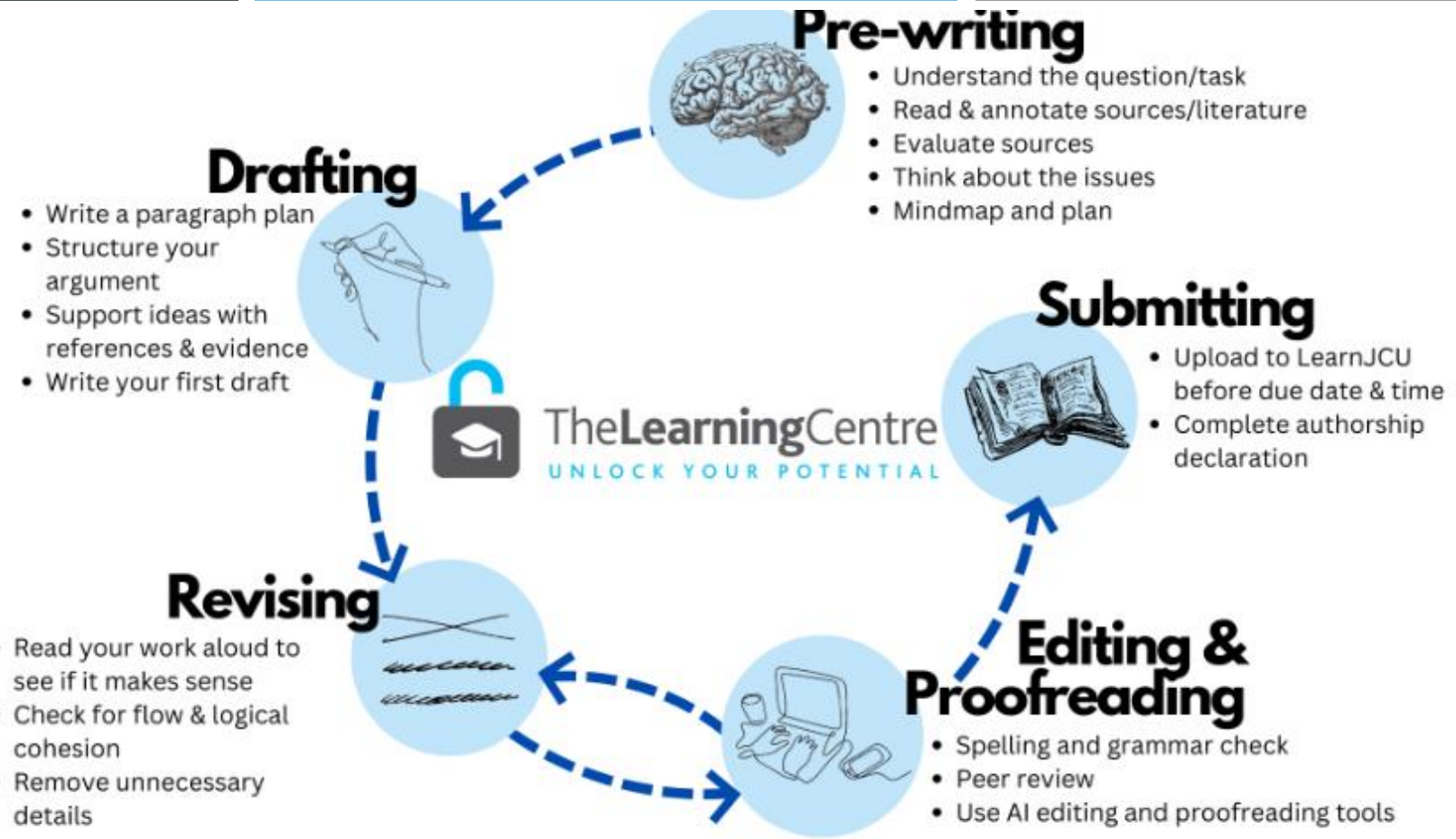


Gaps in existing research



Explanation of how your research will fill the gaps





The 5 stages of Academic Writing

ANATOMY OF A SCHOLARLY PAPER



Feature	Definition
Abstract	The abstract provides a brief summary of the paper. It should provide a brief outline of the topic, the study or experiment, and the findings. An abstract is informative and allows the reader to decide if reading the article would benefit them. Abstracts are generally freely available online, even when the article is not open access. The abstract can help inform readers if they want to pay for or request a copy.
Introduction	The introduction provides details on the goals and purpose of the research. This section should provide relevant context on the topic and how it led to this paper. In some cases, the introduction will cite related research if there is not a literature review section later in the paper.
Literature review	The literature review summarizes key literature related to the paper. It both summarizes and synthesizes the scholarly conversation around the topic. The literature review prepares readers to understand the significance and reason for the research.

BRIN PROJECT FOR STUDENTS

Informasi Program



Program BARISTA – Bantuan Riset bagi Talenta Riset dan Inovasi

BARISTA – Bantuan Riset Talenta Riset dan Inovasi

Program BARISTA merupakan pemberian bantuan Uang Kuliah Tunggal (UKT) dan riset kepada mahasiswa aktif tingkat akhir jenjang Diploma 4 dan Strata (S1, S2, S3) untuk menyelesaikan tugas akhir yang berbasis kerjasama riset di unit kerja lingkungan BRIN.

Tujuan Program

Dukungan kepada talenta riset dan inovasi;
Kolaborasi dan publikasi bersama serta memperluas jejaring kerjasama untuk meningkatkan kegiatan litbangjirap dengan perguruan tinggi.

Bantuan Riset Bagi Talenta Riset dan Inovasi yang diberikan:

a. uang kuliah tunggal maksimal 2 (dua) semester dengan nominal paling banyak berjumlah Rp5.000.000,00 (lima juta rupiah) per-semester yang disalurkan ke rekening perguruan tinggi;



Program BARISTA – Bantuan Riset bagi Talenta Riset dan Inovasi

BARISTA – Bantuan Riset Talenta Riset dan Inovasi

b. dana bantuan riset untuk jenjang diploma IV/strata satu (S1) berjumlah Rp3.000.000,00 (tiga juta rupiah); jenjang strata dua (S2) berjumlah Rp6.000.000,00 (enam juta rupiah); dan jenjang strata tiga (S3) berjumlah Rp9.000.000,00 (sembilan juta rupiah), yang disalurkan ke rekening penerima BARISTA setelah mengunggah luaran yang telah disahkan oleh perguruan tinggi.

BRIN Membuka Program BARISTA 2023 bagi Mahasiswa

@ zainul.lutfi 📅 June 12, 2023



RESEARCH ASSISTANT

Program mentoring berbasis kolaborasi riset bagi mahasiswa aktif jenjang D4/S1/S2/S3, non-ASN, guna mendukung luaran hasil riset.



Kualifikasi

- ✓ Non-ASN
- ✓ Mahasiswa aktif jenjang D4/S1/S2/S3
- ✓ Proposal kegiatan riset
- ✓ Terlibat dalam kegiatan riset di BRIN
- ✓ Diusulkan oleh kelompok riset di BRIN



Alur Pendaftaran:



Persyaratan Kelompok Riset Pengusul

Untuk mengajukan **1 (satu) orang Research Assistant**, kelompok riset dalam kurun waktu **4 (empat) tahun terakhir**, telah memiliki paling sedikit **4 (empat) riwayat luaran** yang dapat berupa:

- ❑ publikasi ilmiah terindeks global bereputasi tinggi;
- ❑ buku ilmiah yang diterbitkan oleh penerbit internasional;
- ❑ paten *granted*;
- ❑ lisensi;
- ❑ purwarupa dengan tingkat kesiapan teknologi/TRL minimal 7; atau
- ❑ naskah akademis undang-undang, peraturan pemerintah, atau peraturan presiden.

Merdeka Belajar – Kampus Merdeka



Program mentoring kegiatan
riset mahasiswa D4/S1
bersama periset BRIN

Kualifikasi Peserta :



Kualifikasi PT :

- ✓ Mahasiswa aktif jenjang D4/S1
- ✓ Berasal dari program studi terakreditasi
- ✓ Minimal semester 5
- ✓ Diusulkan oleh perguruan tinggi

- ✓ Menyelenggarakan MBKM
- ✓ Memiliki perjanjian kerja sama dengan BRIN

Alur Pendaftaran



Program mentoring kegiatan riset mahasiswa D4/S1 bersama periset BRIN.

Bentuk Kegiatan MBKM di BRIN:

- Magang/ Praktek Kerja
- Penelitian/ Riset

Jangka Waktu Pelaksanaan: 6 bulan/ 1 Semester

Ketentuan MBKM di BRIN:

- Kerja sama dilakukan terpusat antara rektorat dengan Deputi SDMI.
- Mahasiswa D4/S1 aktif, berasal dari prodi & lulus seleksi di perguruan tinggi.
- Mahasiswa lulus verifikasi administrasi oleh Dir MT dan lulus seleksi substansi oleh Kelompok/Fungsi Kegiatan.
- Menggunakan system informasi: elsa.brin.go.id
- Informasi per semester mengenai topik riset, pembimbing dan kuota di lingkungan PR

TERIMA KASIH

