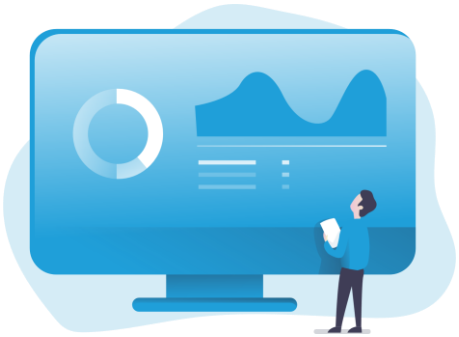

**Nama: _____**

**Kelas: _____**

# Analisis Data Kualitatif (2)

**Metode Instruksional: *WORK IN PAIR***

**PETUNJUK:** Pada lembar kerja ini, Anda diminta untuk menganalisis data kualitatif hasil Focus-Group Discussion (FGD). FGD dilakukan dengan mengundang mahasiswa Engineering di sebuah perguruan tinggi di Amerika Serikat. FGD dilakukan di akhir semester setelah mahasiswa yang ikut berpartisipasi dalam sebuah penelitian menggunakan Electronic Enhanced Guided Notes yang diakses menggunakan iPad. Dalam kegiatan ini Anda diminta untuk mempelajari pernyataan-pernyataan dan frase kunci yang telah ditandai peneliti dengan tanda kurung balok. Setelah itu tuliskan tema dari pernyataan yang ada dalam bentuk frase. *Silakan bekerja dengan seorang mitra Anda.*

## INFORMASI TERKAIT *PARTICIPANTS*

The participants for this study were one hundred and fifteen engineering students enrolled in the course, Fundamental Electronics for Engineers, during the fall 2011 semester, at a university in Utah. Eighty-four percent of these students who completed the survey (10 females and 87 males) had a cumulative GPA of 3.00 or higher. Sixteen percent had a cumulative GPA ranging from 1.00 to 2.99. Sixty-one percent were sophomores, followed by juniors (34%), seniors (4%), and freshmen (1%).

| Demographic factor | *N* (out of 97) | Percentage |
|---|---|---|
| Gender | | |
| Male | 87 | 90 |
| Female | 10 | 10 |
| GPA | | |
| 3.00 or higher | 81 | 84 |
| 2.99 or lower | 16 | 16 |
| Class | | |
| Freshman | 1 | 1 |
| Sophomore | 59 | 61 |
| Junior | 33 | 34 |
| Senior | 4 | 4 |

Berikut ini adalah contoh Enhanced Guided Notes yang digunakan oleh mahasiswa Engineering di sebuah perguruan tinggi di Amerika Serikat dengan memanfaatkan iPad.

**Part A** **Before We Begin** **EGN Set 1: *DC Voltage, Current & Resistance***

**Readings**

| | | |
|---|---|---|
| DC Voltage-pg 35-38, 41-54 | DC Current-pg 38-41 | Resistance-pg 65-88 |

**Part B** **Conceptual Layout**

**1. DC Voltage**

Objectives: (1) To understand how the terminal voltage of any DC supply is established; and (2) To understand how the terminal voltage of any DC supply creates a flow of charge in the system.

What is the difference between DC & AC supply?

What do you already know about DC "voltage"? How does DC voltage exist in connection to AC voltage?

***Example 1*** Let's find the amount of energy that would be required to create 12 volts of potential by moving 1 coulomb of negative charge.

*What theoretical principles or laws do you need to use*

*How do you use your theoretical principles or laws?*

*Should you expect to get these answers?*


**Part C** **Problem Solving**

...

Problem 2: Let's calculate how many hours a 16 volt DeWalt drill will be useful if it has an 8 ampere-hours rating and provides a current of 2.5 amps.

Sort the use of relevant concepts/formulas in the box to solve this problem:

- 
- 


Write your solution below:

**Part D** **Quick Reflections**

**1. Conclusions**

- Every source of voltage is established by creating a separation of positive and negative charges.
- One coulomb of charge is the total charge associated with $6.242 \times 10^{18}$ electrons.
- .....

.....

**2. Self-evaluation**

| | Statement | My Answer |
|---|---|---|
| 1 | If an electrical circuit can operate for XX hours with a 2-Ah battery, what is the average current that the circuit demands? (A) 0.2 A ; (B) 2 A ; (C) 5 A ; (D) 20 A | A B C D |

...

Isilah Themes atau Cluster of Meaning berdasarkan pernyataan-pernyataan (statements) yang ada. Anda dapat menuliskan satu atau lebih themes untuk setiap kelompok pernyataan di bawah ini. Sekadar informasi, terdapat EMPAT kelompok pernyataan dalam tabel berikut ini.

| Statements | Themes atau Cluster of Meaning |
|---|---|
| "The notes have made my learning [more efficient]."<br><br>"The notes [help me to learn] because sometimes in class I am so busy writing down all I can, that I can't spend the time that is needed to understand the material. They help me to [process the information] and [think about what questions I need to ask]."<br><br>"EGNs have [a lot of examples] in the back, so when he shows you how it all works, it makes a lot more sense."<br><br>"What I learned [using the notes varied by chapter], but the notes seemed to be more important in the latter part of the class."<br><br>"I really like them in classes like this where you have to draw a lot of circuits – that gets tedious. Having notes like this [makes that a lot easier]."<br><br>"I think it is very useful to have summary sections in textbooks, so I think that the [EGNs serve in some ways as a summary, which helps]."<br><br>"I found that [a lot of the information in the EGNs corresponded to the text, which was very helpful]."<br><br>"[Having a summary of the important points] in a given set of notes would improve their usefulness."<br><br>"In a lot of my classes, [I print off the professor's notes and make my own comments off to the side. It really helps], so that is something that I would want to have in other classes." | |

| | |
|---|---|
| "When preparing for the tests, [I studied the EGN's more than the homework]."<br><br>"[The notes were a great resource] when I was doing the homework and preparing for the exams."<br><br>"I found information in the EGNs to be [very consistent with the exam questions], even more so than the book, so that was [very helpful]."<br>"Quite frankly, there were large sections of the book that we were not even tested on and material in each chapter that we weren't going over; not that it wasn't valuable information, but we weren't being tested on it, so [the notes helped]." | |
| "[If I missed a couple of days, it's a lot easier for me to get caught back up]."<br><br>"I really like the note sharing because [if I missed class, I didn't need to go back and talk to somebody…]. It's a really nice way of doing that."<br><br>"[If you didn't catch something in class, anywhere you are at you can go and get that information]."<br><br>"I know that one day I wasn't able to make it to class, so [it made it really easy to get caught up – I didn't have the lecture, but at least I had enough to go back and piece together what I missed]." | |
| "[I can understand the notes better than the book]. [When I go over the notes, then go to the book, I get the very minute details], whereas the professor teaches the broad ideas. The book goes over 10 times what the teacher does, so the book is useful."<br><br>"I like the examples in the book – it walks you through each step – so [after the materials are introduced with the EGN's, the book teaches the details]. So, the book isn't something you can replace or get away from." | |