

# What is research?

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# Research is an attitude

It is not just what you do,  
but also what you are

You do research because  
you are a researcher

**RESEARCH**

science  
knowledge  
data collection  
literature review  
interpretation  
discovery  
theorems  
solve problems  
laboratory  
survey  
observation  
measurement  
implementation  
data analysis  
curiosity  
systematic  
experiment  
vision  
strategy  
technology  
planning  
management  
hypothesis  
evaluation  
teamwork

science  
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# Research is....

A systematic way  
to observe, describe and analyse real  
life experience in order to  
extract useful knowledge from it.



# Daily life information is confusing

- In old times people thought that the Earth turned around the Sun
- Some years ago people believed that autism was a problem related to non-effective mother child connections
- Some people believe that deafblind children are totally deaf and totally blind



# Where does our knowledge usually come from?

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**Experience** – “It worked with another child, I will do the same with this child”.

**Authority** – “The doctor said that my child needs to have speech therapy”

**Deductive Reasoning** – “Hearing is necessary for speech. If a child cannot hear he cannot speak.”

**Inductive Reasoning** - “this method worked for this child. I should use it for all children. (attempted generalization)

**The Scientific Approach** - a combination of thorough and systematic use of experience, authority, deductive and inductive logics to explain a phenomenon.

# We tend to see things differently



# What is happening here?





# Why do we need to research?

- We do not know enough
- We need to discover new knowledge
- Development and evolution depend on research

# To be a researcher, one need to be curious



- Observe
- Ask your self questions about what you see
- Try to find answers to your questions
- Read what other people have said about the topic

*If you do not find an answer to your questions you may have found a research topic !*

# Research starts with a question



Questions should be relevant  
to the development of further  
knowledge

# What is a good research question?

- A question that answers your curiosity
- A question that contributes to improving knowledge in the field
- A question that contributes to improving quality intervention



# Not all questions are good research questions!!

- How do people with Db communicate?

- Too wide
- A lot has been studied already
- “People with Db” is not an homogenous group

- . Is sign language useful for people with MDVI?

- . Problems with sample definition
- . We already know that sign language is a useful way to communicate
- . But we also know that now all people with MDVI are able to use formal language

# A good researcher


Logical  
reasoning

Systematization



Let's look at examples



A dark blue, irregularly shaped graphic with a splatter effect, containing white text. The graphic is centered on a white background and has a rough, ink-like border with small blue droplets scattered around it.

Research question:  
How does this community  
define research?




**Research question: How does this community define research?**



Is this a useful question?  
Is it clear?



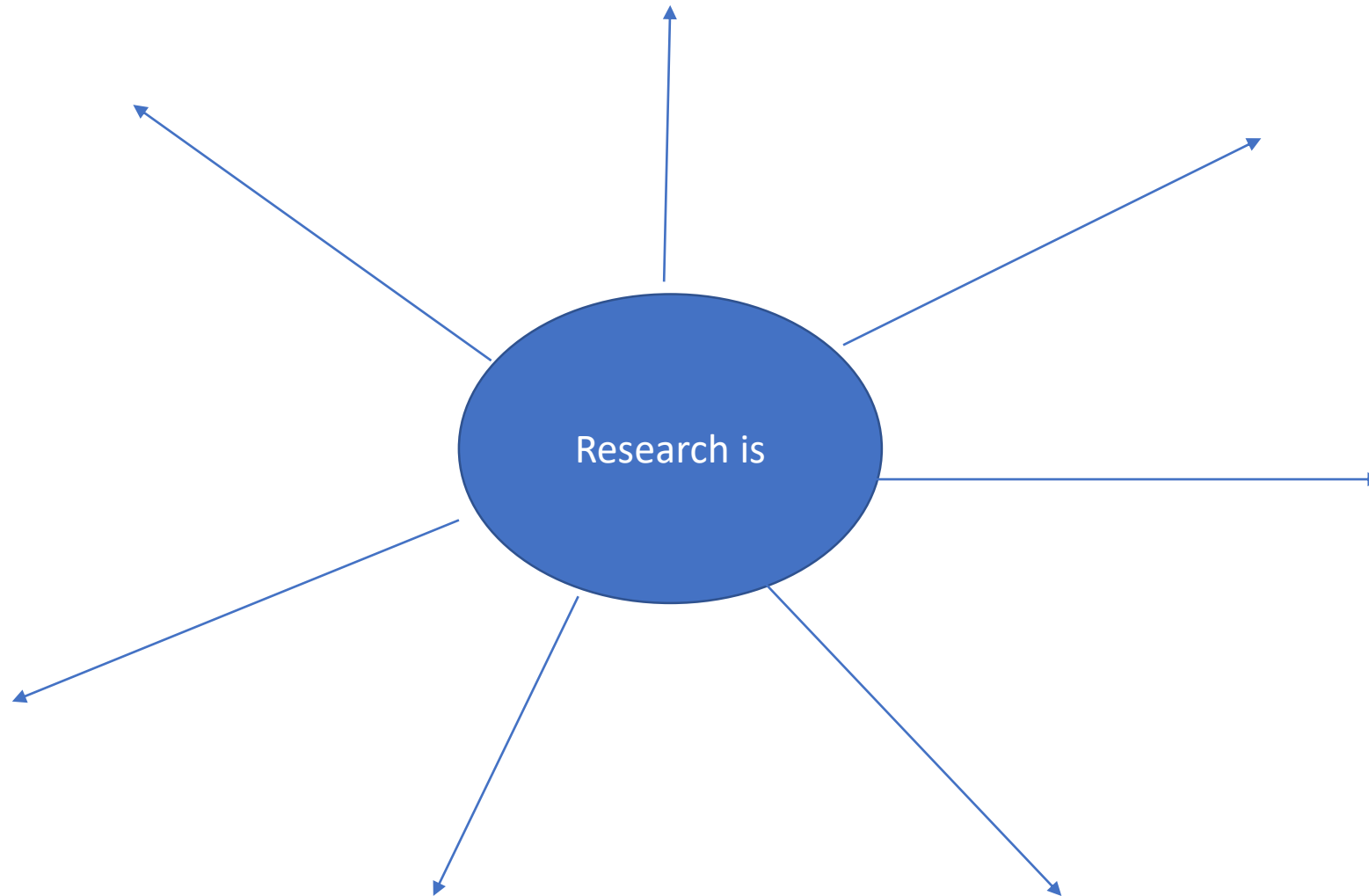


OK, we have a question. What next?

We need to find a way to know what people think about research

How are we going to collect this information?

# Data collection methods: Focus group/ concept mapping



# Data collection methods interview

## General open question

- Please tell me what is your definition of research.
- Probing questions (*if necessary*)
- Can you explain your idea a bit further?

# Data collection methods

## Questionnaire - Multiple choice

- Research is:
- A..... a process that helps you get a degree
- B..... a statistical process
- C.....a systematic description of what you already know
- D.....a process of gathering information
- E.....a way to learn new methods
- F..... a process of inquiry that leads you to new knowledge

# Ways to analyse data

- **Quantitative methods - numbers**
  - counting
  - statistics
  
- **Qualitative methods - words**
  - Thematic analysis
  - Content analysis

# What do you do with the information?

- Summarize it
- Read your results and compare what you found with what is already known
- Discuss it with a research colleague
- Review your summary
- Write conclusions
- Publish your study

# Research is also a competency

- We need to know the fundamentals of research (types of studies, methodologies, etc)
- We need to have skills to collect and analyse data
- We need an attitude of permanent curiosity and neutrality over data



# Back to our initial question: what is research?

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The ability to produce new knowledge

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The ability to read and interpret other people's research

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Knowledge and skills on how to collect and analyse data in a systematic way

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The ability to read your results according to what you already know

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An attitude of ongoing curiosity

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# How does being a researcher help teachers?

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It helps develop a systematic way of thinking

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It helps describe and analyse assessment data

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It helps support decisions through the use of evidence -based information

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It helps write organized reports

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It helps provide evidence-based arguments

# Final question

What do you need to do  
to become a researcher  
or improve your researching abilities ?