

TECHNOLOGICAL ANALYSIS PROCESS IN SECONDARY SCHOOL

What is this object? To what need does it respond? What does it create?



- Questions pertaining to the operation of an object
- Questions pertaining to the scientific principle(s) at issue
- Questions pertaining to the impact of the object on man, the environment and on ethics
- Questions pertaining to the fabrication and maintenance processes of the object

Suggest an explanation



- Initial ideas
 - I explain in my own words what I know about the object or what I think the principles at issue are.
- Tentative solution
 - I identify the overall use of the technical object.
 - I identify the main aspects to be considered in the analysis.
 - I think that/I imagine that/I suppose that...
 - I think it because/since/due to...

INITIAL IDEAS, TENTATIVE EXPLANATION AND HYPOTHESIS

Planning and implementing the process

Materials

- I observe and manipulate the technological object to be analysed.

Development

- I choose a scenario that will prove useful to me for answering the questions.
- What are the steps?
- What precautions do I need to take?
- What are the concepts, the laws, the models and the theories at issue in this object (design, fabrication, use)?
- What should I note and when?

Action

- I carry out the process according to the order established at the start.
- I adjust the process as needed and note the adjustments.
- I note my observations.



PLANNING AND CARRYING OUT

Working out explanations and concluding

- Do my observations and my knowledge confirm my initial explanation?
- I suggest an explanation for the initial questions, based on the data collected and on my knowledge.
- What should I communicate about my accomplishments and how do I communicate them effectively?
- Did I use the appropriate terms and respect the rules and conventions to express my ideas and illustrate my technical object (parts, assembly and operation)?
- What do I take away from this process?



OUTCOME

SIGNIFICANT CONTEXT