

Mapping data through concept maps: an auxiliary tool for decision making regarding IEN institutional projects

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This report presents the framing of a mapping data construction towards project area [1], where it models a systemic and adaptive tool based on Novak's theory of concept maps [2], using the CmapTools software, version 5.05.01.

It has the objective to subsidize the decision making practice at many different levels inside the Instituto de Engenharia Nuclear, IEN.

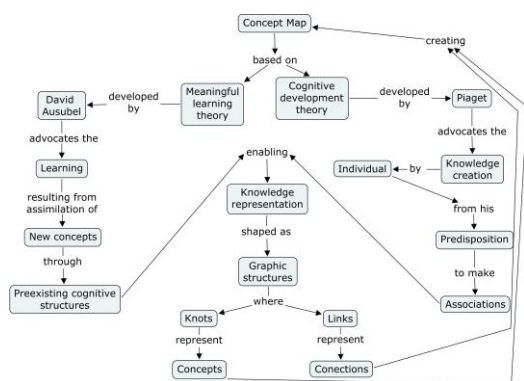


Figure 1. Concept map methodology

Using the cited method and through data selection, interviews, official meetings and organizational documents collected, the organizational tool was built. The main intention: Help to answer what are the concepts to be taken in order to help and speed up decision making practice towards a joint development project with Industrias Nucleares Brasileiras, INB, and IEN, in the Pre-investment phase [3].

The whole data shared is done online and always updated in real time. This form of work, enabled by remote access, allows uniformity of data, focus contextualization and collective construction. Internal network security and password access offer traceability and data integrity.

More than a remote access database, the conception of a cognitive map transforms the idea into a figure easily assimilated which induces the negotiated focus for its elaboration. Being a systemic and perennial construction, it presents itself as an adaptive tool, able to follow the needs of change and adequacy to attend the project.

The general idea of a concept map must be understood holistically, values and organizational strategies must permeate the structure to allow that items considered critical, such as safety culture, do not be forgotten. Also, promoting collective construction, new items can be incorporated and new connections will be stimulated.

The cognitive mapping of this first stage that generates content to aid in the decision making process also becomes a document that can be consulted about the actions undertaken besides serving as learning lessons for future projects.

References

- [1] D'AVILA, A. L. Mapping data through concept maps: an auxiliary tool for decision making regarding institutional projects. In: INTERNATIONAL NUCLEAR ATLANTIC CONFERENCE - ENIN - MEETING ON NUCLEAR INDUSTRY, 5., 2017, Belo Horizonte, **Anais...**Rio de Janeiro: ABEN, 2017. Não paginado.
- [2] NOVAK, J. D. **Learning, creating and using knowledge: concept maps as facilitative tools in schools and corporations.** New Jersey: Lawrence Erlbaum, 1998.
- [3] WEISZ, J. **Projetos de inovação tecnológica: planejamento, formulação, avaliação, tomada de decisões.** Brasília: IEL. 2009. 175p.

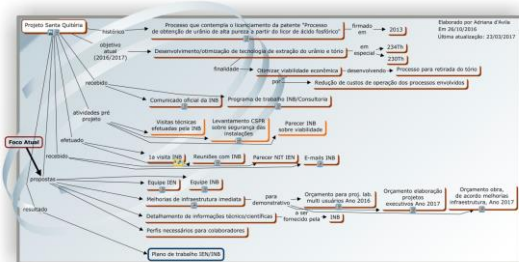


Figure 2. Concept map of project proposal (pre-investment phase)