Concept mapping and dialogue mapping in information seeking practices: a case study

There are huge possibilities for using concept and dialogue mapping tools in information retrieval. With the help of the software the subjects can be analysed and divided into smaller conceptual parts. Then the actual task is easier to carry out.

In the past two years the Helsinki University of Technology TKK library and the Department of Computer Science and Engineering have co-operated with an interesting project. New software for making mind maps, concept maps and dialogue maps are being used for structuring information retrieval. These methods have been studied together, taught on separate courses and presentations about the methods have been given. This project has got a warm reception because the idea can be adapted throughout the university and therefore several departments may benefit.

The paper will discuss the experiences of the project and highlight the possibilities incorporating the concept and dialogue mapping techniques in information literacy activities. Visualization of information seeking increases creativity. Illustrations can also capture complex entities, as demonstrated below in Figure 1.
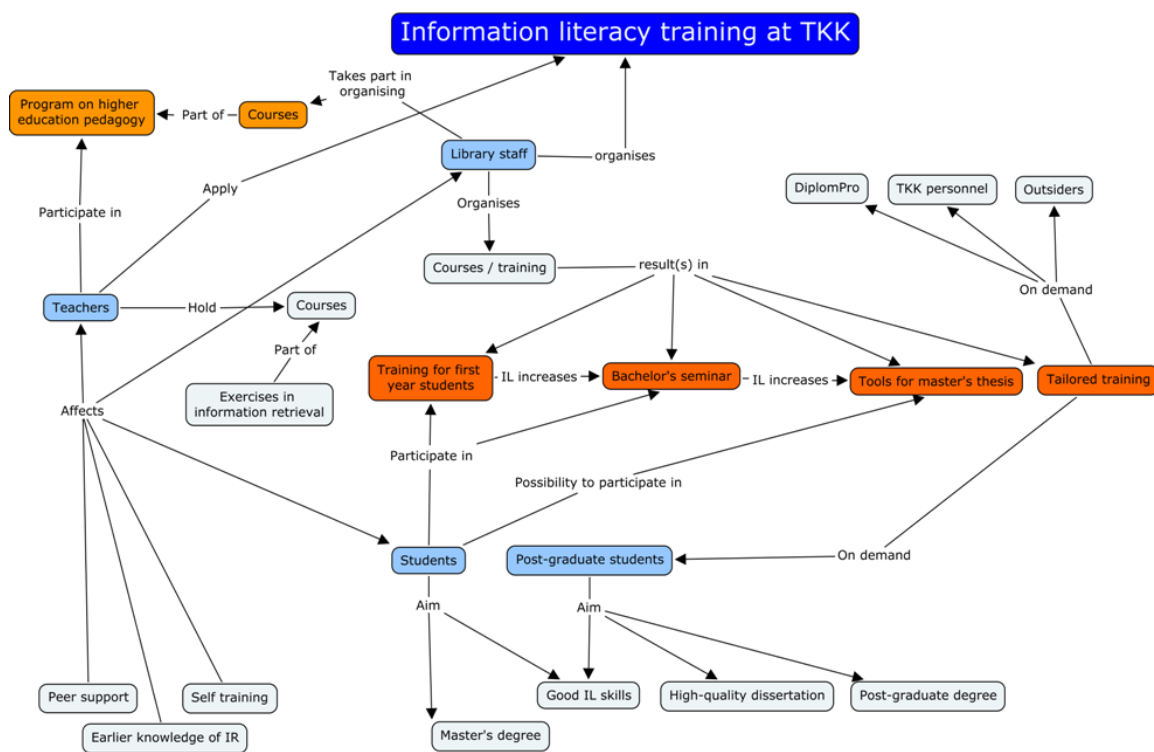

Figure 1: Information literacy training at TKK

Biographical statement

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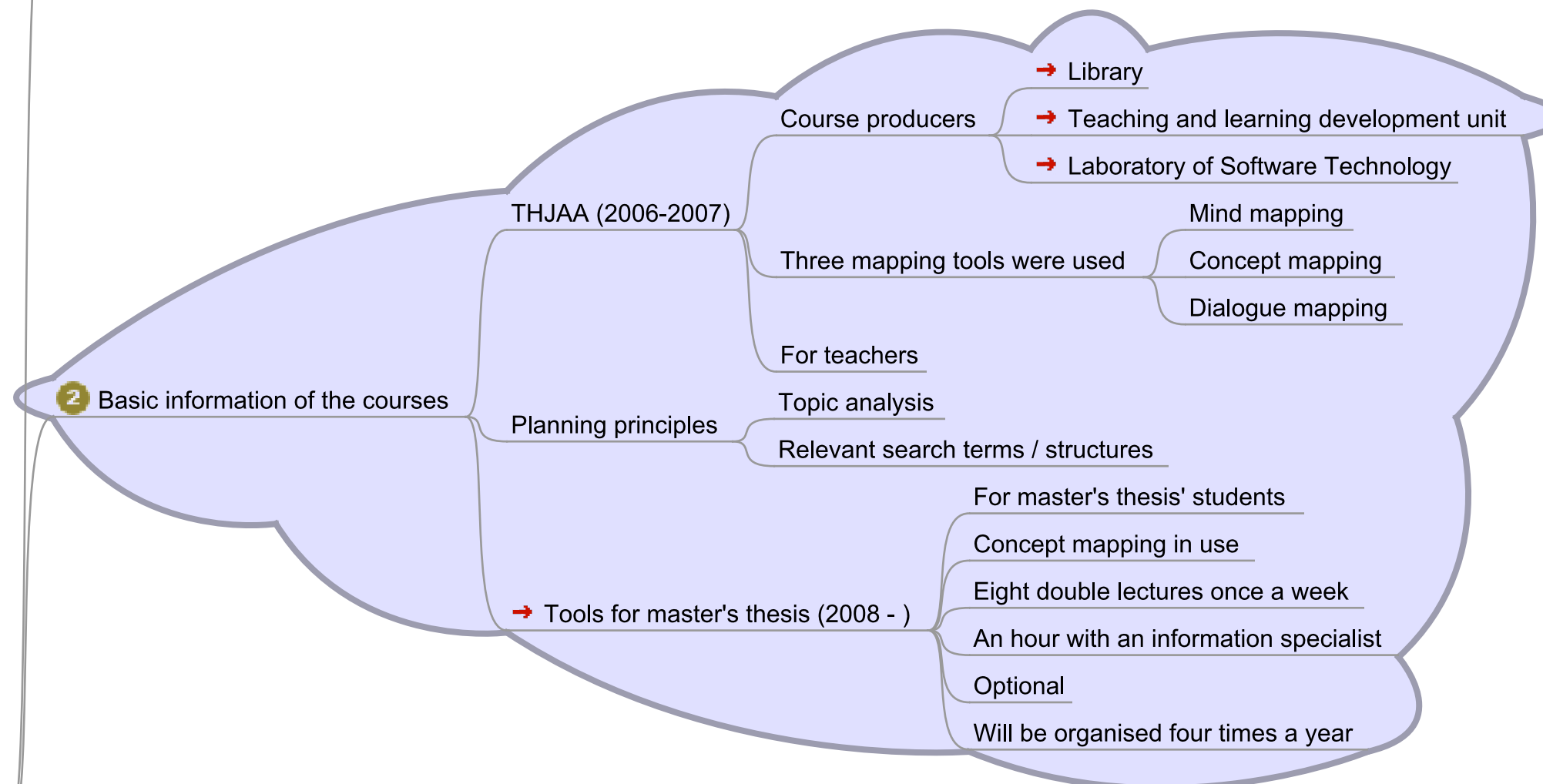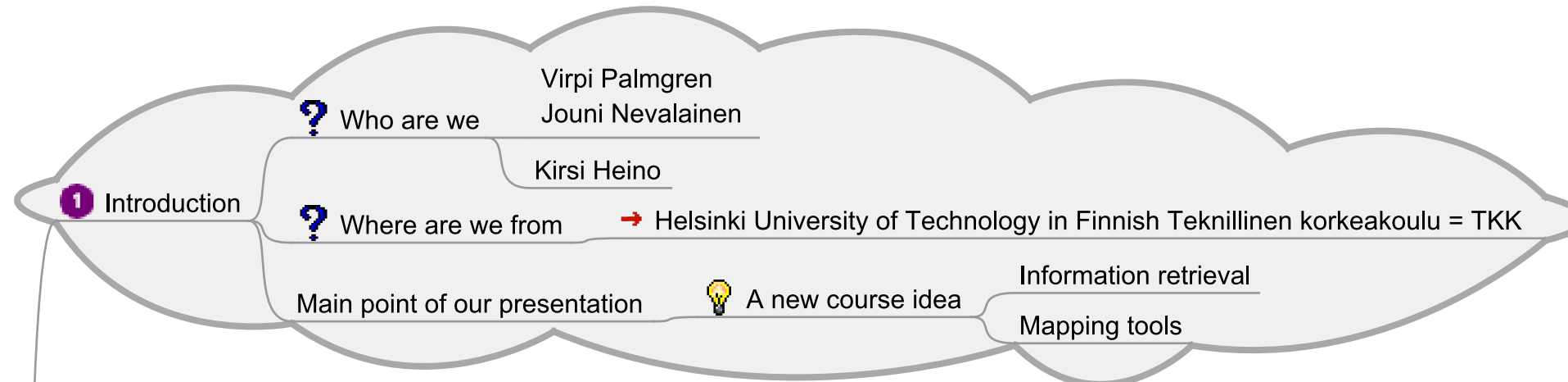
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1 Introduction
- Who are we
  - Virpi Palmgren
  - Jouni Nevalainen
  - Kirsi Heino
- Where are we from → Helsinki University of Technology in Finnish Teknillinen korkeakoulu = TKK
- Main point of our presentation → A new course idea
  - Information retrieval
  - Mapping tools

2 Basic information of the courses
- THJAA (2006-2007)
  - Course producers
    - → Library
    - → Teaching and learning development unit
    - → Laboratory of Software Technology
  - Three mapping tools were used
    - Mind mapping
    - Concept mapping
    - Dialogue mapping
- Planning principles
  - For teachers
  - Topic analysis
  - Relevant search terms / structures
- → Tools for master's thesis (2008 -)
  - For master's thesis' students
  - Concept mapping in use
  - Eight double lectures once a week
  - An hour with an information specialist
  - Optional
  - Will be organised four times a year

3 Mapping tools
- Mind map (Freemind)
  - Best suited for explaining things as a whole
    - Course programs
    - Can be integrated eg. with power point slides, web pages and photos
- Concept map (CmapTools)
  - Defines relevant concepts
  - Outlines relations between different concepts related to the topic
  - Enables identifying, widening and defining search terms
  - The more you know about the topic the more difficult it is to make the map
  - English better than Finnish language
- Dialogue map (Compendium)
  - Possible to present questions, answers and reasons
  - Suitable for planning, problem solving and knowledge creating

4 Future
- Feedback
  - Was the concept map useful for structuring your master's thesis topic
  - Did you utilise the concept map in the information search
  - Was the concept map useful when discussing with the instructor or supervisor
  - Did the concept map affect the writing process
  - How and in which direction did the map develop during the work
  - In what kind of situations would you use concept maps in the future
- In conclusion
  - Using the programs is easy, analysing topics difficult
    - Takes a lot of time
    - Requires a lot of practise
  - Concept mapping best method for structuring the search
  - Co-operation with teaching and learning development unit
- THANK YOU FOR YOUR ATTENTION
- Contact information
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