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# **CONFERENCE ABSTRACT**

**Improving Critical Thinking Skills in master integrated care design students** ICIC20 Virtual Conference – September 2020

## Ruben van Zelm

#### Introduction and aim

Critical Thinking is defined as "the active, skillful deployment of simple, general methods which are most conducive to truth or accuracy in making judgments." This method is to be considered as a basic attitude in academic thinking, and there for a competency for every professional working in integrated care. Characteristics of such an attitude are openness, open mindedness and curiosity, but these characteristics cannot function without specific skills for reasoning and argumentation.

In the master Integrated Care Design, our students follow an interactive course to build this competency. The aim of the course is to provide students with the skills of structuring arguments and rationales. To achieve this goal, we use a blended learning approach with instruction and self-tuition using an online commercial software package: Rationale Online (https://www.rationaleonline.com/).

#### The course

The fundamentals of "Critical Thinking" are based upon:

- Structuring arguments
- Analyzing reasoning
- Identifying assumptions
- Evaluating evidence

and are expressed and visualized by use of "reasoning maps". These are visual representations of an argumentation. Three types of maps are used:

- [1] Grouping maps
- [2] Reasoning maps
- [3] Advanced Reasoning maps

Critical thinking is principle and rule based. Which means student can learn to apply these principles and rules to their own argumentation. Students are supported to develop reasoning maps in increasing complexity, from a relative simple grouping map, to an elaborate advanced reasoning map. The online resources in the critical thinking software (e-book, tutorials, exercises) are complemented by face-to-face instruction and feedback on developed maps.

## Results

With every assignment in the master program, students have to develop a supportive reasoning map. E.g. a grouping map is used to support the coding of qualitative interview data. An advanced reasoning map is used to support the Discussion section in the exam paper.

Students are generally satisfied with the course (course evaluation 8.7/10). They indicate that the critical thinking skills and the visualization in maps are very useful academic skills. Alumni tell us that they still use reasoning maps, e.g. in preparing presentations, multidisciplinary meetings, and even job interviews!

#### Conclusion

We believe critical thinking skills are essential for any student or professional working in integrated care. Using this principle and rule based course, including reasoning maps, is a relative simple and visual method to increase these skills.

Because of the visual nature of the course, a poster format showing examples of reasoning maps, is most suitable for this contribution.