

accommodation in an instructional design. The intuitive solution of Sudoku in an iterative model can be viewed as an example of the recent work on learning through developing intermediate cognitive models of Miwa [13]. It highlights the pitfalls of repeating an instructional design for consecutive academic years.

A third level of contribution is on the level of framework for understanding (F of FMA). The reader should take note that, as promoted by Myers and Klein, critical social researchers should guide their actions by using critical social theories. In this case the ideas of the critical systems thinker Werner Ulrich were used. By identifying the assumptions of the involved and affected the lecturer was able to focus on the specific needs of the different groups of students [4]. It also helped to identify which factors belongs to the environment of the system and which can be controlled by the system.

5. Conclusion and Future Work

Project-based learning (PBL) provides a teaching strategy to accommodate students of diverse competencies in a single instructional design. PBL is intrinsically linked to self-directed learning (SDL). Students should take control of their own learning objectives. The running of this project in the past six years has shown how students are proud of their achievements to provide unique strategies for the solution of Sudoku.

The author has decided that although the availability of solutions provided by previous students has been managed by the instructional design, it would be advantages to rotate the specific problem from year to year. Several new projects will be selected and developed to be used in future.

6. References

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