Efficient Navigation of a Partially Ordered Set

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Summary: This invention is an algorithm to efficiently navigate a partially ordered set to quickly and dynamically reach a target set of elements based on a small amount of input information.

Description: This invention could be used to present individualized educational games or educational quizzes that match the level of the student. The algorithm will present questions that adapt to the student’s answers in real time. The method can assess, provide remediation, enrich, and design an individualized teaching tool for a specific student. For example, the invention could be used to teach mathematics to elementary school students.

Advantages of this Invention:
- Tailored learning environment to the education needs of a particular individual
- Method is more flexible and inexpensive to implement as compared to alternative computer learning models

Potential Areas of Application: Several settings, mainly educational
- Individualized games, quizzes, or other learning tools for students
- Research tool to collect a large amount of data that can later be analyzed

Intellectual Property Status: Seeking protection

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