







fashion. Main function of this module includes retrieving knowledge items and resources via a concept searching, then by organizing the topic relevance, different shape or color will display various level of knowledge nodes and links. In such a visualized manner, learners can explore every knowledge items one by one. The navigation system offers a knowledge presentation according to individual learner's cognitive model to avoid getting lost in exploring process and enable learners to locate their knowledge nodes directly.

### 3.7. system deployment

Our navigation mechanism is implemented using helix software development process. The system collects most of open course resources and navigates in a dynamically visualizing mechanism on purposes of improving learner's achievement in an open resource leaning environment. After the system requirement analysis process, we set up four sub-module including the dynamic visualizing navigation module, resources aggregation module, learning behavior statistics module, and interactive comment module. We also redesign the system user interface in order to fit learner's common habits.

### 3.8. demonstration

To check the effectiveness of the dynamical visualized navigation mechanism, we have investigated user's satisfaction ratio by questionnaire, learner's assertiveness degree by technology receive model, and we have analyzed learner's learning behavior by using statistical measures. Finally, we investigate the sore

of learner's final examination to evaluate to what extent this mechanism improve learner's achievements.

## 4. Conclusion

We aim to study the key factor in visualized navigation system including its objective, paradigm, and strategy. By merging the mechanism of individualized recommendation and visualized navigation, learners can ameliorate their work-flows in studying process so as to fit their individual interests, studying habits, and therefore, to get the maximum accomplishment in studying.

## 5. References

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