

The mind beyond time and space:

Online collaborative knowledge
building using Knowledge Forum

Learning Community Project, CITE, HKU

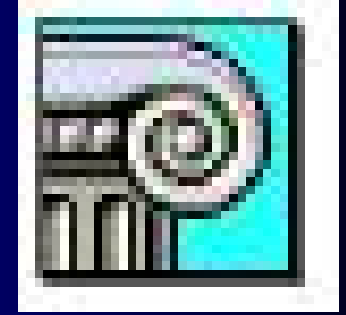
Knowledge Management & Learning

- Latest technology enables global sharing of information across platform and continents.
- Knowledge management is a logical extension of the Information Society.
- An attempt to cope with the explosion of information.

Basic Elements of KM

- Accessing, evaluating, managing, organizing, filtering, and distributing information
- useful to end users
- professional judgement
- KM is about enhancing the use of organizational knowledge through sound practices of information management and organizational learning
- more than managing information flows

Knowledge Forum and knowledge building and management



Knowledge Forum (KF)

- **Knowledge Forum provides a computer-supported intentional learning environment for knowledge building and knowledge management**
- **It is initiated by a Canadian graduate school of education, the Ontario Institute for Studies in Education in the University of Toronto.**

What is Knowledge Forum?

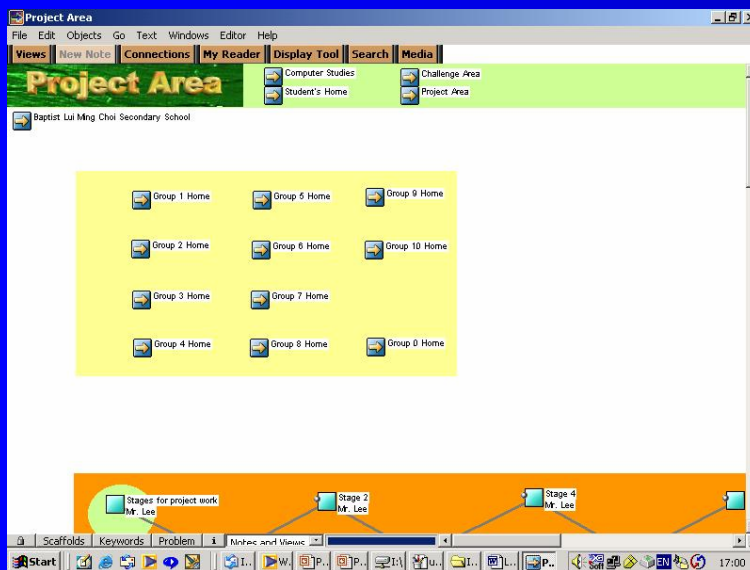


- **Knowledge Forum® is a problem-centered collaborative knowledge medium that operates over a computer network.**



- KF DEMONSTRATION

- **Knowledge Forum includes knowledge building and management tools for:**
 - **Collaborating**
 - **Building idea networks**
 - **Constructing, storing, and retrieving notes**
 - **Referencing, quoting, and tracking notes**

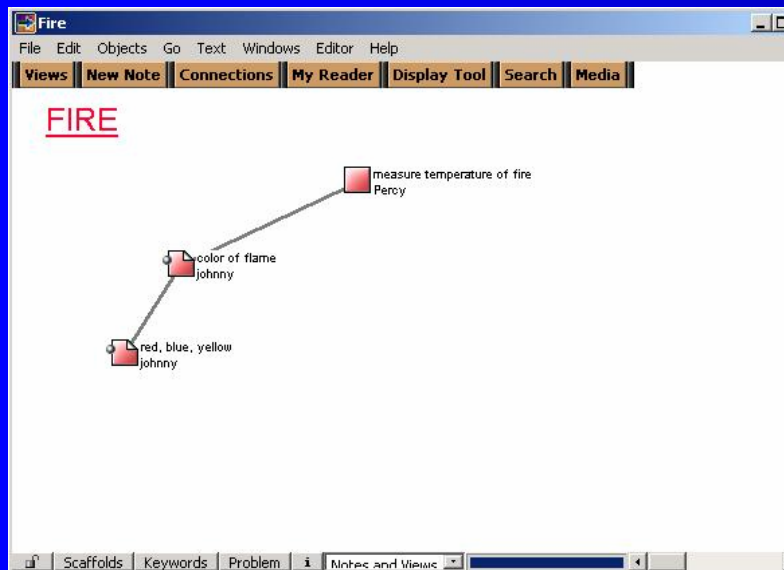


- **Identifying knowledge gaps or advances**
- **Viewing the knowledge database from multiple perspectives**

Enhance students' knowledge-building ability

- **Traditionally, schools are dominated by the teacher-led chalk-and-talk approach. Most of the time, there may not be enough time for students to discuss because of the tight teaching schedule and arrangement.**
- **KF can provide a room for students to have discussion and to develop their independent and critical thinking. Through the discussion and mutual learning process, students are actually forming a knowledge-building community. And in this community, students have to produce, share and advance the knowledge of the collective.**

- **The roles of students have changed from that of clients to that of participants and workers in the community. Hence, there is a shift from teacher-directed approach to student-centred learning. It helps trace out students' own paths of constructing knowledge collaboratively with teacher's guidance and monitoring.**



Civic Studies

File Edit Objects Go Text Windows Editor Help

Views New Note Connections My Reader Display Tool Search Media

Civic Studies Student's Home

- johnny

File Edit Objects Go Text Windows Editor Help

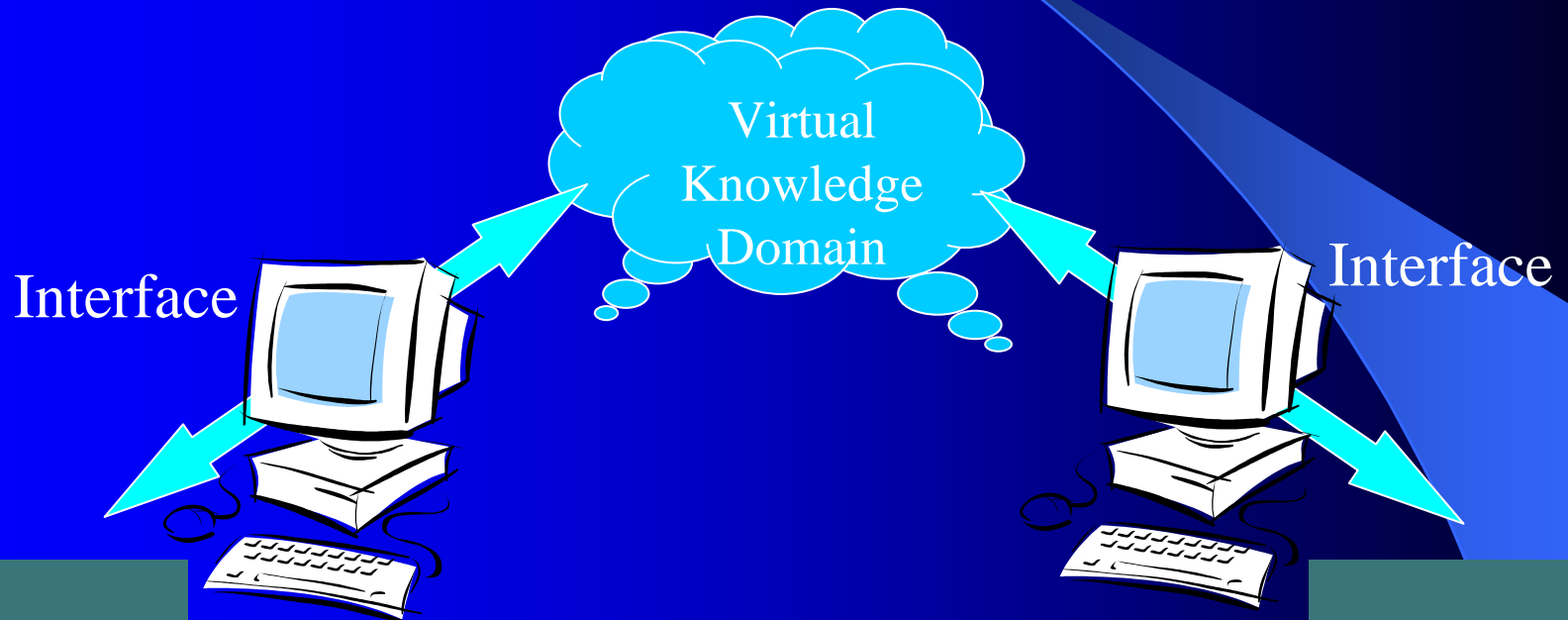
Theory Building Problem Minimize

My theory
I need to under:
New information
This theory canr
A better theory
Putting our know

Keywords Scaffolds Build On Connections Close

- **The collaborative knowledge building approach is very important to students not only in the sense that it helps develop better thinking, analytical and problem-solving skills, but it also paves the way for student to develop their life-long learning abilities and attitudes.**
- **It works in line with the recent curriculum reform advocated by the Education Commission report on life-long learning towards 21st century in Hong Kong, which emphasized on the importance of learning how to learn**

A good online collaborative knowledge building platform



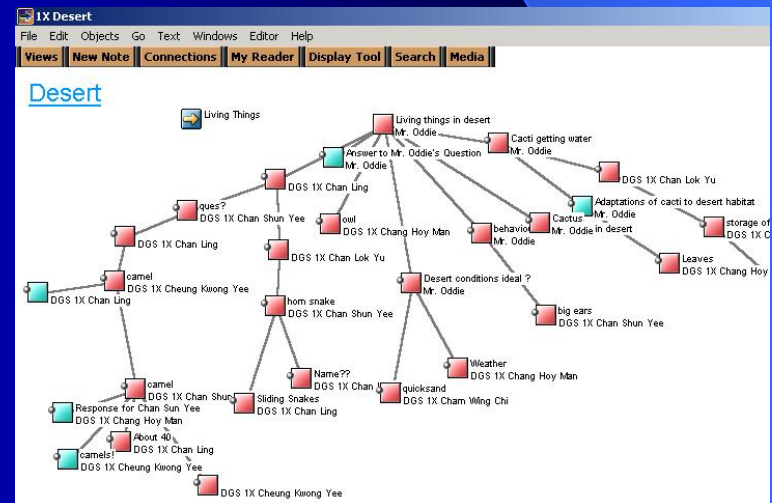
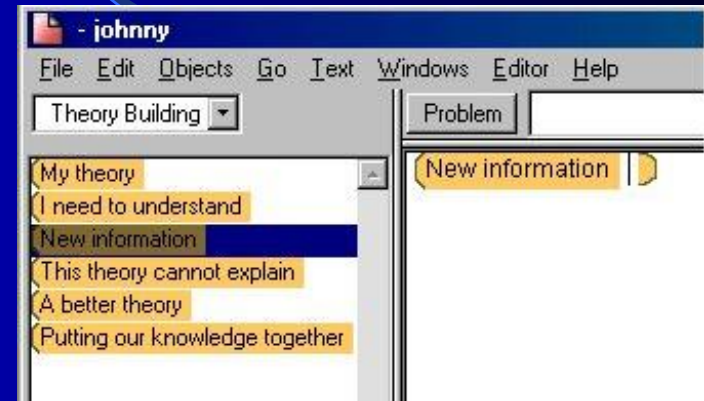
In other words, it mediates processing among human mind.

Knowledge Forum®



KF and Cognitive Issues

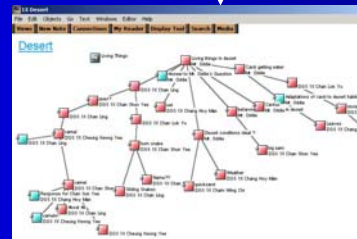
- On Learning:
 - It helps students to identify different components in thinking processes, structure and organize ideas through “Scaffold Supports” and “Rise-Above”
- On Collaborative Knowledge Building
 - It helps students to share, compare and contrast and advance their ideas



KF & Human-Computer Interactions



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And other features that address **the need** of collaborative knowledge builders

We hope that KF can help students in developing their:

- Thinking skills
- Meta-cognitive skills in learning
- Life long learning skills



Application of Knowledge Forum® (KF) in the contexts of Hong Kong

- Since September 2001, KF has been localized in some of the Hong Kong schools through a research and development project called

‘investigating the formation of knowledge building communities with technology support’

- The project aims at supporting and investigating the development of life-long learning abilities in group collaborative learning contexts with facilitation of technology.

Peer Tutoring Project

- **Aim:**

- **To extend the use of KF to more schools and provide an opportunity for students to collaborate as a knowledge building community during summer**

- **Activities:**

- **Except from on-line collaboration, students will be invited to join the peer teaching session and cross-school peer tutoring in order to display their collaborative work and share their learning experience**

Research interests in PTP

Study on how online collaborative knowledge building lead to student's:

- Cognitive development
- Meta-cognitive development
- Motivational change

Schedule of PTP

- **Milestone 1**
- Mid to late June (after exam): Introductory session for students on the use of Knowledge Forum. Two workshops will be conducted for students
- **Grand opening ceremony: 10-7-2002 2:30pm
Rayson Huang Theatre**
- **Milestone 2**
- Summer: Students work within own school/ class on selected topics
- **Milestone 3**
- From beginning of September: Students will conduct
 1. Peer teaching sessions to their classmates
 2. Cross-school peer tutoring
 3. Achievement tests and survey