```
                    ┌──────────────┐
                    │   Virtual    │
                    │  Engineering │
                    │    Teams     │
                    └──────┬───────┘
        ┌──────────────────┼
┌───────┴────────┐         │      ┌──────────────────┐
│     Team       │         ├──────│  Task 1: Project │
│   Building     │         │      │     Outline      │
└───────┬────────┘         │      └────────┬─────────┘
        │                  │
┌───────┴────────┐         │   ┌───────────┼───────────┐
│   Interests    │
│     Areas      │
└───────┬────────┘
        │
┌───────┴────────┐
│  Members Sign  │
│      Up        │
└────────────────┘
```

Virtual Engineering Teams

Team Building

Interests Areas

Members Sign Up

Task 1: Project Outline

- Team Develop Project Outline
- Team Posts the Outline in Team Presentation in WebCT
- Individual Gives Feedbacks on 2 Other Teams' Outline

Task 2: Project Proposal

- Team Develop Project Proposal
- Team Posts the Proposal in Team Presentation in WebCT
- Individual Gives Feedbacks on 2 Other Teams' Proposal

Task 3: PPT Presentation

- Team Develop PPT Presentation
- Team Posts the PPT Presentation in WebCT
- Individual Gives Feedbacks on 2 Other Teams' PPT

Task 4: Project Report

- Team Develop Project Report
- Team Posts the Report in WebCT
- Individual Gives Feedbacks on 2 Other Teams' Report

Figure 1: A Project-based Environment adopted from David Jonassen D. H.'s model (2000)

Learning Actions	Supporting Strategies	Activities
Project Presentation	• Technology Modeling	WebCT Tools Instructions Just-in-time Technology Solution Center in WebCT
	• Project Modeling	Example of Previous Projects
Project Collaboration	• Team Building o Forming o Storming o Norming o Performing • Scaffolding	Building interest team Breeze Live synchronous meeting Threaded Discussion Prompts Guided team building process Guided project procedures
		Formative assessment
Project Assessment	• E-peer evaluation • E-peer feedback	Periodical evaluation on team members' performance
		Feedback on other team's work

Table 1: Summary of the support strategies to the learning activities utilizing variety of technology tools and activities

Homepage
Syllabus
Course Content
Technology HowTo
Discussions
Team Workspace
Student Tools
 My Homepage
 Resume Course
 My Progress
 My Grades
 Search
Presentation Review

Homepage > **Discussions**

Discussions

| Compose message | | Search | Topic settings |

Click on a topic name to see its messages.

Topic	Unread	Total	Status
Instructor's Notes	10	10	public, unlocked
Messages to Chinese Students	3	4	public, unlocked
Technology HelpLine	23	23	public, unlocked
Anonymus Course/Project Feedback	218	218	public, anonymous, unlocked
Team A-American Bridge Consultants	4	4	public, unlocked
Team B-Fly Ash	29	34	public, unlocked
Team C-Wallers	26	26	public, unlocked
Team D-The Concrete Team	23	23	public, unlocked
Team E-WARS Tunnel	66	66	public, unlocked
Team F-Conventional Consultants Inc	26	26	public, unlocked
Team G-Dam Decyners	3	3	public, unlocked
Team H-TASK Force	19	19	public, unlocked
Team I-Design Doctors	6	6	public, unlocked
Team J-The Best Dam Group	111	111	public, unlocked
Team K-Innovative Construction Services	5	5	public, unlocked
Team L-Slope Protection Specialists	38	38	public, unlocked
Team M-Mesanators	3	3	public, unlocked
Team N-WEST-World Engineering Services and Technologies	44	57	public, unlocked
Team O-World International Student Engineers of Railway	2	2	public, unlocked
Team P-REAL-Roadbed Engineering and Leadership	85	85	public, unlocked
Team Q-Concrete Durability Consultants	16	16	public, unlocked
All	**760**	**779**	---