



# **ActiveLessons**

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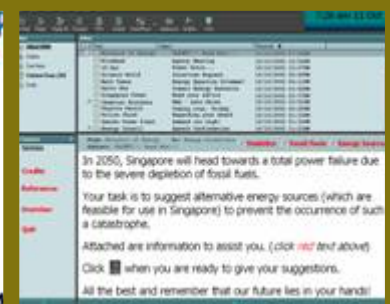
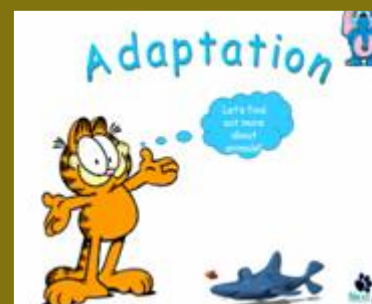
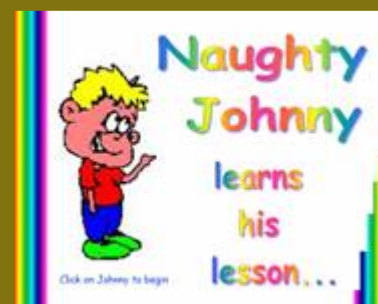


# What is ActiveLesson?

- Strategy for teachers to design pedagogically effective student-centered e-learning
- Builds on ideas of WebQuest (US) and MicroLessons (Singapore)
- Technologically simple -- PowerPoint is used for creation and there is no need to struggle with technicalities of web publishing -- teachers can concentrate on pedagogy
- If teachers develop understanding of technology-supported pedagogy, technicalities will synch in naturally
- This experience will transform their epistemology in constructivist direction



# Let's Start with Some Examples



# Why PowerPoint?

- Teachers are trained to use these tools
- Available in all the schools and teachers can install it on their home computers
- Requires very moderate technical skills thus it empowers teachers to concentrate on pedagogy while designing e-learning activities
- Allows easy integration with other application
- Allows easy deployment over the internet, CD-ROM and even mobile devices
- ActiveLessons can be developed using other tools as well, e.g., Authorware or Flash



# ActiveLesson in a Nutshell

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- 1 Presents students with some authentic scenario for learning. This scenario is presented in multimedia way and the task is given to students
- 2 Engages students to explore resources (e.g., web sites, multimedia packages, learning objects, MP3, videos) and transformer material as they work on their tasks
- 3 Provides templates which organize and scaffold students' completion of tasks



# ActiveLesson in a Nutshell

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- ④ Requires students to use technology-based tools (e.g., MS Word, MindManager , Digital Camera) to create artifact of their involvement in the task
- ⑤ Require students to produce an artifact for evaluation
  - ★ Students might also conduct presentations, exhibitions, upload their artifacts on-line for class critique, etc.
  - ★ ActiveLessons might contain checklists for students to conduct self-evaluation of their artifacts before submissions



# Examples of Active Lessons

The grid contains 12 lesson examples:

- The Truth, the Whole Truth, and Nothing but the Truth**: A lesson featuring a man at a podium and line graphs.
- Heroes & Heroines, Hear Our Call!**: A lesson about animal diversity with a mountain landscape and the text "Dynamic Duo Wanted! Help Tarzan and the Animals! Journey Through Animal Diversity and Classification".
- Time Management**: A lesson with a pink border and a cartoon bear.
- CLOTHES-A-MANIA**: A lesson about clothing with colorful illustrations of various garments.
- Singapore Police Force – Department of Chemistry**: A lesson with a photo of a police officer and text boxes for "Specific Instructional Objectives", "Target Group", and "Instructions".
- Water, water everywhere; Not a drop to drink.**: A lesson about water scarcity with a beach scene and the title "The Water Problem of La Mer Town".
- Dilemma Of The Three Little Pigs**: A lesson with cartoon pigs and the text "readily presented by: Triscilla Kek Huihen and Koh Meng Hoe".
- Areas of Biotechnology**: A lesson with a list of topics: "Food Technology", "Fermented Food", "Genetically-modified (GM) Food", and "Food Supplements".
- Depreciation of Fixed Assets**: A lesson about accounting with a red car and the text "BROWN MOTORS PTE LTD".
- Bone Fracture and Nutrition Planning**: A lesson with illustrations of a doctor and a patient.
- Hero Profile Bean**: A lesson featuring a cartoon character and the name "Bean".





# Why is this Effective Strategy?

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- Easy to create
- Cheap to develop
- Pedagogically strong
- Minimum training is needed for teachers
- Teachers will appreciate that simple technology allows them to design pedagogically sound learning experiences for their students
- Can be developed by everyone including students
- Existing resources can be used with ActiveLessons



# Why is this Effective Strategy?

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- Easily to manage for reuse
- Can be reused in different situations
- Can be packaged and shared across institution(s)
- Can be easily upgraded and accommodated to different students
- Can be contextualized
- Templates can be developed and provided for teachers to populate with their material
- Scaffolding tools can be provided to facilitate pedagogical decision-making



# Examples of Active Lessons

<p><i>Elements Of Office Administration</i></p> <h3>Handling Telephone Calls</h3>  <p>BACK</p>	<h3>I can't pass my NAPFA test!</h3>  <p>The real story of a student who has difficulty passing his NAPFA test.</p> <p>BACK</p>	<h3>Statistics- Pie Chart and Bar Graph</h3>  <p>BACK</p>	<p>It is the year 1205BC. Ramses III is the Great Pharaoh of Egypt. The world was going through great upheavals and the people were scattered by battle.</p> <p>The Pharaoh sends you a message, saying the Libyans are attacking again. He needs your help to defeat the Libyans.</p>  <p>BACK Story NEXT</p>
<h1>METALS</h1>  <p>ENTER</p>	<h3>Habitat, communities and adaptations - pond</h3>  <p>ENTER</p>	<h3>WOOD JOINTS</h3>  <p>GO ON</p>	<h3>THE ROAD TO MERGER: REASONS FOR THE MERGER</h3>  <p>START</p>
<p>Listen class, the June holidays is here again!! The school had decided to organize a short trip to Koh Samui in Thailand for 6 days 5 nights.</p> <p>For those who are interested in going, please sign up with me on Friday.</p>  <p>BACK NEXT</p>	<h3>How Man Makes use of Energy</h3>  <p>BACK</p>	 <h3>Snow White &amp; The Silly Dwarves</h3>	<h3>Battle of the Viewership</h3> <p>Which is the most popular channel?</p> 



# ActiveLesson Approaches

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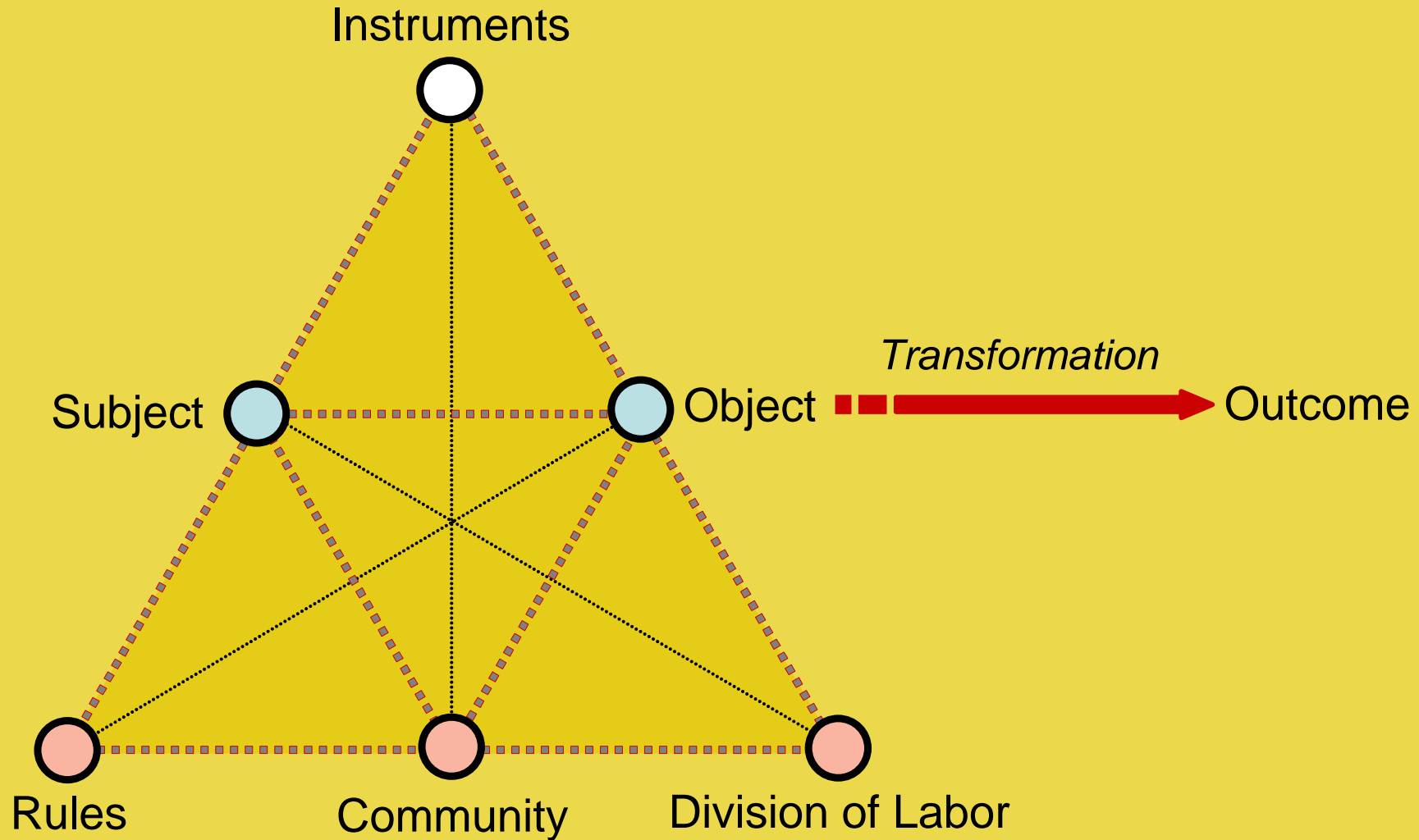
- Inquiry as a focus of ActiveLessons
- Problem solving as a focus of ActiveLessons

- ❖ Logical Problem
- ❖ Algorithms
- ❖ Story Problems
- ❖ Rule-using

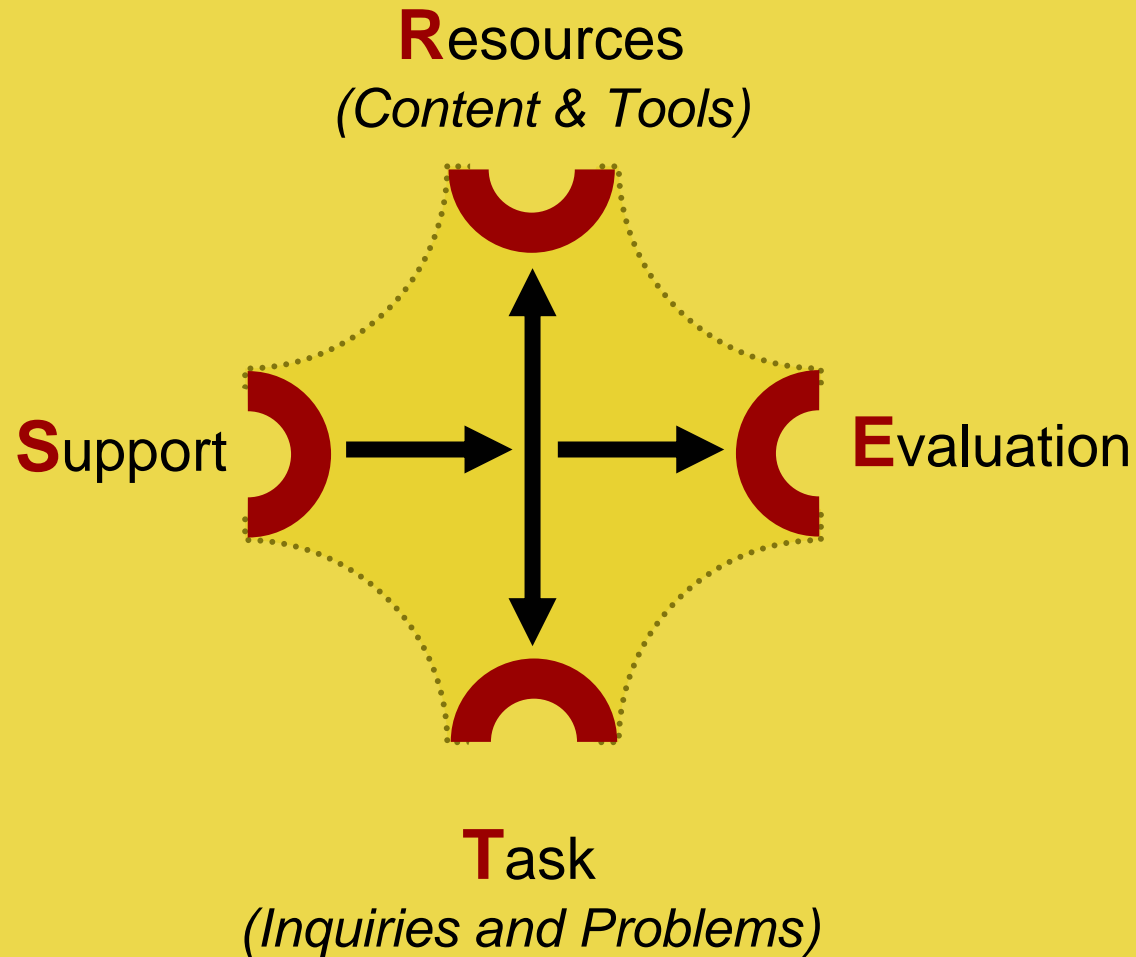
- ❖ Decision-making
- ❖ Troubleshooting
- ❖ Diagnosis-solution
- ❖ Strategic Performance
- ❖ Case Analysis
- ❖ Design
- ❖ Dilemmas



# Theoretical Bgr. -- Activity Theory



# Theoretical Background -- "RTSE" Model



# Examples of Active Lessons

**Case Study: Jack & Max**

Jack is a boy who likes junk food. Max, his best friend, tells him that junk food is not healthy food. However Jack does not know what kind of food to eat to keep healthy. Can you help Jack decide what kind of food to eat to keep healthy and energetic? Click on the 'Info' icon to see what Jack eats everyday. Then design a new menu to help him include healthier substitutes.

**DENTAL HEALTH**

**UNIT 3: DIET & TEETH**

**Choosing the Right Birthday Present!**

*Topic: States of Matter (Physical and Chemical Changes)*

**Hundred Acre Woods' Ice-Cream Day**

Hi I'm Winnie!

Hi I'm Beanie!

**Help! Please Save Us!**

**THE ENDANGERED ANIMALS**

*Social and Economic Conditions of Singapore after WWII*

**Our Country - Change and Progress**

Choosing the most desired place of interest in Singapore



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- Time Management:** A lesson with a pink border and a cartoon bear.
- CLOTHES-A-MANIA:** A lesson about clothing with colorful clothes and the text "CLOTHES-A-MANIA".
- Singapore Police Force – Department of Chemistry:** A lesson with a police officer and text: "Specific Instructional Objectives: 1) State that different indicators have different operating pH ranges. 2) Analyze and compare results obtained from different indicators. Target Group: Sec. 1B (Average to high ability). Duration: 1 period (30 minutes). Instructions: Work in pairs. Follow through the development of this case and solve the mystery. Remember to hand in your activity worksheet at the end of the lesson." Urgent message.
- The Water Problem of La Mer Town:** A lesson with a beach scene and the text "Water, water everywhere; Not a drop to drink. The Water Problem of La Mer Town".
- Dilemma Of The Three Little Pigs:** A lesson with three pigs and the text "Dilemma Of The Three Little Pigs". Proudly presented by: Priscilla Kek Huihen and Koh Meng Hoe.
- Areas of Biotechnology:** A lesson with the text "Food Technology" and "Fermented Food", "Genetically-modified (GM) Food", "Food Supplements".
- Depreciation of Fixed Assets:** A lesson with a red car and the text "BROWN MOTORS PTE LTD".
- Bone Fracture and Nutrition Planning:** A lesson with a doctor and a patient.
- Hero Profile Bean:** A lesson with a man's face and the text "Hero Profile Bean".





# ActiveLesson Design Process

- 1 Identify suitable topic from your curriculum for design into ActiveLesson
- 2 Write learning outcome (s)
- 3 Identify task to lead to achievement of the learning outcome (s)
- 4 Plan interesting scenario that would involve learners
- 5 Locate resources and tools required in completion of task
- 6 Plan support components such as instructions, templates, frequently asked questions, extra resources that would scaffold learners, etc
- 7 Plan how to evaluate learning and what to do if further intervention is required



- There are a lot of resources available over the internet
- Are they developed in principal, informed and systematic ways to support learning?
- Learning Objects as an effective strategy
- Repository of quality resources can be developed and provided for teachers to utilize within learning activities



# Learning Objects



# Thank You for the Attention

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