Group Online Collaboration For Scholarly Articles Readability and Understandability (A UTS Teaching and Learning First Year grant)

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Sixth International Conference of MIT’s Learning International Networks Consortium (LINC) June 16 – 19, 2013, Boston
Overview

• Challenging Issues
• Related Work
• Technique
• Framework
• Case Studies
• Conclusion

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Scholarly Papers

Learning benefits

- New idea
- New contribution
- New knowledge

Paper format

- 1) research papers,
- 2) experience reports,
- 3) short papers,
- 4) posters,
- 5) tutorial proposals,

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Students Challenges

• Understanding difficulty
  (domain, language used in the paper, the research methodology, results interpretation)

• Absence of skills
  (critical thinking, the research method, the presentation skill and the writing skill)
How many students enjoy reading scholarly articles?

Not many
How many students can fully understand one scholarly paper?

Not many

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This research

- Develop a practice-based technique to enable students on building their readability and understand ability skills.
- It is to enhance learning as effective as possible so that to encourage learners to learn widely and deeply beyond concepts-level.
- An objective to support this goal is based on a constructive guided learning SCHOLARLY ARTICLES framework.

- It is based on scholarly articles as the key subject context and integrate them into courses as part of a test assessment or a tutorial-based activity in an e learning as an alternate approach for maintaining educational sustainability.

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• Assist learners understand scholarly articles by encouraging them to discuss challenging issues online with other global learners with an appropriate use of a tool for collaborating work together on discussing ideas to generate inventive and innovative ideas.

• Heavy emphasis on a skill component, research, integrates and incorporates into their learning activities and by allowing them to build their research skill, analytical skill and critical review skill.

• Promote collaborative learning

• Motivate students interest on reading

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Learning Concept

Concept of learning. (Saljo, R, Brown, J.S. and Alder, B.Chua et al.)

- To increase one knowledge;
- To memorize and reproduce,
- To apply,
- To understand,
- To seeing something in a different way,
- To change a person’s thinking.

- Buchanan and Huczynski (1995) define learning as ‘the process of acquiring knowledge through experience which leads to a change in behaviour’.
- In other words, learning is not just an acquisition of knowledge, but the application of it through doing something different in the world.
- For example, a familiar scenario that has incorporated changes can drive us to learn something new, or adjust to a new way of operating, or to unlearn something.

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Related Work

• From an organizational learning (1998) point of view, learning is associated with two important concepts: the first is the power of knowledge acquisition, and the second is the power of knowledge sharing.

• Understanding scholarly articles provides readers with knowledge, and thus increases their ability to knowledge-share with others (Thomas, Davenport and L. Prusak, 1998 and Drunker, 1988). Therefore it is important to encourage students to learn through reading scholarly articles. However, integrating these articles in the classrooms remains a challenging task for educators.
Methods

• Stage 1
  Literature review on learning

• Stage 2
  Surveying students

• Stage 3
  A technique for postgraduate students and undergraduate students
SOAR Framework

Scholarly Articles

Educator’s Space and Interest
1. good selection based on scholarly article criteria
2. Good assessment criteria earners skills

Learner’s space and Interest
1. Research skill 2. analytical skill 3. learning skill

Learner’s Collaboration Corner
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## Evaluation

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<tr>
<th>Assessment Criteria</th>
<th>2008 (without the framework)</th>
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<th>2010</th>
<th>2011</th>
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<td>6</td>
<td>22</td>
<td>16</td>
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<tr>
<td>Credit (10-12)</td>
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<td>Fail &lt;7.5</td>
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### Results

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Criteria Assessment Outcome

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Comments from students on SOAR

• 1) article topics
  
  *Topics are current significant, clear and interesting*, ‘good knowledge’, ‘It sharpened our thinking’, ‘Topics are thought provoking’, ‘They give us business aspects of a technical field’, ‘They broadened our knowledge of IT strategies’

• 2) paper discussion
  
  Showed that students felt it was ‘informative’, and that ‘team dynamics were unique’. They agreed that the process involved two-way discussion and they ‘enjoyed it’. They also believed that such discussion helped them ‘not only get to know each other better but also able to share their experience and knowledge within the group level and class level’

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• 3) questions posted on the forum
  ‘questions are a good help to think critically and relate to the paper and real life experiences’. As for the oral presentation, many students claimed that the purpose was to ‘help understand the topic well’, ‘stimulate discussion in class and feedback from the subject coordinator’.

• 4) their oral presentation
  ‘help us understand the topic well’, ‘stimulate discussion in class and feedback from the subject coordinator ‘there was a lot of information’ and ‘argumentative and critical evaluation’. They felt that they learned how to ‘build oral communication skills, negotiation skills and analytical skills, as well’.
Demo

- Feedback
- E-learning tool
- Presentation
Future Work

• Substantial empirical work can be done to further test the technique’s suitability and applicability on other subjects.
• Class size:
• Does SOAR suitable for large size subjects and large class sizes?
• Tool assessment : Is SOAR as a tool a necessary aid for supporting resources and for setting up the forum discussion?
• Subject identification : Are certain subjects better able to integrate this technique?
• Framework limitation : What are the limitations of SOAR? These questions will roll into the next phase of our research investigation, which will be more in-depth and analytical.

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• Thank you for your listening.

• If you have a question for us, we appreciate you send it to

   Bee Bee at beebee.chua@uts.edu.au or
   Danilo at dbernard@db2powerhouse.com