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<th><strong>Title</strong></th>
<th>Implementation of web-based collaborative tool for learning computer programming: A case study</th>
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<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td>Kwok, DSY</td>
</tr>
<tr>
<td><strong>Citation</strong></td>
<td>CITE Research Symposium 2002 (IT in Education : Research into Practice), Hong Kong, China, 6 July 2002</td>
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<td><strong>Issued Date</strong></td>
<td>2002</td>
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CITE Research Symposium
2002

6 July, 2002

MR. Dominic Kwok
Dissertation Title

- Implementation of web-based collaborative tool for learning computer programming: A case study
Problem Identified

- Students do not make good use of school’s discussion forum for learning.
- Many students hand in project by “copying” others’ program and teachers are found difficult to justify the working part of the student. Especially when the projects are done by group.
Problem Identified

- Peer support and teacher support are inefficient.
- Lack of collaborative tool.
Purposes of the study

- The purposes of the study is to explore how to facilitate teaching and learning with the discussion forum of a web-based collaborative tool.
Theoretical Framework

- Collaborative learning
- Literature overview
  - The Vygotskian concept of zone of proximal development
  - Essential components for collaborative learning by Johnson and Johnson
Implementation

- Stage 1: Grouping
- Stage 2: Negotiation
- Stage 3: Collaboration
- Stage 4: Presentation
- Stage 5: Feedback and further data collection
Collection of data

- Quantitatively:
  - Usage statistics

- Qualitatively:
  - Questionnaires
  - Interviews
  - Comment in the forum
  - Researcher’s observations
Screen Shot Demo
## General Discussion

### Visual Basic Discussion Forum

- **Profile** | **Active Topics** | **FAQ**

- **Username:** [ ]  **Password:** [ ]

    - By default, you may login using admin/admin.
    - Default password is your HKID number, you can change your password and nickname in this forum.
    - You may do this by clicking the "profile" link.

### Forums

<table>
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<tr>
<th>Forum</th>
<th>Topics</th>
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<tr>
<td>General Discussion</td>
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<tr>
<td>Instructions</td>
<td>1</td>
<td>5</td>
<td>18/17/2001</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>by Kaok Chir</td>
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<td>11/13/2001</td>
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<tr>
<td></td>
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<td>by Chan Tai Ming</td>
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- Contains new posts since last visit.
- No new posts since the last visit.

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There are 10 Posts in 13 Topics and 227 Users.
## Private Discussion

You Last Visited - 10/18/2001 16:32:00

There are 12 Posts in 12 Topics and 227 Users

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<th>Forum</th>
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<td>1</td>
<td>10/17/2001 16:22:50 by Kas7_Sir</td>
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<td><strong>9A</strong></td>
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<tr>
<td>Group 2</td>
<td>2</td>
<td>2</td>
<td>10/17/2001 16:44:55 by User_5</td>
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<td>Students can test their post here</td>
<td>6</td>
<td>6</td>
<td>10/19/2001 14:12:07 by Kas7_Sir</td>
</tr>
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</table>

Contains new posts since last visit
No new posts since the last visit.
Private Discussion
File upload feature

You may upload file with not larger than 2MB.
Administration features
Live Demo

Visual Basic Discussion Forum

Profile | Active Topics | FAQ

Username: [Input]
Password: [Input]

Login

By default, you may login using [username], where [username] is your student ID. Default password is your NID number.
You can change your password and nickname in this forum.
You may do this by clicking the "profile" link.

Save Password
Forgot your Password?

There are 13 Posts In 13 Topics and 227 Users

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http://www.kwoksir.com/vb
Findings

- Task work and team work leadership
- File sharing feature is essential
- Assessment and participation
- Issue concerning computer programming
- Effective ways of facilitating teaching & learning activity with collaborative platform
Findings

- Collaborative platform is not useful to every activity conducted in the study
- The platform helps students with low learning attitude a little
- Large work load for teachers
Discussion

- Comment?
Thanks you