

## CHAPTER 5

### RESULTS AND OBSERVATION

#### 5.1. Results and Observation

This chapter will show the results of the paper prototyping and observation on the computer prototype related to literatures used in this research.

#### 5.2. Findings

The paper prototyping was successfully conducted to 4 test participants (3 teachers and 1 student).



Figure 5.1—Ongoing user testing



Figure 5.2 -Ongoing user testing

These were the findings in summary:

1. Test participants have difficulty finding how to send email
2. Chat icon is understandable
3. Test participants do not understand the meaning of ‘shout’ in the communication input text box.
4. Test participants have difficulty finding how to update personal information
5. Mark as Helpful is a good functionality (according to the test participants)
6. Test participants find it difficult to locate Logout link even though the link was located the same as the social networking site that the test participants use daily.

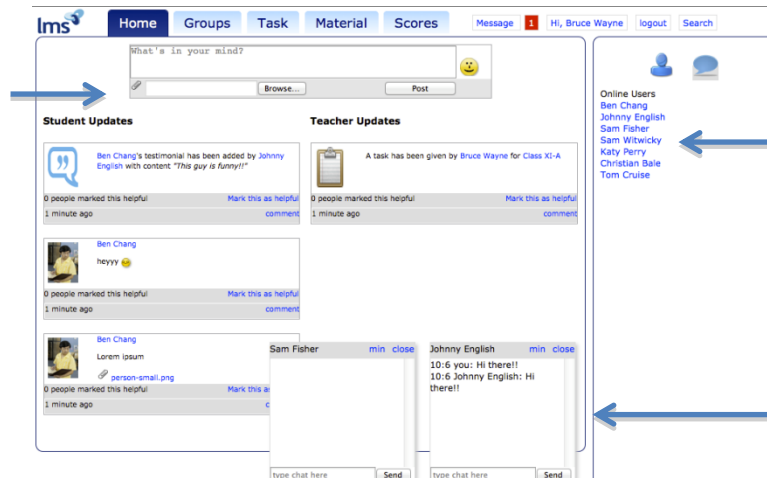
7. Test participants do not find difficulty in using emoticons to enhance the text-based message. Moreover, the user even uses it when not instructed to.
8. Test participants think that there should be a greeting word before mentioning the logged in username. For example: “Hello, John!” or “Hi, John!”
9. Test participants tend to use Groups page to do class related activities such as giving tasks, scoring, etc.
10. Notification is a good functionality, therefore should be implemented

### **5.3. Computer Prototype Observation**

This subchapter would explain about the computer based prototype implementation based on analyzed theories in Chapter 3.

Figure 5.3.1 showed that the computer prototype implements the user interface for features (1) View who is online, (2) Chat, and (3) Share file. First, the “View who is online” feature conforms to ConnectivismEC-2 as proven in the paper prototyping result in which one user stated that to get quick answers, he prefers to ask the online users one by one. Therefore becomes an interaction with peers. Secondly, the implementation of the attachment also conformed to the ConnectivismC-2 as this feature would be used to upload a file which will become a social object (an object responsible for the occurrence of interaction). Lastly from the figure, the chat implementation was also conforming to ConnectivismC-2, in which it acts as a medium for online interaction.

ConnectivismE  
C-2b



Connectivis  
mEC-2a

Connectivis  
mFC-2c

Figure 5.3- Features to View who is online, Chat, and Share file

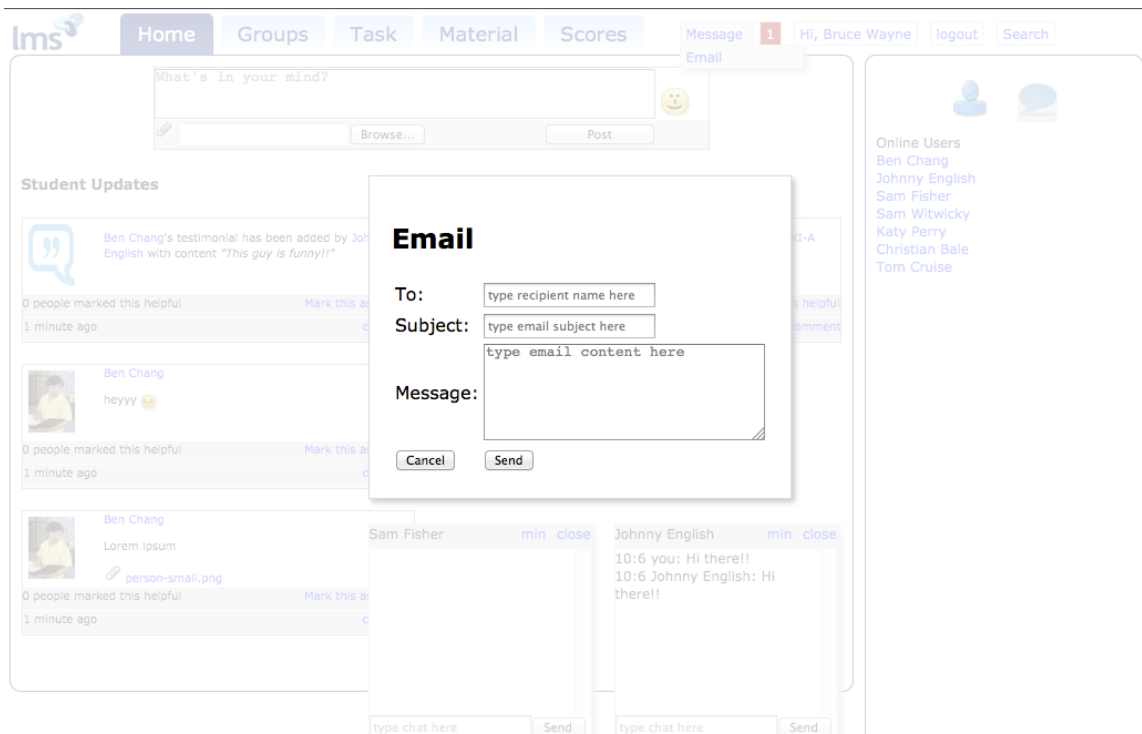


Figure 5.4 - Features to View send email (ConnectivismEC-2d)

The feature to send email conforms to ConnectivismEC-2 as it was considered as a medium for interaction whenever the user was not online in the web application.

Moreover, most of the users involved in the user testing admitted that they regularly check emails. Therefore, this feature was implemented to conform with the user regular activity.

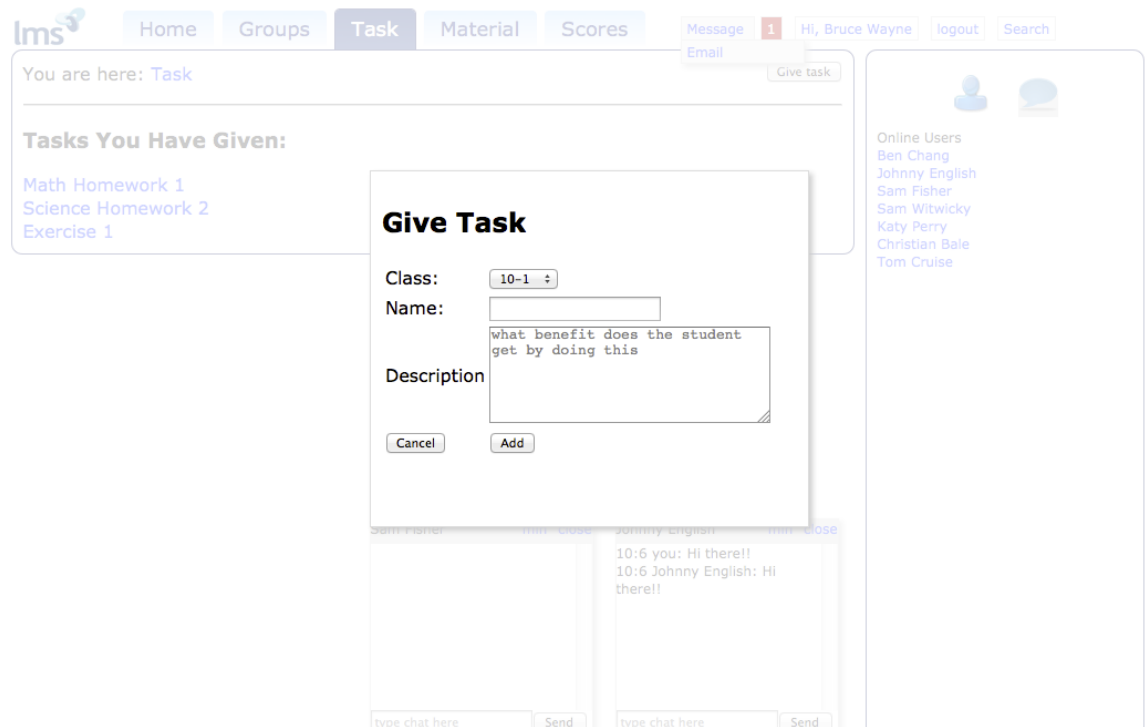


Figure 5.5 - Placeholders to encourage users to state the purpose of the task (ConnectivismEC-3)

Placeholders was implemented to conform with the ConnectivismEC-3. Placeholders gives a clue of what to write in a textbox. Therefore to conform with ConnectivismEC-3, placeholders will give a clue which tells the user to state the purpose of a task or material given.

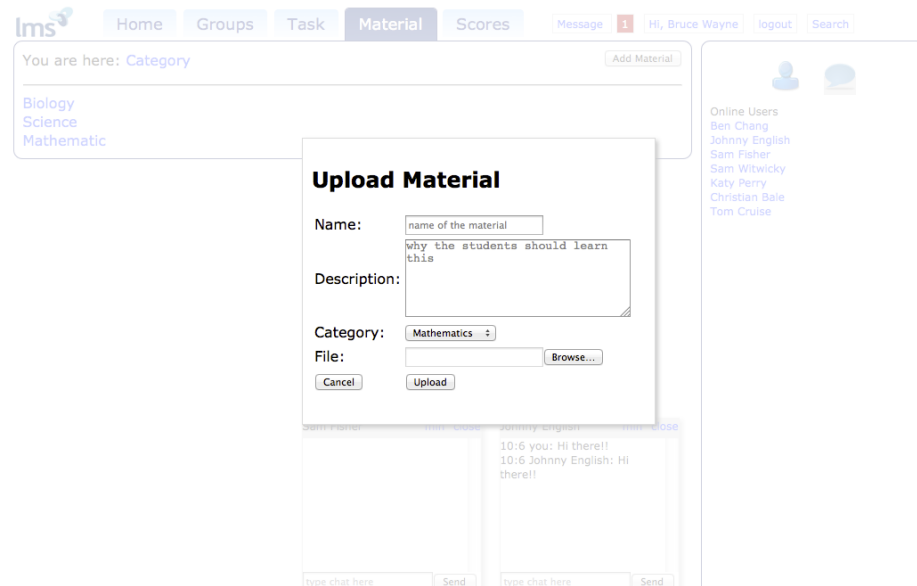


Figure 5. 6 - Placeholders to encourage users to state material’s purpose (ConnectivismEC-3)

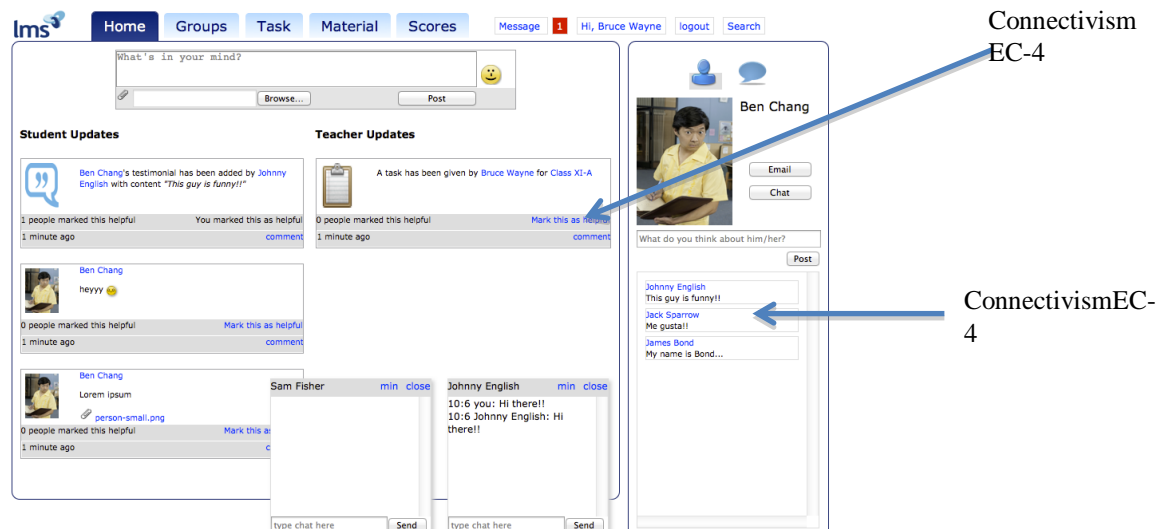


Figure 5.7 - Mark helpful and testimonials

The “Mark as helpful” feature conformed to ConnectivismEC-4 as it enables the user to recognize how the user’s work has helped others, and thus will increase the user’s self-esteem and self perception of usefulness.

The testimonial features conformed both to ConnectivismEC-4 and ConnectivismEC-5 as it both builds positive social climate and used as a feedback medium for users to express their gratitude.

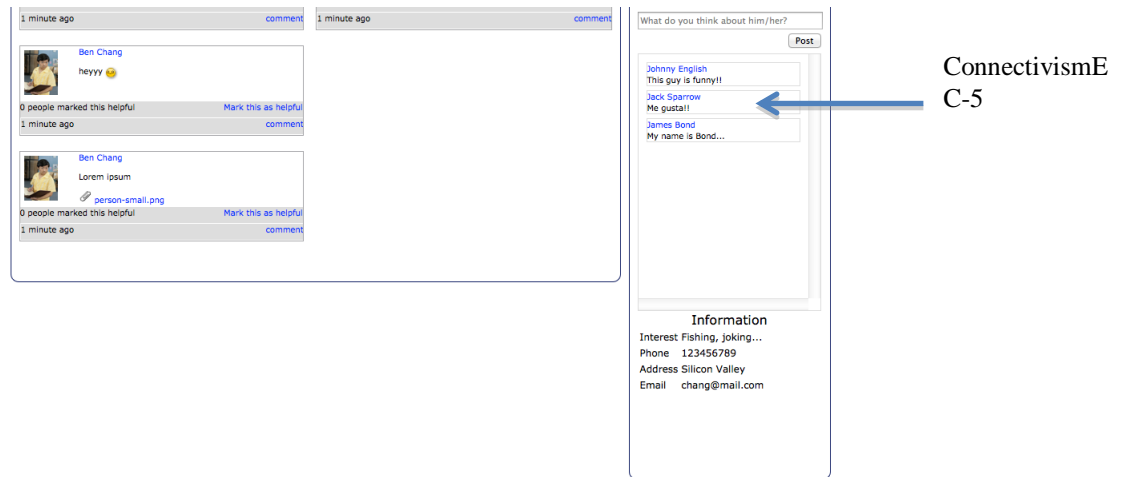


Figure 5.8–Testimonial feature

#### 5.4. Theoretical Framework to Enhance Social Connectedness

Further enhancement to the system was needed in order to make the user feel socially connected as it would in face-to-face interaction. Therefore, this subchapter would explain the features of the system related to the theoretical framework.

1. Edit and see other's profile page (SC-Guideline-1). This implementation conformed to SC-Guideline-1 as in online context, profile page would serve as the initial basis for user schema construction.

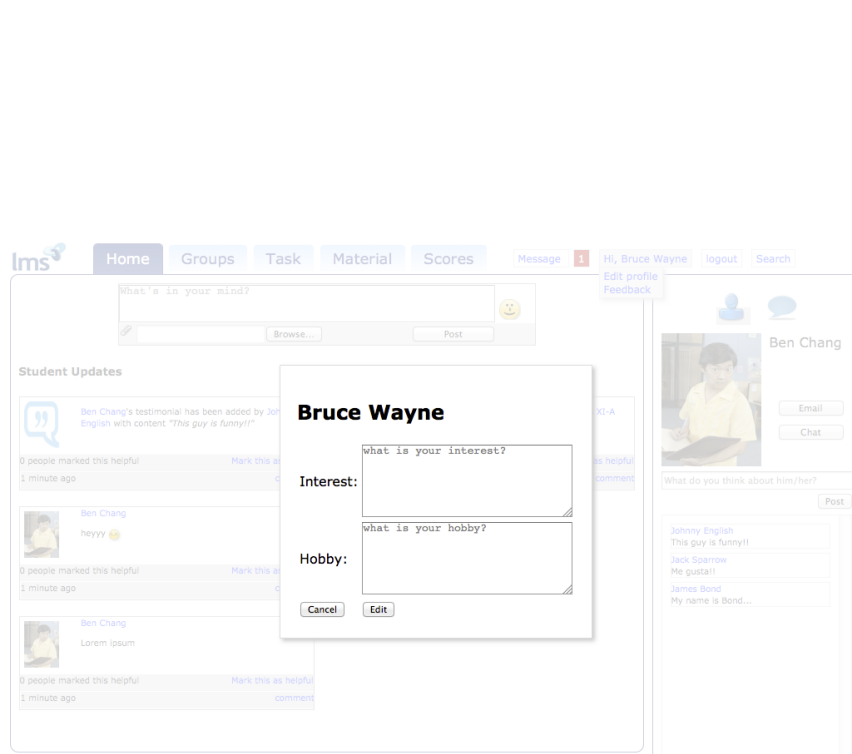


Figure 5.9 - Edit Profile Page window



2. Ensure that the users were able to edit own profile page and see other's (SC-Guideline-2). The design of the so called "Profile Inspector" conforms with SC-Guideline-2 (whenever user clicks another user's photo or name, that particular user's profile page will appear at the "Profile Inspector". From the paper prototyping observation, the test participant was having trouble locating the button to edit profile information, and because of this, the button location had been relocated. Moreover, the "Profile Inspector" had proven to be useful for the test participant to easily see other's profile information. Overall, the "Profile Inspector" had been proven to conform to the mentioned guideline.



Figure 5.10 - Profile Inspector

3. Whenever a user clicks another user's photo or name, a screen will appear to reveal that particular user's social information. (SC-Guideline-3).

This feature also utilizes the "Profile Inspector" to ensure that the users are able to see other's profile information frequently, which will lead to the development of person schema.

#### 4. Chats, Discussion Groups (SC-Guideline-4)

The guideline states that the users must be able to interact in a variety of context. Thus in a learning context, the possible medium for interaction in various contexts or settings would be chats and discussion groups. In this case chats would be used for interpersonal interaction, while discussion groups would be used for group-based interaction.

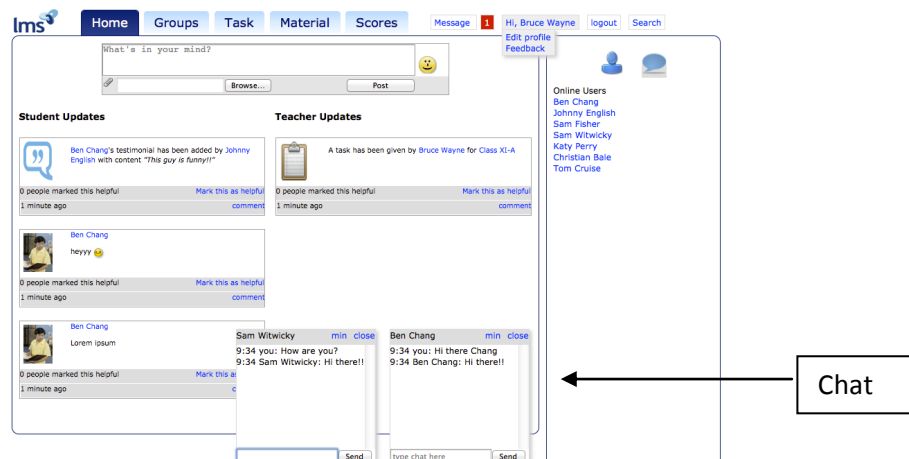


Figure 5.11 - Chat window

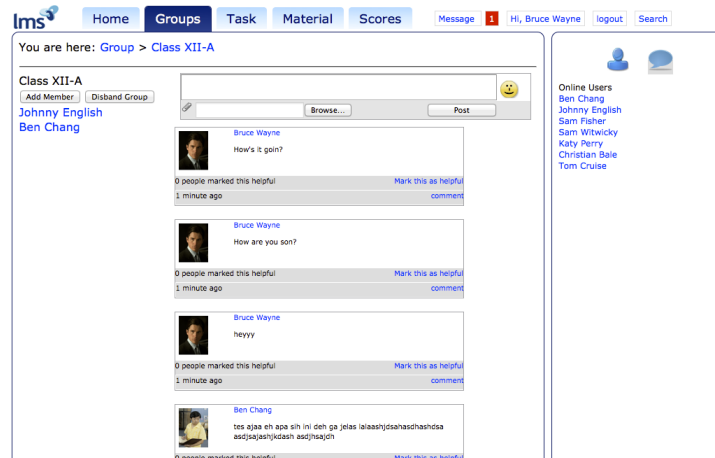


Figure 5.12 - Discussion Groups

## 5. Emoticons to aid in expression/mood (SC-Guideline-5).

The emoticons were known as a common way to express mood or feelings in a text based message. Common chat messengers such as Yahoo Messenger and Windows Live Messenger were known to implement emoticons to enhance their text based messaging. Therefore emoticons would be implemented as it matches with the common chat messengers' approach to enhance their text-based message.

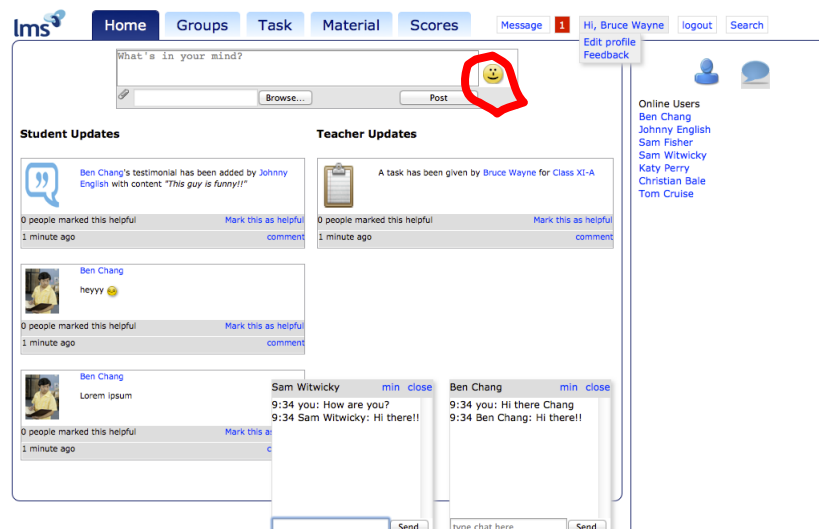


Figure 5.13 - Emoticons

## 6. Updates Stream Page (SC-Guideline-6)

The “Updates Stream Page” contains the dynamic social interaction that happens in the system. The “Updates Stream Page” will list the activity associated with an object’s update, e.g. a testimonial has been added to user’s testimonial list. The “Updates Stream Page” would behave almost similarly to Facebook’s and Google+’s, and was implemented to match with the Indonesian people’s preferred social network feature(Facebook’s newsfeed).

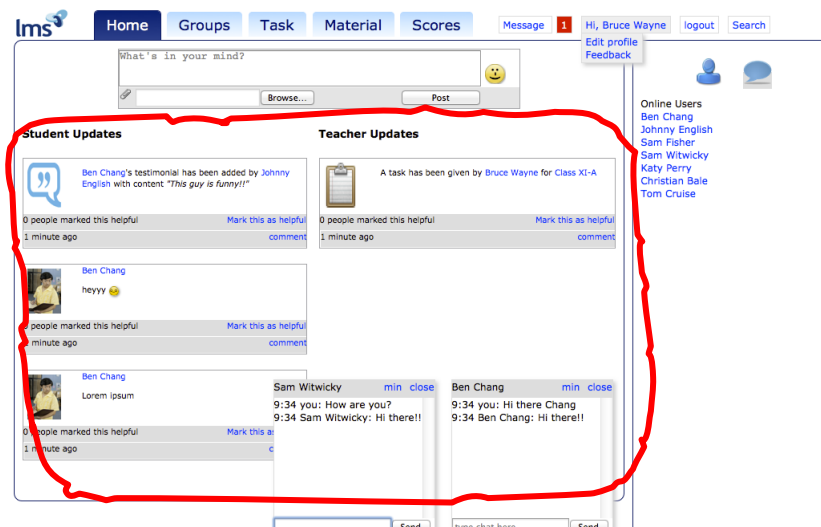


Figure 5.14 - Updates Stream Page

7. Profile page to contain testimonial for other users to type in (SC-Guideline-7)

The guideline stated that the system should supply an opportunity for students to interact in a variety of context on a specific task that requires each individuals to take on specific roles. In this case, the testimonial acts as a medium to ease the user to differentiate individual's strengths and weaknesses, which was required for roles assignment. While tasks were given by the student's appointed instructor through "Assign Task" feature.

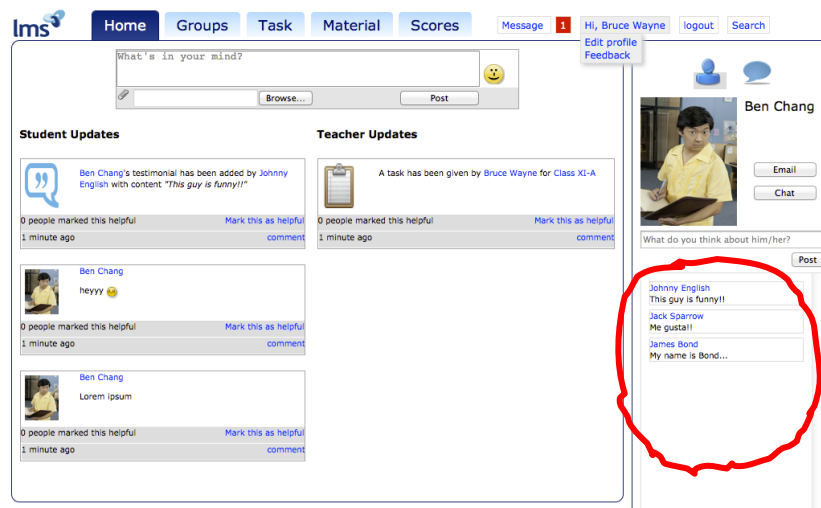


Figure 5.15 - Testimonials

8. User's profile to contain testimonials. (SC-Guideline-8)

Testimonials acts as a medium for the user to express feedback or gratitude for the user's role on a specific task. By implementing this, it allows the users of the system to differentiate task and socio emotional roles by checking in the testimonial list. A typical scenario to explain the usage of the testimonial: suppose a group-based task was given by the course instructor, groups normally would have to assign a leader to direct the group. From the testimonial list, a

group had decided that person A is the most appropriate person to be appointed as a leader as seen from his testimonial list that contains words such as “Excellent teamwork” or “you contribute most of this work”.

9. Each time an object was updated (interacted), that particular object’s update would appear in the “Updates Stream” (SC-Guideline-9).

The “Updates Stream” page was located in the home page (the page that was frequently visited by the test participants), therefore this would ensure that users would frequently process other’s social functions (a vaguely specified social event) and participate in it (supply textboxes for the users to easily type in).

Testimonial updates  
appearing in the  
updates page

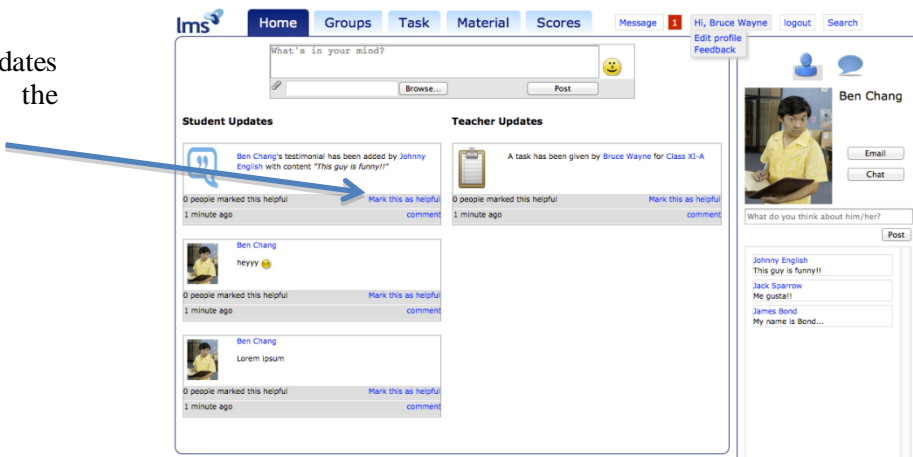


Figure 5.16 - Updates Stream Page