Betty's Brain (BB) Workshop

Activity: Use Betty's Brain in small groups

- 1. Read these questions first, so you know what type of information on which to focus
- 2. Step through the tutorial. Ignore the cringe-worthy dialogue if you can...
- 3. Go to your assigned domain module . You will need to close and then re-start BB
- 4. Teach Betty at least part of the material, so that you can quiz her (etc.)
- 5. Guide your group's exploration with the list of questions-- *up to you how to organise group, how to record, what you think "counts" as evidence!*
- 6. Groups will report back to the class on some questions

Groups:¹

- 1, 6: Demo topic-- No support
- 2, 4: Demo topic-- Quiz hint support
- 3, 5: Demo topic-- Skill training support

Some helpful tips:

- TUTORIAL: You can't shut the program in the middle of the tutorial, you must finish the dialogue OR force quit BB through your task manager.
- INTERNET: You need an active internet connection to use BB. If you lose the connection, you may get error messages. FYI: your work is saved and you can re-start.

General questions for all groups

(** means we will discuss this at the end of class. We can discuss un-starred questions if groups ran into trouble with these, but it would be better to ask for help during the work time.)

- 1. What are the components of the system? (Think about the parts the user can see, not the underlying, implementation-level architecture).
 - a) Describe the components briefly
 - **b)** What is the function of each?
- 2. What TYPES of user actions are possible in BB? (Think about categories of actions, not individual low-level actions like "add link to map")
 - a) Describe the action categories briefly
 - **b**) What is their function?

3. **What is the role of Mr. Davis (teacher-agent)...

- a) With respect to Betty?
- b) With respect the the student-teacher?
- 4. ******Constructing and representing knowledge (two related issues):
 - a) How does BB help the human user construct knowledge? (BB project goal #1)
 - Give specific examples of how and where this is done. Try to find more than one!
 - b) How does BB make knowledge, reasoning processes "transparent" to the human user?
 - Give specific examples of how and where this is done. Try to find more than one!

¹Using demo topic because far simpler, has less material. Other topics are quite large, and would take quite a bit of "start-up time" in order to get to quizzing Betty.

5. Describe the typical session that a student-teacher might have with Betty.

a) What type of things would s/he do?

b) Where do you think they will spend the most time?

This should be a fairly high-level description about types of activities, not a list of specific actions. Try for a paragraph of text.

****Group-specific questions:**

Groups 1, 6: The BB researchers claim that teaching is an inherently problem-solving activity.

- In the course of doing this exercise (i.e. your group collectively teaching Betty), do you think you had to make decisions and engage in problem solving?
- What kind of decisions or problems were they?
- Give examples.

Groups 2, 4: You worked with the demo topic including "Quiz hint support".

- What does "quiz hint support" mean, exactly? Give an example.
- How might quiz-hint support contribute to the BB project goals and/or to student learning?

Groups 3, 5: You worked with the demo topic including "Skill training support"

- What does "skill training support" mean, exactly? Give an example.
- How might skill-training support contribute to the BB project goals and/or to student learning?