



Preliminary Questionnaire

1. Have you ever taken a course on modeling for 3d computer graphics?

Yes



2. Have you ever followed a tutorial in order to create a 3d model?

Yes

3. On a scale of 1 to 5, how confident do you feel that you could create a 3d model that you have never attempted before using a tutorial? 1 being the least confident, 5 being the most confident.

1

2

3

4

5

Study Questionnaire

Part I. In general, compare the use of a video or static document tutorial to the interactive visualization system.

1. Rate the usefulness of each of the following on a scale of 1 to 5, 1 being the least useful and 5 being the most useful.

Usefulness for getting a general overview of how a model is constructed

Tutorial Document:	1	2	3	④	5
Tutorial Video:	1	2	③	4	5
Interactive Vis:	1	2	3	4	⑤

Usefulness for investigating key details and understanding how they were achieved

Tutorial Document:	1	②	3	4	5
Tutorial Video:	1	2	3	④	5
Interactive Vis:	1	2	3	4	⑤

2. If you had to choose only one way of learning how to make a model, please rank your preference for each type of tutorial/visualization in the order you would choose.

1st choice: Interactive Vis

2nd choice: Tutorial Video

3rd choice: Tutorial Document

3. What did you like about your first choice compared to the others?

It saves time but offers details if necessary.
own pace.

Part II. Compare the tutorial screenshots to the screenshots from the interactive visualization system.

1. Rate the usefulness of each of the following on a scale of 1 to 5, 1 being the least useful and 5 being the most useful.

Usefulness for getting a general overview of how a model is constructed

Tutorial:	1	2	3	4	5
Interactive Vis:	1	2	3	4	5

Usefulness for investigating key details and understanding how they were achieved

Tutorial:	1	2	3	4	5
Interactive Vis:	1	2	3	4	5

Usefulness of the graphical annotations

Tutorial:	1	2	3	4	5
Interactive Vis:	1	2	3	4	5

2. If you had to choose between the two, which set of images better explained how the model was built (tutorial or interactive vis)? Explain what you liked about your choice.

interactive vis, because it showed the steps at a consistent pace. Without words, the tutorial tended to jump

3. How did the use of graphical annotations affect your choice?

I feel like I was already familiar with the interactive vis' annotations, so I was biased that way.

Part III. Compare the interactive visualization system with and without the ability to cluster or filter changes to the model.

1. Rate the usefulness of each of the following on a scale of 1 to 5, 1 being the least useful and 5 being the most useful.

Usefulness of for getting a general overview of how a model is constructed

Clustering:	1	2	3	4	5
Filtering by types of operations:	1	2	3	4	5
Filtering by selecting parts of the model:	1	2	3	4	5

Usefulness for investigating key details and understanding how they were achieved

Clustering:	1	2	3	4	5
Filtering by types of operations:	1	2	3	4	5
Filtering by selecting parts of the model:	1	2	3	4	5

2. Would you prefer to have the ability to cluster and filter changes to the model? Explain why or why not.

Yes, because clustering gives a good, rapid overview of the build; filtering is quick for working on a specific area if you need detail

Part IV. Consider the interactive visualization system. Please leave a few comments on each of the following.

1. In general, do you think that the ability to interact with the visualization and change characteristics of what you see helps you to understand how a model was created? How so?

I think the ability to interact helps me understand how the model was created in a more efficient way, ^{overall} and enhances understanding particularly for details.

2. Do the clustering of operations and the graphical annotations help to give you an overview of how the model was created? Do you find this useful? How so?

The clustering, definitely. It groups those actions that are repetitive and shows the general approach. The graphical annotations are often more helpful on a more detailed scale because run by through high abstraction is too fast to take in everything.

3. Do you think you would change the level of detail in the clustering often? How important to you is the ability to change this level of detail?

Probably ~~at~~ between overview & searching for a specific, hard to model area. Possibly more often if something is particularly confusing or tricky.

4. Does filtering out types of operations help you to focus on parts of the model creation process that are interesting to you? Please give an example.

filtering out undo definitely helps.

5. Does filtering out operations that affect only certain parts of the model help you to focus on parts of the model creation process that are interesting to you? Please give an example.

Yes. This is very helpful. For example, in the hydrant, or the biped, if I focused on the fingers or the pumps (?) they were worked on at least two different times. It's a good way to view all the actions for a particular section.

6. Do filtering out sections of the timeline and using the thumbnail views help you to focus on parts of the model creation process that are interesting to you? Please give an example.

I think it helps, but probably not as much as filtering certain parts of the model. It's good to see the progression of pieces though.

7. In general, please rate the usefulness of each of the following features compared to one another on a scale of 1 to 5, 1 being the least useful and 5 being the most useful.

Graphical annotations:

1 2 3 (4) 5

High level clustering (seeing many operations at once):

1 2 3 (4) 5

Ability to control the clustering level of detail:

1 2 (3) (4) 5

Filtering by types of operations:

1 2 (3) 4 5

Filtering by selecting parts of the model:

1 2 3 4 (5)

Filtering by focusing on the timeline and thumbnails:

1 (2) 3 4 5

I would ^{have} loved to ^{use} ~~have~~ this interactive vis tutorial
in a digital arts modeling class. Though I
suppose with it, the professor would not need to
do much.