Final Student Interview Questions over NOS and Thinking Skills

1. Tell me about how confident and comfortable you are in your ability to evaluate scientific information. This includes looking at a science fair project or study and judging whether the project was done properly, gained meaningful data, and whether the conclusion given is appropriate.
   (Wyatt)BOY A: I'm pretty comfortable, if this is bias, he can spot the bias in the data.
   (Hunter)BOY B: I feel pretty comfident, you go the national science fair, and you have no idea what they are talking about. With regular people it is fine.
   (Nathan) BOY C: Kind of depends on the project and what I know about it. Most of the time I feel confident.
   (Emily H): GIRL A: I'm pretty comfortable, medium.
   (Emily K): GIRL B: Pretty comfortable.
   (Emily B): Um decently, I don't know. It kind of depends on the topic of the project.
2. Tell me about how confident and comfortable you are in your ability to analyze scientific information. This includes things like being able to read a graph, chart, or data table.
   BOY A: I like tables, because I can actually look at it, I don't know if I am super comfortable with it.
   BOY B: That is fine, no problems there.
   BOY C: Not too good at that.
   GIRLA: I can do that.
   GIRL B: Yeah, very comfortable
   GIRLC: Usually pretty good with that..
3. Tell me about how confident and comfortable you are in your ability to synthesize scientific information. This includes developing a science fair project or a hypothesis, designing something.
   BOY A: I think a lot of different things for science fair projects, but I never do them. Yes, I believe so.
   BOY B: That is a little harder. Figuring out a good question to ask is a bit difficult.
   BOY C: Uh, if I can get a good start at it I am pretty good.
   GIRL A: I can do that.
   GIRLB: Fairly comfortable.
   GIRLC: If I have time, I can't do it right off the bat.
4. Anything else you would like me to know?

The next set of questions to be administered after treatment.

1. How has learning about the Nature of Science changed your perception of scientific information?
   (WYATT WILLIS) A) Don't just take stuff for granted, because it may not be what you think it is, like sewer lice.
   (HUNTER YATES) B) That nothing is proven. Just stop and think about it more, how does it really happen, what causes that, and don't trust Mr.Love when he is not in his seat.

2. Do you feel more confident and comfortable in your ability to evaluate scientific information after learning about the Nature of Science? What challenges do you still face with evaluating scientific information?
   A) Somewhat yes, but not a whole lot. Like, I still tend to think more with your brain than with your actual eyes. I'm still making assumptions, jumping to conclusions, and that is not what you are supposed to do.
   B) Yes, now that I know more about the background of it. I'm still not very good at making hypothesis, never have been.

3. Do you feel more confident and comfortable in your ability to synthesize scientific thought after learning about the Nature of Science? What challenges do you still face with synthesizing scientific thought?
   A) I don't think that has really changed. Saying what I mean is hard for me. I have a hard time expressing what I want to say sometimes.
   B) No, I've never been good at. I just like to find things and tinker with it. Coming up with information I still can't do.

4. Do you feel more confident and comfortable in your ability to analyze scientific information after learning about the Nature of Science? What challenges do you still face with analyzing scientific information?
   A) Yeah, I think I'm a little better at it, again, not a whole lot. Pretty much the same thing, jumping to conclusions.
   B) Yes. The background helps you know how everyone else does it. Seeing how someone else did it makes it easier.

5. Do you feel that learning about the Nature of Science was helpful in developing better thinking skills, or do you feel that learning about the Nature of Science neither helped nor possibly even hindered you in improving these skills?
   A) I think it helped. Just knowing how to better think about things, so you aren't jumping to conclusions. Not just making things up as you go, looking at things completely as you go.
   B) Yeah, it makes you think through stuff more and not assume that is how it works.

6. What could be done differently next year to help improve students' ability to think like a scientist? Are there certain activities which were not useful or is there something we could add which would help?
   A) I think some of the ones, like the sewer lice, it is a good thing with our brain. The sewer lice most of us (all of us), jumped to conclusions. More activities like this would help us think more outside of the box.
   B) Explain it a bit longer, some are fast learners and some are a little slower. Significant digits weren't understood until I went through it.

7. Is there anything else you would like me to know?
   A) Not really.
   B) No, I enjoyed it.