Next Gen
PET

Teaching and Learning Extension L (Part 2)

Guiding Explanations and Solutions: Conducting an Interview with Children about Sound and/or Light

In Class Group Planning

The purpose of the in class planning time is for your group to discuss the children you can interview, decide which group members will be conducting the explanations or designing solutions options for interviews, and begin thinking about how your group will communicate with each other. With four members in your group, it would be best if two members conduct the explanations interview with younger children and two group members conduct the designing solutions interview with older children. However, if that won't work, then at least one group member must conduct each interview option.

Each group member must fill out his/her own Interview Protocol Form (IPF) during and after the interview and share that form with the rest of the group via e-mail. In addition, each student must submit a pdf of the IPF to the instructor for assessment. The group report should include a summary of the results and an analysis of the interview questions for both the explanation and design of solution options. Students who administer the same type of interview should collaborate on writing that portion of the group report. However, everyone in the group is responsible for the entire report and will share the group grade. The group report format is provided on the next page. Decide how the workload for writing the report will be distributed among your group members. After your group report is submitted, you will need to assess each member of your group (including yourself) on his or her contributions to the entire task (interview, interview protocol form and group report) on the form provided.

The maximum score each student can receive for this project is 20 points: (1) The group report can receive a maximum score of 14 points (every participating member receives the same score); (2) The group member assessment grade will be averaged among all group members; the maximum is 3 points; (3) Each group member's IPF will be assessed with a maximum of 3 points.

Deadlines

- Your group report must be e-mailed to fgoldberg@mail.sdsu.edu as a Microsoft Word document before 2:00 PM on Oct 25.
- Your IPF must be uploaded as a pdf to the Assignments section of Bb before 2:00 PM on Oct 25. [You only need to include the part dealing with your own interview, either explaining a shadow or designing a solution.]
- Your filled out Assessment of Group Members' Contribution form must be uploaded as a pdf to the Assignments section of Bb before 2:00 PM on Oct 27.

Group Report Form

Cover Page (You fill in the pages for each part)

Group #:
Group Members:

The first two parts of the report should focus on the shadows explanation, and the second two parts on the communication design challenge. See the 'Group Report Grading Rubric' on the next page so you will now how the four parts of this report will be scored.

Contents	Pages	Score
Part 1: [For Shadows explanation] First, list the pseudonyms, ages		
and grade levels of the children interviewed for this option.		
Second, describe the children's initial explanations for Nina's		
shadow. [Combine the results for all the children interviewed with		
the question and include the form with their drawings and		
writings.] Third, describe how the children used evidence to		
support their explanations. (3.5 points max)		
Part 2: [For Shadows explanation] First, describe the activities you		
had the children engage in and what they observed. Second,		
describe the children's new explanations for Nina's shadow.		
[Combine the results for all the children interviewed with the		
question and include the second form with their drawings and		
writings.] Third, write some general comments about how the		
children's second explanations were different (hopefully		
improved) from their first explanations. (3.5 points max)		
Part 3: [For Communication design] First, list the pseudonyms,		
ages and grade levels of the children interviewed for this option.		
Second, describe the children's first design solution. Third,		
describe the children's second design solution. [Combine the		
results for all the children interviewed with this task and include		
the forms with their drawings and writings.] (3.5 points max)		
Part 4: [For Communication design] First, describe how the		
students compared their two solutions. What criteria did they use		
(themselves, or ones you suggested)? Which design did each child		
think was best, and why? [Include the forms with their writings.]		
Second, write some general comments about how the children		
were able to engage in the engineering design process for this		
particular scenario. (3.5 points max)		
Final Report Grade (14 points maximum)		

E-mail the entire group report, including the cover page, **as a MICROSOFT WORD**<u>DOCUMENT</u> (not a pdf), to <u>fgoldberg@mail.sdsu.edu</u>. Use the title: **GROUP # INTERVIEW REPORT #1**.

Group Report Grading Rubric

(See what is expected for each part on the cover sheet above)

Contents

Part 1: [For Shadows explanation] (3.5 points max)

Rubric:

0.2 points: Listing pseudonyms, ages and grade levels

2.5 points: Provide a narrative description of the children's explanations (1.8), along with their drawings (0.7) and any follow up questions you asked (with answers)

0.5 points: Provide a narrative description of how children used evidence (this could be personal experience or anything the children refer to that supports their ideas)

0.3 points: Grammar, punctuation, spelling, etc.

Part 2: [For Shadows explanation] (3.5 points max)

Rubric:

1.0 points: Describe activities the children were engaged in and what was observed

1.5 points: Provide a narrative description of the children's new explanations (1.0) and provide the new drawings (0.5)

0.7 points: General comments about how the second explanation was different from (hopefully an improvement on) the first.

0.3 points: Grammar, punctuation, spelling, etc.

Part 3: [For Communication design] (3.5 points max)

Rubric:

0.2 points: Listing pseudonyms, ages and grade levels

1.5 points: Provide a narrative description of the children's <u>first</u> design solution (0.8), along with their drawings and any interesting comments they made (0.7)

1.5 points: Provide a narrative description of the children's \underline{second} design solution (0.8), along with their drawings and any interesting comments they made (0.7)

0.3 points: Grammar, punctuation, spelling, etc.

Part 4: [For Communication design] (3.5 points max)

Rubric:

2.4 points: Provide a narrative description of how the children compared their two solutions (0.8), what criteria they used (0.8), and which solution they thought was best, and why (0.8).

0.8 points: General comments about the children's engagement in the engineering design process

0.3 points: Grammar, punctuation, spelling, etc.

Final Report Grade (14 points maximum)

Assessment of Group Member Contributions

Your Name	Your group #	:
	0 1	

You are to assess each group member's contribution to this project (both conducting the interviews, filling out the IPF, and helping to prepare the final group report), by using the guidelines in the following paragraph. Provide reasons for the scores you gave. Don't forget to assess your own contributions.

If a group member contributed fairly to all parts of the group project then assign that group member a score of 3.0 points. [Most students should receive a 3.0.] If a group member's contribution was <u>much less</u> than others in the group, then you can give that person either 2.0 or 1.0, and provide a rationale. If a group member did not participate in preparing the group report, then write 'did not participate in group report' and give that person a 0. Finally, if a student in your group did <u>exceptional work</u> compared to others in the group, then that student can receive extra credit and you can assign that person either 3.5 or 4.0. However, please do this only for exceptional work and it would be very unusual if more than one student in the group received extra points.

Group Member	Reasons for Grade Earned	Score
(Your name)		

Print this form, fill it out, digitize it, and save it as a **pdf document** under the title: GROUP #, YOUR FIRST NAME, YOUR LAST NAME. Upload the document to the Assignments section of Bb after you group has submitted its group report and before the date given to you by your instructor.

Assessment of Each Group Member's Interview Protocol Form

You must upload a **<u>pdf file</u>** of your IPF to the Assignments section of Blackboard **<u>before the date given to you by your instructor.</u>**

Your *Individual Protocol Form* will be given a **quick review** and assigned up to 1.5 points if you provide a substantive response to each prompt in the IPF, and up to an additional 1.5 points if you include the appropriate forms showing the child's drawings and written responses. [There are two forms for the shadow explanation task and three forms for the communication design task.] Thus, you can receive a maximum of 3 points for this IPF assessment. This is an individual score, independent of what other group members receive.