EDP Rubric for Young Children's Engagement in the EDP

For teachers' formative or summative assessment of young children's engagement in the EDP section of the EDP-5E and the Extension section if an EDP is used in that section, as well.

Criterion	2	1	0
Understanding and Application of Problem	Both A and B are evident. A: Student shares the problem statement accurately in his/her own words. B: Designed solutions demonstrate that s/he is attempting to solve that problem.	Either A or B is evident, but not both. Not evident (circle one): A or B	Neither A nor B is evident.
Understanding and Application of Constraints[i]	Both A and B are evident. A: Student explains the constraints for the design problem accurately. B: Student abides by those constraints during planning and creation.	Either A or B is evident, but not both. Not evident (circle one): A or B	Neither A nor B is evident.
Understanding and Application of Criteria	Both A and B are evident. A: Student explains the criteria for the design problem accurately. B: Student attends to those constraints during planning and creation.	Either A or B is evident, but not both. Not evident (circle one): A or B	Neither A nor B is evident.
Sharing and Listening to Ideas within a Team[ii]	Both A and B are evident. A: Student shares own ideas with teammates. B: Student listens to and seems to take into consideration others' ideas.	Either A or B is evident, but not both. Not evident (circle one): A or B	Neither A nor B is evident.
Planning[iii]	Both A and B are evident. A: Student engages in verbal planning prior to designed solution creation. B: Student engages in written planning prior to designed solution creation.	Either A or B is evident, but not both. Not evident (circle one): A or B	Neither A nor B is evident.

Criterion	2	1	0
Reasoning Regarding Designed Plans	Both A and B are evident. A: Student can explain reasons for the way in which his/her team planned to create designed solution #1 or #2. B: Student can explain how their plan for designed solution #2 incorporates information from testing and/or observation of other teams' designs.	Either A or B is evident, but not both. Not evident (circle one): A or B	Neither A nor B is evident.
Sharing Materials and Resources	Student consistently shares materials and other resources (e.g., testing materials) with others.	Student sometimes shares materials and other resources with others.	Student rarely shares materials and other resources with others.
Comparing Designed Solutions #1 and #2	Both A and B are evident. A: Student is able make a claim stating that one of his/her designed solutions (#1 or #2) performed better than the other. B: Student supports this claim with evidence (i.e., from testing results).	Either A or B is evident, but not both. Not evident (circle one): A or B	Neither A nor B is evident.
Comparing Designed Solutions Across Teams	Both A and B are evident. A: Student makes a claim that one problem can be solved by different designed solutions. B: Student supports this claim with evidence (i.e., from other teams' designs).	Either A or B is evident, but not both. Not evident (circle one): A or B	Neither A nor B is evident.

[i] Note that it is not necessary for young children to know and use the words "constraints" or "criteria." Rather, for example, they should know what materials they are limited to and how they will know if their designed solution is successful.

[ii] Sharing of ideas (or not) may be most apparent during the brainstorming phase, however, idea sharing continues throughout the EDP.

[iii] Ideally, planning could be assessed twice – for designed solution #1 and designed solution #2 (the improvement phase). Assessment for both of these, however, may not be practical given teachers' time constraints.