## **MEA Individual Questions and Feedback Form:**

Who is the direct user of the deliverable your team is being asked to create?

In one or two sentences, what does the direct user need?

Describe at least two issues that need to be considered when developing a solution for the direct user.

	Yes	Sort of	No
Identified the direct user:	2	1	0
Identified what the direct user needs:	2	1	0
Described at least two issues that need to be	2	1	0
considered:			

Please provide comments about the direct user of the procedure.

Please provide comments about what the direct user needs.

Please provide comments about the two issues that need to be considered.

# MEA Peer Critique: Student Sample Work

#### **Mathematical Model**

In your own words, briefly (3-5 sentences) summarize the mathematics used in the procedure.

Apply the procedure to the specified situation and present the results you obtained below. If you are unable to produce results, type "Unable to generate results." Whether you are able to produce results or not, describe any problem(s) you experienced when trying to apply the procedure.

- 4 The procedure fully addresses the complexity of the problem.
- 3 The procedure moderately addresses the complexity of the problem and/or contains embedded errors.
- 2 The procedure only somewhat addresses the complexity of the problem and/or contains embedded errors.
- 1 The procedure does not address the complexity of the problem and/or contains significant errors.
- No progress has been made in developing a model. Nothing has been produced that even resembles a poor mathematical model. For example, simply rewriting the question or writing a "chatty" letter to the direct user does not constitute turning in a product.
- 4 The procedure takes into account all types of data provided to generate results OR *reasonably*
- 3 justifies not using some of the data types provided.

Provide constructive recommendations on how to better address the complexity of the problem or eliminate errors.

#### **Re-Usability**

**Re-usability** means that the procedure can be used by the direct user in new but similar situations. A re-usable procedure: (1) identifies who the direct user is and what the direct user needs in terms of the product, criteria for success, and constraints, (2) provides an overarching description of the procedure, and (3) clarifies assumptions and limitations concerning the use of procedure.

In your own words, briefly (3-5 sentences) summarize the information provided in the procedure that contributes to its re-usability.

- 4 The procedure is clearly re-usable.
- The procedure *might* be re-usable, but it is unclear whether the procedure is re-usable because a few pieces are missing or need clarification.
- 3 The procedure is not re-usable because multiple pieces are missing or need clarification.

Provide constructive recommendations on how to make the procedure more re-usable.

### Modifiability

*Modifiability* means that the procedure can be modified easily by the direct user for use in different situations. A modifiable procedure (1) contains acceptable rationales for critical steps in the procedure and (2) clearly states assumptions associated with individual procedural steps.

In your own words, briefly (3-5 sentences) summarize the rationales and assumptions provided. If no rationales and assumptions are provided, type "No rationales and assumptions are provided."

- 4 The procedure is clearly modifiable.
- The procedure is lacking acceptable rationales for a few critical steps in the procedure, and/or a few assumptions are missing or need clarification.
- The procedure is lacking acceptable rationales for multiple critical steps in the procedure, and/or multiple assumptions are missing or need clarification.

Provide constructive recommendations to make the procedure more easily modifiable.

#### **Share-ability**

Share-ability means that the direct user can apply the procedure and replicate results.

- 4 All of the results from applying the procedure to the data provided are presented in the form requested.
- Results from applying the procedure to the data provided are presented, but additional results are still required, they are not presented in a form requested, or they are not consistent with the procedure.
- 1 No results are provided and therefore this procedure does not meet the minimum requirements requested by the direct user.

List any missing results.

- 4 The procedure is easy for the direct user to apply and replicate results. All steps in the procedure are clearly and completely articulated.
- The procedure is relatively easy for the direct user to apply and replicate results. One or more of the following are needed to improve the procedure: (1) two or more steps must be written more clearly and/or (2) additional description, example calculations using the data provided, or intermediate results from the data provided are needed to clarify the steps.
- The procedure is not easy for the direct user to apply and replicate results. Multiple steps must be written more clearly and/or additional description, example calculations, or intermediate results from the data provided are needed to clarify the steps.
- 4 There is no extraneous information in the response.
- There is extraneous information in the response, including but not limited to discussions of software tools, issues beyond the scope of the problem, and/or excessive wordiness.

Provide constructive recommendations on how to make the procedure easier for the direct user to apply and replicate results.