**Narrative Curriculum Development Assignment**

**Narrative Curriculum Project:** (150 pts)

Each candidate will individually develop and present an integrated STEM education design problem that is directly connected to a piece of children’s literature used in the elementary or middle grades.

Before getting started, confirm that your book selection and design challenge is an original idea. Please do not develop an activity that is commonly found in schools such as a penny boat challenge, egg drop, 3 Little Pigs – blowing a house down with a hairdryer, or other common design challenge. If you can do a web search for the name of your book and design challenge (STEM challenge, engineering design challenge, etc.) and the idea can be found, it is not original. Additionally, if you use a resource, such as a science or mathematics worksheet for content or a rubric, it is not acceptable to just take a screen shot and then paste it into your Word document (or only include a link to the resource). You may use the content (with appropriate citation), but you need to recreate this and make it your own.

Parameters:

* Must be formatted to the STEM design brief template
* Must include embedded art that directly ties the design problem to the selected literature (cover of book, pictures of characters, etc.)
* Must utilize the Engineering design loop/process/method for problem solving.
* The completed assignment must be submitted electronically (e-mail attachment – both as a Word document and .pdf) before the due date.

The following should all be included with your lesson:

* + Curriculum Guide to the teacher including title, disciplinary area, unit, standards, big ideas, essential question(s), scenario, materials/resources, content information, deliverables, parameters, assessment, and any worksheets necessary.
	+ A simplified design activity guide written for the student (age appropriate wording)
	+ Engineering journal or design sheet that utilizes or scaffolds the design loop/process/method in some fashion
* Presentation to class over literature, lesson, and student activity

**Narrative Curriculum Design Project Rubric**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Category** | Up to 5 pts. | Up to 25 pts. | Up to 45 pts. | Up to 60 pts. | **Score** |
| **Curriculum Content****(60 pts.)** | Curriculum does not present new information; does not follow recommended pattern; potential audience wouldn’t be able to grasp information/complete. | Curriculum was clearly uncomfortable with curriculum content and only included rudimentary information and/or partially met requirements. | Curriculum developer is at ease with content, but fails to fully address all requirements of the curriculum assignment. | Curriculum developer demonstrates full knowledge (more than required) and includes rich information that fully addresses the assigned task. Potential audience would learn. |  |
|  | Up to 10 pts. | Up to 20 pts. | Up to 30 pts. | Up to 40 pts. |  |
| **Curriculum Organization****(40 pts.)** | Potential curriculum audience would not understand because the product is not sequenced or organized adequately. | Potential curriculum audience would have difficulty following and completing the curriculum. | Curriculum is presented in logical sequence utilizing a recognized curriculum format. | Curriculum presents information in logical, interesting sequence using a recognized curriculum model which the potential audience can follow. The teacher’s guide is broken down so that the potential audience can understand the process for completing the activity with students. |  |
|  | Up to 6 pts. | Up to 14 pts. | Up to 22 pts. | Up to 30 pts. |  |
| **STEM Content and Alignment****(30 pts.)** | The curriculum does not thoroughly address standards or meet the intention of the standards. Minimal content information is provided. | The curriculum addresses standards but does not meet the intention of the standards. Some content information is provided. | Thoroughly addresses some of the standards and meets the intention of the standards. Some content information is provided. | Thoroughly covers standards and meets the intention of the standards. Thorough content information is provided. |  |
|  | 3 pts. | Up to 5 pts. | Up to 7 pts. | Up to 10 pts. |  |
| **Curriculum****Mechanics****(20 pts.)** | Curriculum has four or more spelling errors and/or grammatical errors. Organization was ill-conceived. | Curriculum had three misspellings and/or grammatical errors. Organization was an issue. | Curriculum has few misspellings and/or grammatical errors. Organization was adequate. | Curriculum has no misspellings or grammatical errors, was organized well, and was attractive. |  |
| **Comments: Total Points:** |

|  |
| --- |
| **NARRATIVE CURRICULUM REVIEW CHECKLIST** |
| **CONTENT REQUIREMENTS** | **YES** | **SOMEWHAT** | **NO** | **SUGGESTIONS FOR IMPROVEMENT** |
| Connected to an Appropriate Narrative Text |  |  |  |  |
| Aligned to STEM Standards (at least 4) |  |  |  |  |
| Integrated STEM Content is Obvious |  |  |  |  |
| Performance Assessment Driven (Target) |  |  |  |  |
| Requires Student Collaboration |  |  |  |  |
| Requires use of Design Loop |  |  |  |  |
| Includes Student Version and Teacher Version |  |  |  |  |
| Includes Obvious Big Ideas (that are drawn from standards) |  |  |  |  |
| Includes an Engaging Scenario (students will be excited) |  |  |  |  |
| Includes New STEM Content Information (information that extends) |  |  |  |  |
| Includes Parameters (time, size, materials, etc.) |  |  |  |  |
| Includes Materials, Tools, Resources (teacher and students will know what can be used) |  |  |  |  |
| Destination is Obvious (students will know what to do) |  |  |  |  |
| Includes Testing Information (Teacher will know how to test student solutions) |  |  |  |  |
| Ill-structured Problem (more than 1 potential solution) |  |  |  |  |