



Certification Exam Policy and Sample Questions



The Design Process

REFLECT

Publish your creation, gather feedback, and refine again.



ASK QUESTIONS

to understand what you are teaching and your constraints.



CREATE

to quickly brainstorm ideas (it doesn't matter if they are good or bad ideas).



TEST

Does your prototype work? What needs to be changed? Do you need to start over with a new prototype?



PROTOTYPE

and design creations using your best brainstormed idea (to start).



Certification Exam Overview

Assessment Overview:

To provide a fair and valid industry certification exam, the following process is used to develop the Design/Engineer Thinking Certification exams by KneoWorld, Inc.:

- Identify qualified Industry SME in the field of design/engineer thinking.
- SME creates performance objectives and blueprint.
- Create a pool of test questions.
- Conduct beta test and try out questions and determine a cut score.
- Analyze the results and modify the test questions.
- Release the final version of the exam.
- Conduct periodic item analysis.

The certification test was developed by a Subject Matter Experts (SME) in the field of Design/Engineer Thinking. SME were instrumental in developing and revising the exam objectives and exam questions from the objectives. The objectives are developed from state standards/frameworks. The SME aligned the assessment items with the lesson objectives and standards/frameworks (outcomes) expected by industry and state middle school CTE programs.

The 65% performance standard for the issuance of a certificate is a preliminary pass point based on the assumption that an assessment demonstrates mastery when 65-80% of the test items are correctly answered. A modified Angoff Method will be used to determine the final pass point of the assessment once the items have been psychometrically evaluated to determine their content validity and reliability and revised after the initial 3 field tests of the assessment items.

Certification Exam Overview

Assessment Overview (continued):

The certification exams are multiple choice questions that are feature based questions, so candidates become familiar with the process of design/engineer thinking and analyzing and developing game presentations, including sound, motion, and color presentations.

Design/Engineer Thinking Sample Test Questions:

- 1) What is a prototype in the design process?
 - a. A sketch or sample of a product or process
 - b. The process of thinking of ideas.
 - c. The final copy of a product or process
 - d. The initial thought that sparks an idea
- 2) What is testing in the design process?
 - a. Observing other people and taking notes
 - b. The process of thinking of ideas.
 - c. The final product or process
 - d. None of the above
- 3) Which skill is important for a career in game design?
 - a. Must be able to communicate with a team.
 - b. Must be able to sit for long periods of time.
 - c. Must be able to draw.
 - d. Must know a lot of people.