Critical Questions

Answering these questions will help with the design a game, gamification event or simulation for your learning needs. Write your answers in the space below each question. This template may not be completed in one sitting, most likely it will take multiple iterations to complete.

These are basic questions that must be answered before you begin designing. These questions lay the framework.

Foundational Questions

1) Describe business or academic problem prompting the need for interactive learning?
   - Lack of sales
   - Lack of customer service
   - Quality issues
   - Time problems
   - Safety issues
   - Lack of performance
   - Learners not understanding content
   - Inability to apply knowledge after learning
   - Need to connect emotionally with learners
   - Deeper engagement of students
   - Application of theory
   - Increase motivation
   - Better tracking of understanding

2) Is this actually a learning need?

3) Is there an alternative solution that might be more cost effective, efficient or impactful?

4) What are the learners not doing now that they should be doing in terms of the identified problem?

5) What is the desired outcome? What do you want the learner to be able to do or to know after interacting with gamification event?

6) What does the learner/player need to know to achieve the outcome? What are the instructional objectives?

7) What are the tasks that must be demonstrated to achieve the outcome?
   - Answer questions
   - Apply content
   - Drag items to the correct place
   - Explore an area
Identify information
– Apply values

8) What types of behaviors or actions will illustrate that the learners have learned?

Summary of Foundational Questions and Answers

<table>
<thead>
<tr>
<th>Need</th>
<th>Skills/Knowledge/Attitude Gap</th>
<th>What Needs to be Learned to Overcome the Gap?</th>
<th>What Evidence will Indicate Gap is Overcome?</th>
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Practical Questions

9) What is the skill level of learners/players?
– Technical knowledgeable
– Familiarity with games/simulations/gamification
– Reading level
– Knowledge level of subject matter
– Length of time in organization

10) What are the logistics?
– When will the gamification event be played?
– How often will they play?
– On what type of device?
– What amount of time is available to play?
– When will it be played
– Where will it be played?

What are the technical aspects of the environment?
– How will it be delivered? (HTML 5, Flash, on a mobile device, laptop)
– What information needs to go to the Learning Management System?
– What type of artwork is required? Can it be 2D or do you need 3D or just simple badges?
– Is a password needed?
– How often can learners access?
– What do we do if there is a technical problem? Who gets called? What hours is
help available?

– Is the gamification only played with internet connectivity? Can it be downloaded and then the scores uploaded latter?
– Do we need to consider SCORM or Experience API?

Summary of Practical Questions and Answers

<table>
<thead>
<tr>
<th>Who are the Learners? What are Their Characteristics?</th>
<th>Where are they Going to Learn?</th>
<th>On What Devices are they Going to Learn?</th>
<th>What Technology is Needed for Them to Learn?</th>
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Scoring and Assessment Questions

11) What are the most important measurement criteria?
– Time
– Accuracy
– Correctness
– Knowledge of all the elements

12) Will the gamification event be driven by points, levels, badges or some other method?

13) Describe the point and scoring system and rationale behind the system.

14) Do the gamification activities match learner outcomes?
Summary of Scoring and Assessment Questions

<table>
<thead>
<tr>
<th>Concept to be Taught</th>
<th>Gamification Activity</th>
<th>Assessment of Learning</th>
<th>Measurement Criteria</th>
<th>Scoring</th>
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**Game Play Questions**

15) What are the learners doing during the gamification event?
   - Racing
   - Chasing/Being Chased
   - Exploring
   - Collecting
   - Role Playing
   - Strategizing
   - Building
   - Stealing
   - Problem-Solving
   - Dodging
   - Matching
   - Discriminating
   - Allocating Resources

16) What is the winning state of the gamification event?

17) How many chances does the learner receive? (how many times can it be replayed?)

18) What is the losing condition? Does learning occur if the learner loses?
Summary of Scoring and Assessment Questions

<table>
<thead>
<tr>
<th>What is the Winning Condition?</th>
<th>How Many Chances Does the Learning Receive?</th>
<th>What is the Losing Condition?</th>
<th>Does Learning Occur if the Learner Loses?</th>
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