Q

Design Pack

Curriculum

What if every unit in your class felt like a level in a game? What if your students were so engaged, they couldn't wait to show off what they know and get to the next level? What if learning, collaboration, feedback and reflection happened naturally?

From the experts in game-like learning at Quest Schools, this design pack offers you tools and resources to begin the adventure of designing your own game-like curriculum.

How do I use this Curriculum Design Pack?

At Quest schools, teachers and Institute of Play staff use the tools and methods in this Curriculum Design Pack to create, develop, and implement game-like learning curricula. We invite you to explore and test out these tools and methods in your curriculum planning. You can use this curriculum design pack in many ways — it all depends on you. Whether you are a teacher, curriculum designer, administrator, or a curious individual, we have a suggested pathway for you to follow to use these tools and processes. Just turn the page to begin.

I am a...

Note

This Curriculum Design Pack is designed for middle and high school, but if you are an adventurous elementary school teacher, please feel free to dive in!

Novice	Veteran	Curious Individual
If you are interested in transforming your curriculum to be more game-like, follow this pathway.	If you have already integrated game-like learning into your curriculum and want to evaluate your progress, follow this pathway.	If you want to learn more about and experiment with game-like learning and curriculum design, follow this pathway.
P	**R**	**E**
Planning	**Reflecting**	**Exploring**

What is in this design pack?

Six key design tools make up the curriculum design pack.

1

Mission Planning Overview

P **E**

Mission Planning Overview

2

Mission Prep

P **R** **E** **M**

Mission Prep User Guide

Mission Prep Part 1

Mission Prep Part 2

Mission Prep Part 3

Mission Prep Part 4

Note

A **Mission** is a longer unit lasting a trimester or semester (10-15 weeks) that poses a complex problem for students to solve.

A **Quest** is a challenge-based sub-unit within a Mission that lasts 2-5 weeks. Multiple Quests make up one Mission. Students do a performance assessment at the end of each Quest.

A **lesson** is one period of instruction. Many lessons make up one Quest.

Quest

Lesson

Mission

3

Quest Overview

P **R** **E** **M**

Quest Overview User Guide

Quest Overview

4

Quest Prep

P **R** **E**

Quest Prep User Guide

Quest Prep 1–4

5

Lesson Plan Templates

P **R** **E**

Lesson Plan User Guide

Lesson Plan Template #1

Lesson Plan Template #2

Lesson Plan Template #3

6

Mission Reflection

P **R** **E**

Mission Reflection User Guide

Mission Reflection

Note that a **Glossary** of terms can be found at the end of the design pack.

To see an example of a Mission and its Quests, **check out our exemplar**.

Pathway Guide

Shown below are the pathways for: **Planning**, **Reflecting**, and **Exploring**.

If you are a **Novice**

P

Planning
Sequence
1–2–3–4–5–6

If you are a **Veteran**

R

Reflecting
Sequence
6–2–3–4–5

If you are a **Curious Individual**

E

Exploring
Sequence
1–6–2–3–4–5

Tip

If you want to show your curriculum to school leaders, parents, and/or outside evaluators, you can print out the **Mission Prep** and **Quest Overview** documents.

Curriculum Map

M

Mission Planning Overview

Since there are many steps in planning a Mission (a trimester/semester learning unit), here is an overview of the design process.

These will be the steps...

Note

These are suggested steps in using the Mission Prep tool, but this planning process is rarely linear. Please feel free to use the tool in a different sequence and revisit parts of the tool whenever needed.

1
Mission Prep: Part 1

Generate big ideas and learning goals for the Mission.

2
Mission Prep: Part 2

Create the story around the Mission.

3
Mission Prep: Part 3

Design what your students will do to provide evidence of their learning.

4
Mission Prep: Part 4

List needed tools and materials.

5
Quest Overview

Make 4-5 groups of relevant standards. These groupings will become the foundation for Quest development.

6
Quest Prep

Design your Quests.

7
Start planning your daily lessons for each Quest.

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Mission Prep
User Guide

You are ready to plan your first Mission! To start planning, you will use the Mission Prep tool, which will take you through the big ideas, knowledge, and skills to be taught over the course of a trimester or semester. This tool is highly informed by Understanding by Design (Wiggins and McTighe, 2005) and backwards planning—knowing your students' learning goals and the final assessment before planning individual lessons and activities.

The Mission Prep tool is divided into four parts. Each part includes a set of directions and additional text box prompts to support you and your design. Ultimately, the Mission Prep serves as your planning map for the trimester/semester and can be used as a reference when you move on to plan Quests and daily lessons.

Quest

Lesson
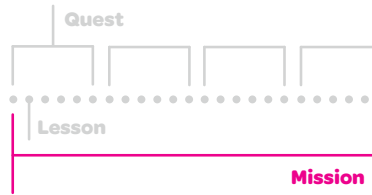
Mission

Mission Prep Tip: Think big

Here's how you use this tool:

Note

This tool is iterative, so you may complete some steps and then return to those steps to make revisions.

Part 1

Develop Enduring Understandings and Essential Questions to frame your Mission.

Part 1: Note

If your school has integrated systems thinking into curriculum and instruction, you can write a short blurb about how systems thinking and your course content are connected. To learn more about systems thinking, go to the **Systems Thinking Design Pack**.

Part 2

List all standards (state and/or national) as well as additional knowledge and skills that your students will learn during the Mission. Brainstorm a context for your Mission and student roles. Will your students be medical experts advising a sick patient, or Persian spies trying to figure out whether to attack Sparta or Athens, based on an exploration of politics, economics, and culture?

Part 3

Describe the final performance assessment for the Mission. Figure out what evidence you want your students to show you about their learning in this assessment. Remember to keep the Mission context in mind when designing it.

Part 4

List any systems thinking tools (if your school integrates systems thinking), materials and Smart tools to be used in the Mission.

Tip

A Smart tool is a "tool to think with" that students create, like a guide to writing an essay, a glossary of science terms, or a set of set of geometry rules with examples. It is a tool that students can use throughout a Mission as a reference.

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Mission Prep

Use this tool to plan your Mission. It will serve as your roadmap for how to frame and plan your entire trimester or semester. Part 1 will help you figure out the big ideas of your Mission.

PART 1

Mission Title	Length of Mission	Class
		Grade

Essential Questions & Enduring Understandings

Essential Questions

Enduring Understanding(s)

Content/Systems Thinking Connection

Tip

If you are having trouble creating Essential Questions and Enduring Understandings, use the following resources:

Book

Wiggins, G. & J. McTighe. (2005). *Understanding by Design*. Alexandria, VA: Association for Supervision and Curriculum Development.

Websites

Recommended by the authors of Understanding by Design:
http://jaymctighe.com/wordpress/wp-content/uploads/2011/04/UbD-Websites-7.12.12.pdf
http://www.nj.gov/education/aps/njscp/
http://questioning.org/mar05/essential.html

Mission Prep
Continued

Part 2 will help you determine what standards and additional knowledge and skills you are teaching in this Mission. Using these specifics, you can create a Mission context and the role(s) that students will take on.

PART 2

Mission Title

Trimester/Semester

State and National Standards

Additional Knowledge and Skills

Mission Context and Student Role

Mission Prep
Continued

MISSION CONTEXT TIPS

Tip

If you need support in thinking of a Mission context, try following these brainstorming steps:

- Look at the content and skills to be taught during the mission. For example, the history of ancient Egypt.
- Brainstorm jobs that use most of the content and skills in real life. For example, archaeologists, authors, and historians. Choose a job from your list and create a context for that job. For example, students will take on the role of writers/illustrators who will produce comic books filled with characters and stories based in ancient Egypt.

- Expand on the context and add additional narrative details, if needed. For example, editors from Pearson will review students' comic books and give feedback. Then students will enter their finalized comic books in a competition and the best ones will be published.

Tip

Here is a list of some of the Mission contexts that have been used at Quest schools.

Grade 6
Content: Science

Mission Context
Some wildly imaginative little creatures, called Troggles, are constantly trying to invent machines to make life and work fun. Their inventions, however, don't ever work. They need help and send out a call to 6th grade students. Students conduct research and a series of experiments to analyze the non-working machines. In this way, students learn about measurement, energy, force, work, and simple machines. Once the students understand the problems with the machines, they design machines for the Troggles that actually work.

Grade 7
Content: Math

Mission Context
Students step into the roles of card sharks and mathematicians. The Global Poker Strategic Thinking Society has been in contact with students to ask them to design strategy guides for different poker games based on statistics and probability. To help them create strategy guides, students will develop skills and knowledge in probability, proportional reasoning, risk/reward decision-making, sampling, and graphical analysis.

Grade 8
Content: Humanities

Mission Context
Students are approached to join a military think tank that consults with the U.S. government on war strategy for the Middle East. As their first task, students must design an invention that demonstrates their understanding of the needs created by war. Next, they are informed that they are military strategists for a presidential candidate and must develop the candidate's position on war in Iran based on understanding the political and social impacts of war. When the candidate is elected, the students are asked to create a proposal of a strategy for dealing with Iran, using their knowledge of war's effects on technology, socio-politics, and economy.

Grade 9
Content: Science

Mission Context
Students will take on the roles of 3rd year medical students at New York University and are responsible for presenting during Grand Rounds (when doctors, residents and medical students visit sick patients in a hospital) on a recurring basis. Students are faced with an array of patients with different symptoms and diseases, and learn science content and skills to help them make the correct diagnoses and suggestions for treatment. As a final challenge, students have to diagnose and treat a patient with multiple and complex health issues.

Mission Prep
Continued

Part 3 is a tool to help you design a rigorous performance assessment for the Mission that connects to the Mission context. Remember that we want students to always feel like they are in the Mission context, even when they are completing the final assessment.

PART 3

Mission Title

Trimester/Semester

Step 1 – Learning Goals Assessed

Enduring Understanding(s)

Standards

Mission Performance Assessment Description

Note

If you are stuck here, you may want to complete Step 2 before writing up the description.

Mission Prep
Continued

PART 3 Continued

Mission Title

Trimester/Semester

Step 2 – Structure of Assessment

How is the assessment connected to the Mission context? What is the goal of your assessment?

What role(s) does a student play?

Who is the audience for the assessment product?

What is the end product created by students?

Step 3 — Evaluation Criteria

What are the criteria for measuring student understanding? (How do you know they know?)

Step 4 — What needs to be created?

What is needed to create this performance assessment?

Mission Prep
Continued

In Part 4, you can list the tools and materials needed for this Mission. You may want to return to this page after completing the Quest Prep tools, because you may have thought of additional tools and materials.

PART 4

Mission Title

Trimester/Semester

Strategies and Tools

Systems Thinking Tools

Smart tools

Materials to create
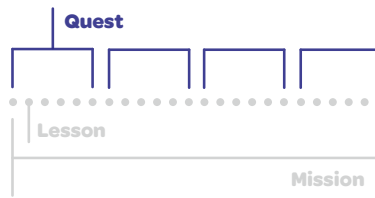
Materials to Order

Work Area

If you need additional space, use this work area.

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Quest Overview
User Guide

After designing your Mission and the Mission performance assessment, it is time to jump into planning Quests. Quests are goal-oriented challenges that equip students with necessary data, knowledge, resources, and practices to solve the larger mission. In traditional terms, Quests are units within a trimester/semester of study, so they last 2-5 weeks on average.

The Quest Overview is a tool to help you sort relevant standards into different groups. These groups will become the Quests in your Mission.

Quest Overview Tip: Map out your plan

Quest

Lesson

Mission

Here's how you use this tool:

Note

This document, along with the Mission Prep, can be printed out and given to school leaders, parents, and/or outside evaluators who are interested in seeing your curriculum.

Step 1

Look at all the standards listed in your Mission Prep tool. Sort the relevant standards into different groups.

Feel free to use a separate document to do this sorting.

Step 2

Copy and paste different groups of standards into Quest 1, 2, 3, etc. in the Quest Overview. Figuring out which groups of standards fit into different Quests depends on how you want to sequence your teaching.

Note: if you have more than 4 Quests, please use the additional page.

Step 3

Title each Quest and identify the length of the Quest (e.g., 4 weeks). Include assessments (quizzes, lab write-ups, short essays, etc.) and the final performance assessment for each Quest.

Quest Overview

Use this tool to group standards into individual Quests.

Mission Title

Semester/Trimester

Quest 1   **Title**

Standards

Length

Assessments

Performance Assessment

Quest 2   **Title**

Standards

Length

Assessments

Performance Assessment

Quest 3   **Title**

Standards

Length

Assessments

Performance Assessment

Quest 4   **Title**

Standards

Length

Assessments

Performance Assessment

Quest Overview
Continued

Mission Title

Semester/Trimester

Quest 5 Title

Standards

Length

Assessments

Performance Assessment

Quest 6 Title

Standards

Length

Assessments

Performance Assessment

Quest 7 Title

Standards

Length

Assessments

Performance Assessment

Quest 8 Title

Standards

Length

Assessments

Performance Assessment

Quest Prep
User Guide

Now that you have your Quests identified, you can now spend some time planning the details of each one. For a Quest, it is important to create a strong "need to know" – a challenge that engages students in learning knowledge and skills to address the challenge. Additionally, designing a solid performance assessment for each Quest is necessary to determine if students have the knowledge and skills needed to move on to the next Quest.

Quest

Lesson
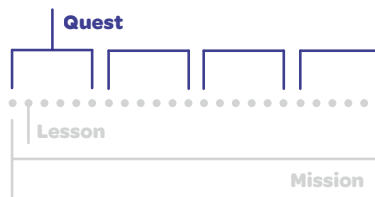
Mission

Quest Prep Tip: Dive Deeper
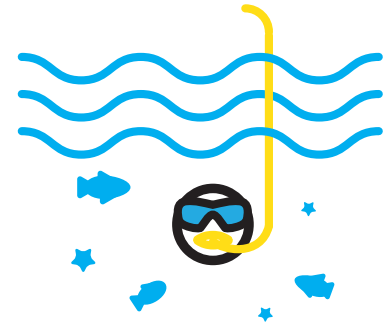
Here's how you use this tool:

Note

If you want to design more than 4 Quests in your Mission, go to the Quest Pack Set. ⤢

Step 1

After filling out the heading section for one Quest, write a brief summary of the Quest narrative that is aligned to the overall Mission context. Be sure to be explicit about the "need to know" to both engage students and motivate them to learn knowledge and skills needed to solve the Quest challenge and, later, to solve the larger Mission.

Step 2

Copy and paste the Enduring Understanding(s) and Essential Question(s) that help to frame this Quest. You probably will only include 1-2 Enduring Understandings and Essential Questions from your Mission Prep in each Quest.

If you teach systems thinking, include a description of how systems thinking connects to the knowledge and skills in this Quest.

Step 3

Copy and paste relevant standards and assessments from the Quest Overview into this section. Feel free to provide expanded descriptions of the performance assessment given at the end of the Quest in this part of the tool.

Step 4

List learning experience and activities with corresponding assessments (e.g., quizzes, short essays, maps, etc.).

Step 5

List specific differentiation strategies to be used in the Quest (both to support struggling students and extend learning for high-achieving students). Also, list needed materials, tools, and/or games. Note the ones that must be created prior to the start of the Quest and those that can be created during the Quest.

Step 6

Repeat steps 1-5 for each Quest.

Quest Prep 1

Use this tool to help you plan your individual Quests.

Mission Title

Quest Title

Length of Quest

Step 1

Quest summary (include the "need to know")

Step 2

Essential Question(s)

Enduring Understanding(s)

Systems Thinking Connection

Step 3

Standards addressed in Quest

Standards addressed in Quest *continued*

Other Knowledge and Skills

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Quest Prep 1
Continued

Use this tool to group standards into individual Quests.

Mission Title	Quest Title	Length of Quest

Quest Performance Assessment

Step 4

Learning Experiences and Activities

Assessments

Step 5

Differentiation Strategies

Quest Tools/Materials/Games

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Quest Prep 2

Use this tool to help you plan your individual Quests.

Mission Title	Quest Title	Length of Quest

Step 1

Quest summary (include the "need to know")

Step 2

Essential Question(s)

Enduring Understanding(s)

Systems Thinking Connection

Step 3

Standards addressed in Quest

Standards addressed in Quest *continued*

Other Knowledge and Skills

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Quest Prep 2
Continued

Use this tool to group standards into individual Quests.

Mission Title

Quest Title

Length of Quest

Quest Performance Assessment

Step 4

Learning Experiences and Activities

Assessments

Step 5

Differentiation Strategies

Quest Tools/Materials/Games

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Quest Prep 3

Use this tool to help you plan your individual Quests.

Mission Title	**Quest Title**	**Length of Quest**

Step 1

Quest summary (include the "need to know")

Step 2

Essential Question(s)

Enduring Understanding(s)

Systems Thinking Connection

Step 3

Standards addressed in Quest

Standards addressed in Quest *continued*

Other Knowledge and Skills

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Quest Prep 3
Continued

Use this tool to group standards into individual Quests.

Mission Title

Quest Title

Length of Quest

Quest Performance Assessment

Step 4

Learning Experiences and Activities

Assessments

Step 5

**Differentiation Strategies**

Quest Tools/Materials/Games

Quest Prep 4

Use this tool to help you plan your individual Quests.

Mission Title	Quest Title	Length of Quest

Step 1

Quest summary (include the "need to know")

Step 2

Essential Question(s)

Enduring Understanding(s)

Systems Thinking Connection

Step 3

Standards addressed in Quest

Standards addressed in Quest *continued*

Other Knowledge and Skills

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Quest Prep 4
Continued

Use this tool to group standards into individual Quests.

Mission Title	Quest Title	Length of Quest

Quest Performance Assessment

Step 4

Learning Experiences and Activities

Assessments

Step 5

Differentiation Strategies

Quest Tools/Materials/Games

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Note If you have more than 4 Quests, go to the Quest Pack Set.

Lesson Plan
User Guide

You've designed and planned your Mission! You've designed and planned your Quests! Now it is time to dive into planning your daily lessons. At Quest schools, we do not have one required lesson planning tool that all teachers use. Instead, teachers choose to use lesson planning tools that match their own needs best.

In this section, three different lesson planning tools are included. It is up to you to choose which one works best for you.
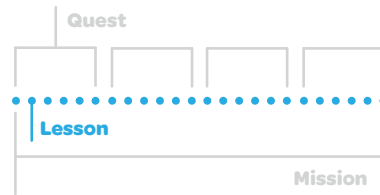
Quest Tip: Try all 3 to find your favorite.

Quest

Lesson

Mission
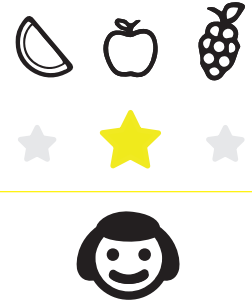
Here's how you use this tool:

Step 1

Review all three lesson planning tools and choose one to use. Feel free to try all three to see which one you like best.

Step 2

Fill out the lesson plan tool for your first lesson of your first Quest. Refer back to the Mission Prep and Quest Prep to help you fill in different sections, such as Enduring Understandings, standards, skills, etc.

Step 3

After you finish planning the first lesson, move on to the second lesson. When you teach, you can either print out a copy of the lesson plan for you to have with you or refer to the plan on a computer. After using the tool, feel free to adapt as needed to best support your teaching and student learning.

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Quest Lesson Plan Template 1

Adapted from the 5-E Lesson Plan by Bybee et al, 2006

Date of Lesson	Class	Mission/Quest	Grade Level

Relevant Essential Question(s)

Relevant Enduring Understanding(s)

Systems Thinking Connection

Lesson Outcomes

Standards

Other Knowledge and Skill(s)

List of Materials

Differentiation Strategies

Homework

Quest Lesson Plan Template 1
Continued

Date of Lesson	Class	Mission/Quest	Grade Level

INSTRUCTIONAL SEQUENCE (include differentiation)

Phase One: Engage the Learner

Students will:

Phase Two: Explore the Concept

Students will:

Phase Three: Explain the Concept

Students will:

Phase Four: Elaborate on the Concept

Students will:

Phase Five: Evaluate Student Understanding

Students will:

Work Area: Any Additional Items

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Quest Lesson Plan Template 2

Date of Lesson

Mission

Quest

Essential Questions Addressed

Enduring Understandings Addressed

Systems Thinking Principles

Learning Goal(s)

Standards

Other Knowledge and Skill(s)

Agenda

Materials

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Quest Lesson Plan Template 2
Continued

Date of Lesson	Mission	Quest

Time

Warm-Up

Time

Mini-Lesson

Model

Time

Activities

Check for Understanding Questions

Differentiation

Assessments

Homework

Quest Lesson Plan Template 3

Teacher	Class	Grade Level	Length of Lesson

Part 1 — Prep

Relevant Enduring Understanding(s)

Relevant Essential Question(s)

Systems Thinking Connection

Learning Goal(s)

Materials

Warm-up Question(s)

Differentiation

Assessments

Homework

Quest Lesson Plan Template 3
Continued

Teacher	Class	Grade Level	Length of Lesson

Part 2 — Class Flow

Start of class

Guided Practice

Other steps in the lesson

Independent Practice

Check for Understanding

Closing

Mission Reflection
User Guide

An essential principle of the Quest school model is iteration.
All things can be improved. Thus, at Quest schools we use tools to structure the reflection and iteration process.

By using the Mission Reflection, you can look back on the Mission and identify strengths and weaknesses in the areas of design, authenticity, assessment, student/teacher fit, multi-modal learning, inquiry-based learning, and competencies learning. After reflecting, brainstorming changes for the next iteration of the Mission is key to consistent improvement of the curriculum, teaching, and learning.

Quest

Lesson
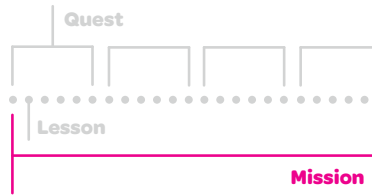
Mission

Mission Relflection Tip:
Use this document collaboratively

Here's how you use this tool:

Step 1

For each question, use the scale to determine the success of the mission in achieving the stated goal.

Step 2

Click on the scale to indicate your choice.

Step 3

When you finish a category, estimate the average rating for the entire category based on all the ratings in that category.

Step 4

For some sections, you'll see that you will circle a choice on a list. To circle, click on the term you want to circle.

Step 5

Category 7 includes competencies of design thinking, systems thinking, and social emotional learning—all of which are foundational to the model of Quest schools. We recognize that you may not be incorporating these competencies in your curriculum design now, but encourage you to begin to brainstorm how to integrate them. To learn more about these competencies, go to the Assessment section of the School Design Pack.

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Mission Reflection

This reflection tool was designed by Institue of Play to use with teachers during curriculum meetings to reflect on Missions.

Instructions

All reviewers should evaluate each question using the scale.
After each question has been evaluated, each category can be assigned a score that is an estimated average. The Mission can be evaluated as a whole based on the average score of each category.

Category 1: Design

	☹	☹	😐	🙂	😀
To what extent does the mission have clear learning goals?	○	○	○	○	○
To what extent does the work create simple set ups for exploration of complex problems?	○	○	○	○	○
To what extent does the Mission include all the principles of game-like learning?	○	○	○	○	○
To what extent does the Mission integrate key concepts within the discipline?	○	○	○	○	○
Was it easy to transition between Quests? Did it feel fluid?	○	○	○	○	○
Average:	○	○	○	○	○

Category 2: Authenticity

	☹	☹	😐	🙂	😀
To what extent does the mission allow for an appropriate balance between the mission context and the learning activities?	○	○	○	○	○
To what extent does the context motivate students to learn?	○	○	○	○	○
To what extent does the Mission allow students to step into real-world identities that relate to the discipline?	○	○	○	○	○
Average:	○	○	○	○	○

Category 3: Assessment

	☹	☹	😐	🙂	😀
Is there a clear set of evaluation criteria throughout the mission?	○	○	○	○	○
To what extent does the mission provide a clear sense of progress, success, and failure?	○	○	○	○	○
To what extent did students create products for assessments?	○	○	○	○	○
Average:	○	○	○	○	○

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Mission Reflection
Continued

Category 4: Student/teacher fit

To what extent does the Mission fit the teaching style and expertise of the teacher?

Is the Mission developmentally appropriate for the students (i.e., age and skills)?

Does the Mission have a diversity of access points to engage all students, including extensions?

Is the Mission scalable for different size classes, if needed?

Is the Mission flexible enough to be used in another context?

Average:

Category 5: Multimodal Learning

Are there different types of learning experiences and activities embedded into the Mission?

What types of student expertise are supported best? **Select all relevant choices from the list below.**

- logical
- kinesthetic
- memorization
- visual

- auditory
- writing
- performing
- organizing

- artistic/design
- technical
- playing

Does the Mission allow students to show understanding in multiple ways?

Average:

Category 6: Inquiry-Based Learning

To what extent did students actively participate in their learning during the Mission?

To what extent did students uncover new or hidden information during Quests?

To what extent did students develop and test their own ideas and/or strategies during the Mission?

Average:

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Mission Reflection
Continued

Category 7: Competencies/Mission/Model	☹ ☹ 😐 🙂 😀
Do students advance in social emotional learning competencies?	○—○—○—○—○
Does the Mission integrate design thinking competencies?	○—○—○—○—○
Do students explore systems thinking in this Mission?	○—○—○—○—○
Average:	○—○—○—○—○

Overall Average Score for Mission: ☹ ☹ 😐 🙂 😀
○—○—○—○—○
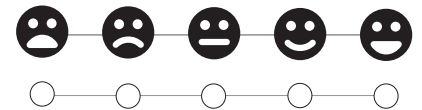
Notes for Next Mission Iteration.

Use this space to write down any changes that you want to make to this Mission before you teach it again.

Glossary

The terms in this glossary are defined in the way we use them at Quest schools.

A

Assessment: A tool to address several questions—what do students know; what did they learn; and, are we teaching and designing well. In addition, at Quest schools, we assess design thinking, systems thinking, and social emotional learning skills.

C

Competencies: A set of 21st century skills essential for success in the real world. Competencies at Quest schools include design thinking, systems thinking, and social emotional learning.

D

Design Thinking : A competency that includes the following skill development: digital media tool use, iteration, representation, communication, designing play, and designing for innovation.

Differentiation Strategies: Teaching strategies used to help all students access the content and skills. A teacher may create three different handouts to guide students through a reading that vary according to the reading levels of students.

E

Embedded Assessment: Using natural contexts to assess students during class, so sometimes students don't even realize they are being assessed. Teachers can use a set of questions to guide their assessment of student learning, as students play a game or complete an inquiry project.

Essential Question: Thought-provoking questions that can be answered in multiple ways; that require inquiry; that raise other questions; and that are engaging to students. An example of an Essential Question is: how does an area's physical geography impact the culture of people who live there?

Enduring Understanding: A statement that conveys what is central to the discipline, is transferable to new situations, and can be used to frame a mission. An example of an enduring understanding is: democratic governments must balance the rights of individuals and the common good.

Evaluation Criteria: A set of criteria used to evaluate evidence of student knowledge and understanding. A guiding question to use when creating evaluation criteria is "how do I know my student knows?"

G

Game-like Learning: A framework grounded in research about game design and learning. Quest schools use 7 principles of game-like learning to shape teaching and learning: everyone is a participant; challenge is constant; learning happens by doing; feedback is immediate and ongoing; failure is reframed as iteration; everything is interconnected; and it kind of feels like play.

M

Mission: A longer unit lasting a trimester or semester (10-15 weeks) that poses a complex problem to students. Students complete a performance assessment at the end of the Mission.

N

National Standards: Standards developed in collaboration with teachers, school leaders, and experts. The Common Core standards focus on Math and English/Language Arts and have been adopted by almost all states in the country. End-of-year tests will assess student learning of these standards across states.

"Need to know": A challenge that motivates students to learn new knowledge and skills to be able to address the challenge.

Novice to Mastery Trajectory: Learning trajectory used in rubrics at Quest Schools that goes from Novice to Apprentice to Senior to Master.

P

Performance Assessment: A specific assessment in which students produce an artifact or product or perform to show their understanding. For example, a field guide, a web-published video, or a digital simulation of a physics concept with a presentation are all performance assessments.

Q

Quest: A challenge-based sub-unit within a Mission that lasts 2-5 weeks. Multiple Quests compose one Mission. Students do a performance assessment at the end of a Quest.

R

Rubric: A document describing what students should be able to do in order to earn a certain level of mastery.

S

Smart Tool: A "tool to think with" that students create, like a guide to writing, a glossary, or a set of geometry rules with examples. Students use it as both a reference and an assessment.

Social Emotional Learning: A competency that includes the following skill development: understanding and regulating one's emotions, teamwork, and time management.

State Standards: Standards designed at the state level that are tested at the end of every school year.

Systems Thinking: A competency that focuses on developing students who understand systems and how to change them. This competency includes demonstrating understanding about the following concepts: parts, relationships between parts, balance, complex systems, patterns, sustainability and stability, feedback loops, unintended consequences, and leverage points.

Systems Thinking Tools: Tools used to investigate systems. Some systems thinking tools include: a concept map of system parts and the relationships among the parts, a behavior over time graph (showing patterns), and causal loop diagrams.

U

Understanding by Design: A curriculum planning framework created by Grant Wiggins and Jay McTighe to highlight the use of backwards planning in schools (planning learning goals, then final assessment, then daily lessons.) Quest schools use this framework as the foundation of our planning tools.

Continued Learning

Now that you've explored the Curriculum Design Pack, we hope this resource has inspired you to use game-like learning in your classroom and school.

Below is additional information to support you in continuing to build and share your own learning.

We want to hear from you

We want to hear about your experiences with using these resources.

How did your students respond?
Did it change your teaching?
Would you use this design pack again?

We welcome your stories and sharing of your newly designed curriculum.

Email your feedback and thoughts to:
info@instituteofplay.org

We want you to learn more

If you are interested in learning more, please visit these following websites:

Institute of Play
www.instituteofplay.org

Quest to Learn, NYC
www.q2l.org

CICS ChicagoQuest
www.chicagoquest.org

We also offer other Design Packs

Q Design Pack: School ⬈
This pack highlights ten innovative components of the Quest school model.

Q Design Pack: Systems Thinking ⬈
This pack provides tools and methods for you to use to integrate systems thinking into your teaching.

Q Design Pack: Games and Learning ⬈
This pack describes our curriculum team model and includes tools and methods to help you begin to collaboratively design games.

We want you to share these resources

This resource is free, and we want you to share it with others. When you do use and share it, please know this resource is licensed under a Creative Commons license.

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We want to thank our partners

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Wiggins, G. & J. McTighe. (2005). *Understanding by design, volume 2.* Alexandria, VA: Association for Supervision and Curriculum Development.

About Institute of Play

We design experiences that make learning irresistible.

The Institute pioneers new models of learning and engagement. We are a not-for-profit design studio, founded in 2007 by a group of game designers in New York City. We are now home to an interdisciplinary team of designers, strategists and learning practitioners. Our first project was the design and implementation of an innovative New York City public school, called Quest to Learn.

At the core of the experiences we design are games, play and the principles that underlie them.

Using these principles, we have created institutions, games, programs, events, digital platforms and products. Our work unlocks the transformative power of people as seekers and solvers of complex problems, risk takers, inventors and visionaries. We work wherever people are: in communities, businesses, schools, cultural and civic institutions.

We empower people to thrive as active citizens in a connected world.

We are not preparing for a distant future. We are about meeting people where they are and igniting their potential now. We work with a diverse set of partners to make it happen, such as Electronic Arts, Intel, Educational Testing Service, the Mozilla Foundation, the Smithsonian, Parsons the New School for Design, Chicago International Charter Schools, DePaul University, E-Line Media and others.

A selection of our work

GlassLab

An unprecedented collaboration between leaders in the commercial games industry and experts in learning and assessment, GlassLab aims to leverage digital games as powerful, data-rich learning environments that improve the process of learning with formative assessments teachers can trust.

Play@ Your Org

With a hands-on exploration of games and design, Play@ Your Org workshops are designed to help businesses, cultural institutions and other organizations integrate the power of play-based learning in their work to maximize participation and engagement.

Playtime Online

A live hour-long webinar series, Playtime Online explores the work of leading organizations in the field of games and learning, the people who do it and why it matters in the world today. The series also offer a live forum to share learning within the Playtime community.

For more information, please visit **www.instituteofplay.org**

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