Designing and Implementing a Lightboard Learning Experience for Instructors

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Open Learning

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Lauren Totino is a Learning Engineer at the Massachusetts Institute of Technology, on the Residential Education team at MIT Open Learning.

Her work on the team involves helping faculty and course teams design, develop, assess, and iteratively improve learning experiences, with a focus on incorporating research-based teaching practices into the design of courses that leverage technology.

She received a MA in Learning Engineering from the Lynch School of Education & Human Development at Boston College and was a student in the inaugural cohort of this program (2019-2020).

About the work

Followed the Learning Engineering process to design and implement a learning experience for instructors

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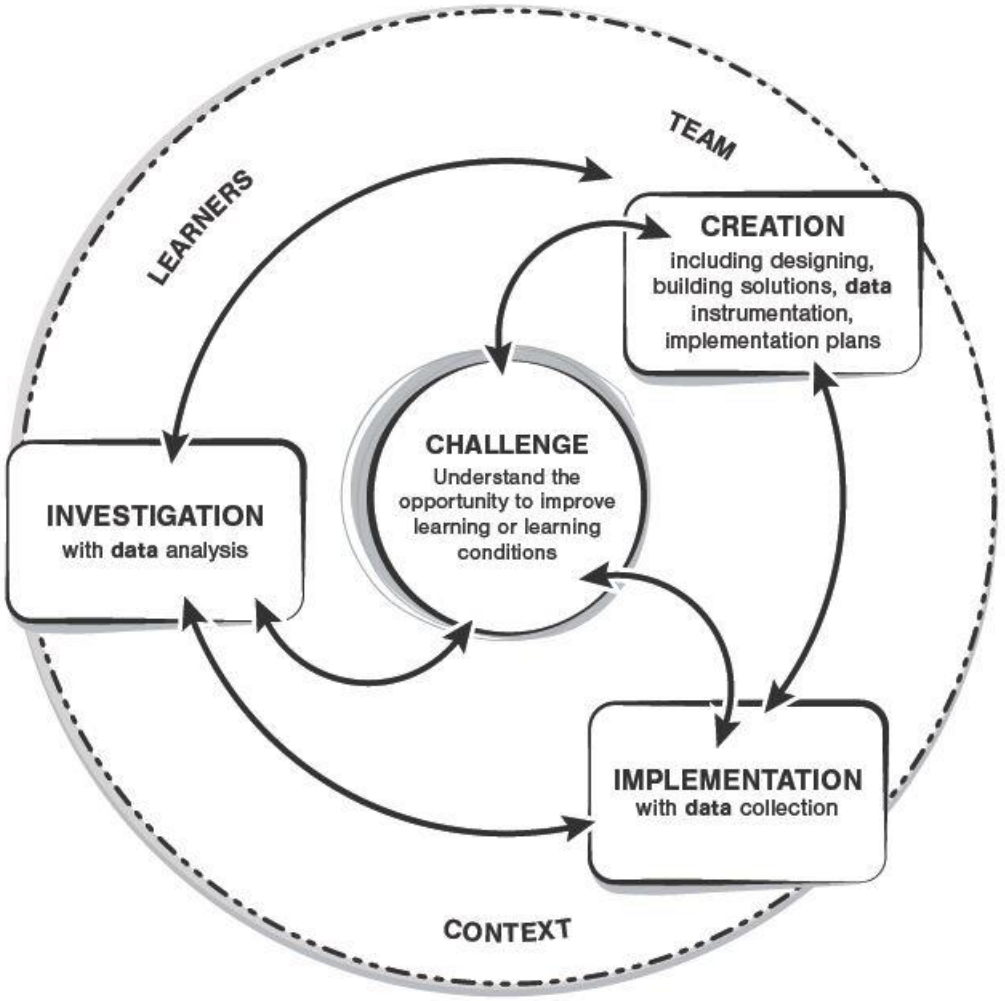

FIGURE 1.1. The learning engineering process

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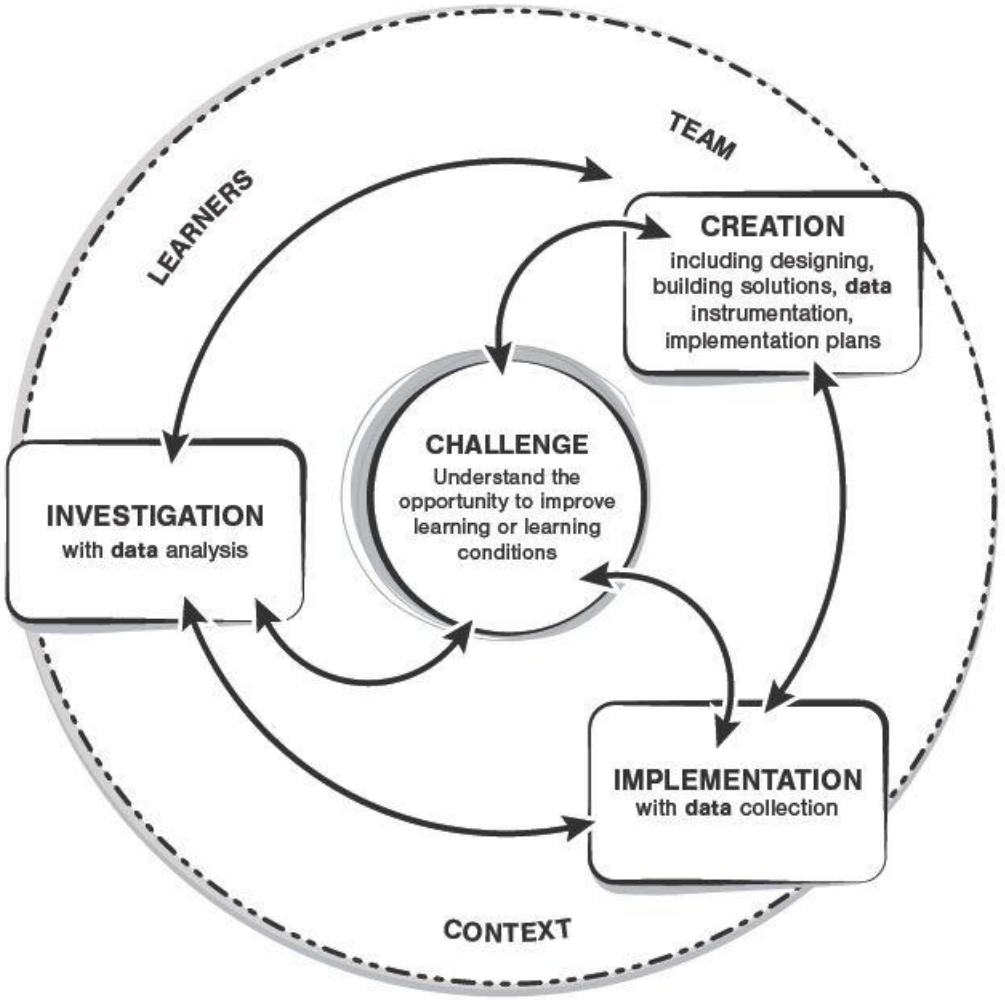
About the work

Followed the Learning Engineering process to design and implement a learning experience for instructors

- Navigated 2 major iterations to the implementation



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About the work

Followed the Learning Engineering process to design and implement a learning experience for instructors

- Navigated 2 major iterations to the implementation
- Practiced design decision & justification tracking across iterations

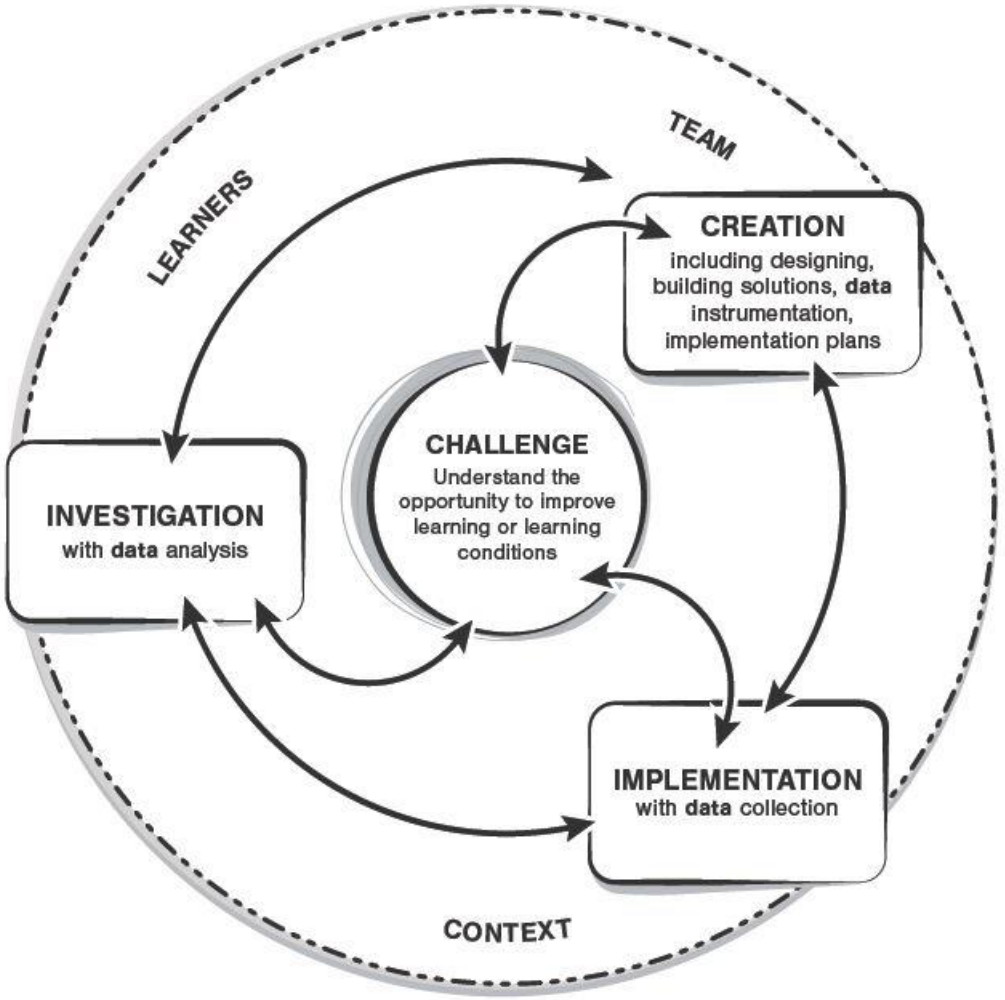

FIGURE 1.1. The learning engineering process

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The Central Challenge

FIGURE 1.1. The learning engineering process

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- Support instructors using Lightboard: **How to use the tech**

The Central Challenge

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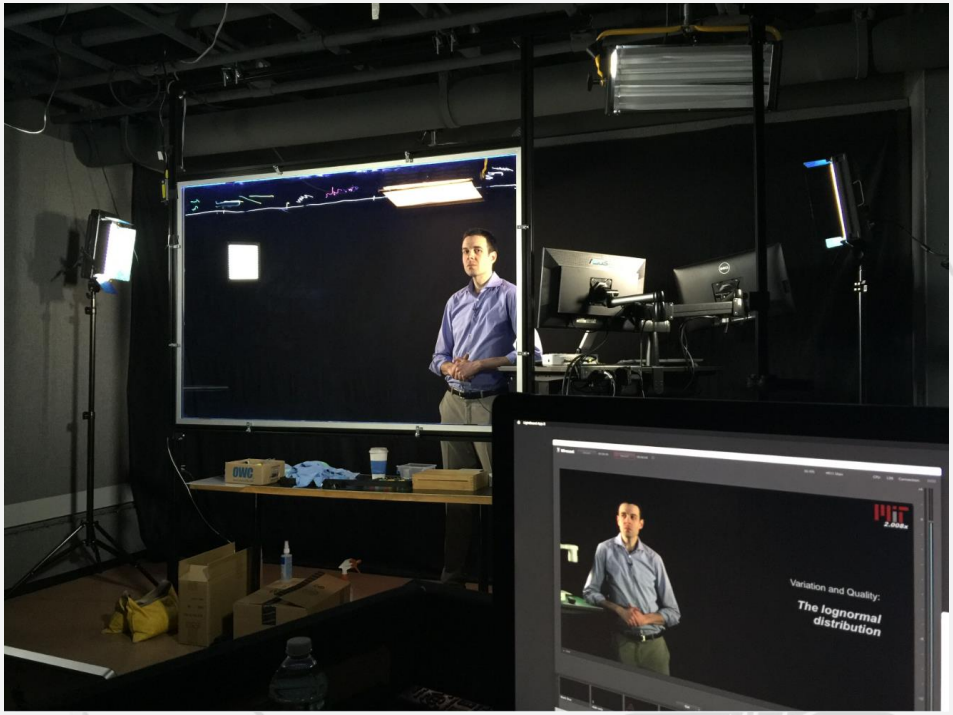
- Support instructors using Lightboard: **How to use the tech**
- Support instructors using Lightboard: **Effective instruction**

The Central Challenge



- Support instructors using Lightboard: **How to Use**
- Support instructors using Lightboard: **Effective Instruction**

IMPLEMENTATION
with data collection

CONTEXT

FIGURE 1.1. The learning engineering process

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The Central Challenge

- Support instructors using Lightboard: **How to Use**

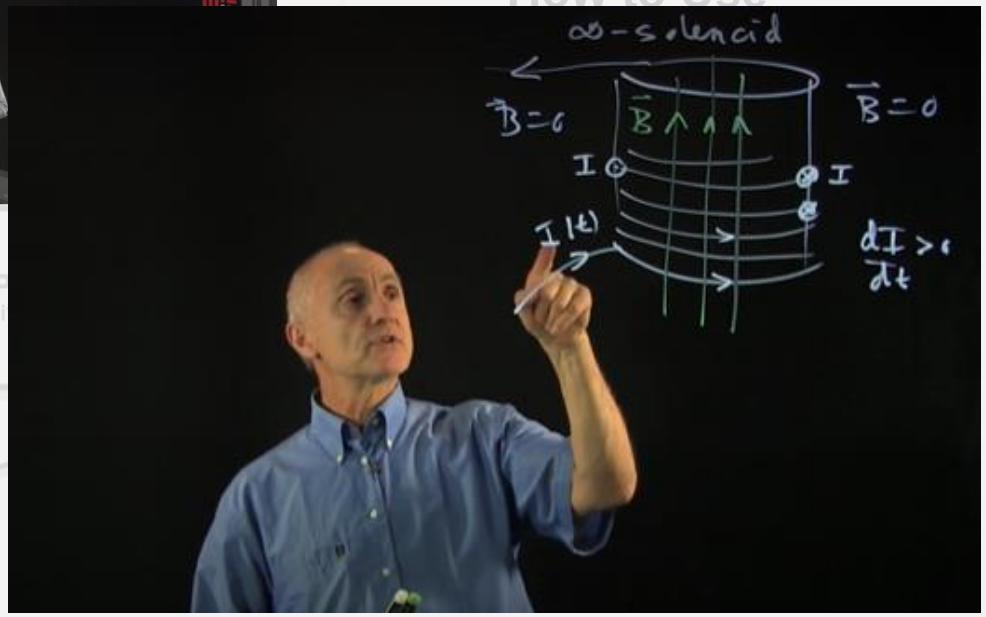
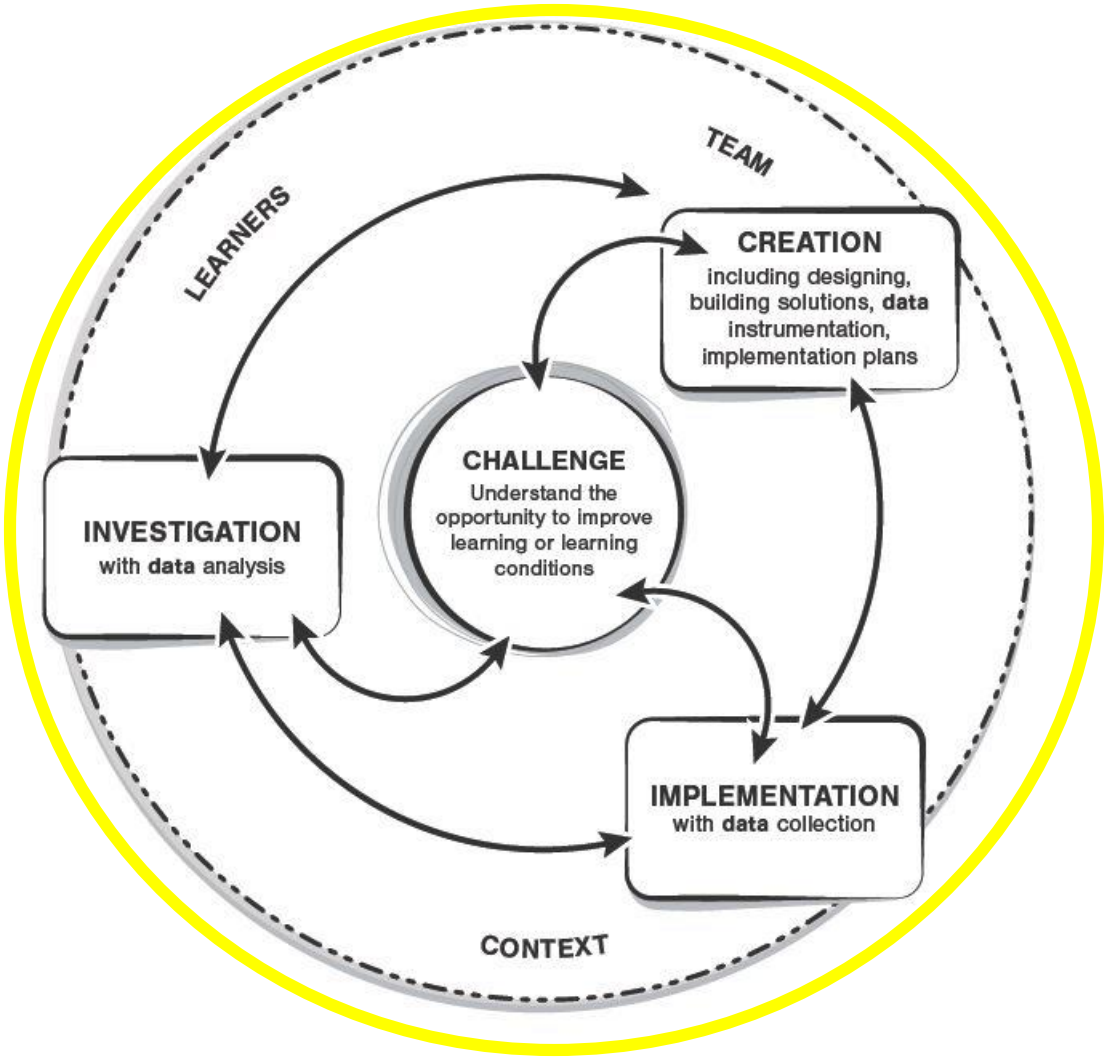


FIGURE 1.1. The learning engineering process

1st Iteration: Context



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1st Iteration: Context

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- Instructors interested in using Lightboard, from any discipline/dept

1st Iteration: Context

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- Instructors interested in using Lightboard, from any discipline/dept
- Increase awareness of instructional best practices

1st Iteration: Context

FIGURE 1.1. The learning engineering process

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- **Timing:** Responsive to emergency remote instruction but will last beyond

1st Iteration: Context

FIGURE 1.1. The learning engineering process

- **Resources:**
  - MITx platform
  - Lightboard studio (physical space)

1st Iteration: Design Decisions

	A	B
1	**Design Decision for Lightboard Learning Experience**	**Related Learning Design Principle/Heuristic**
2	Inclination to use existing videos featuring faculty in favor of recreating videos, because it is more authentic and the experience will be more effective from a sustained engagement and motivational perspective if the faculty "see themselves" in a variety of video examples.	Make learning activities personally meaningful, authentic, and connected to prior knowledge. Learners are more likely to be motivated if they feel capable, know when and who in the world carries out such tasks, have resources that someone in the real world engaging in that task would have, and if activities and assessments fit into the flow of what they are trying to achieve (Goodell & Kessler, 2020)
3	Promoting the "culture shift" in Lightboard use - need to promote moving away from feeling like videos have to be perfect. Want to promote being authentic over being super polished because the tool is about to be used in a different way - for the time being, due to the pandemic, faculty are going to record entire course sessions to replace in-person class sessions (but, still in short snippets, not full-length class videos). We want students to feel like the videos were made for them, and it's "part of the charm" to get all the "foibles" of their professor in a video.	

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2	**Decision**	**Reason**
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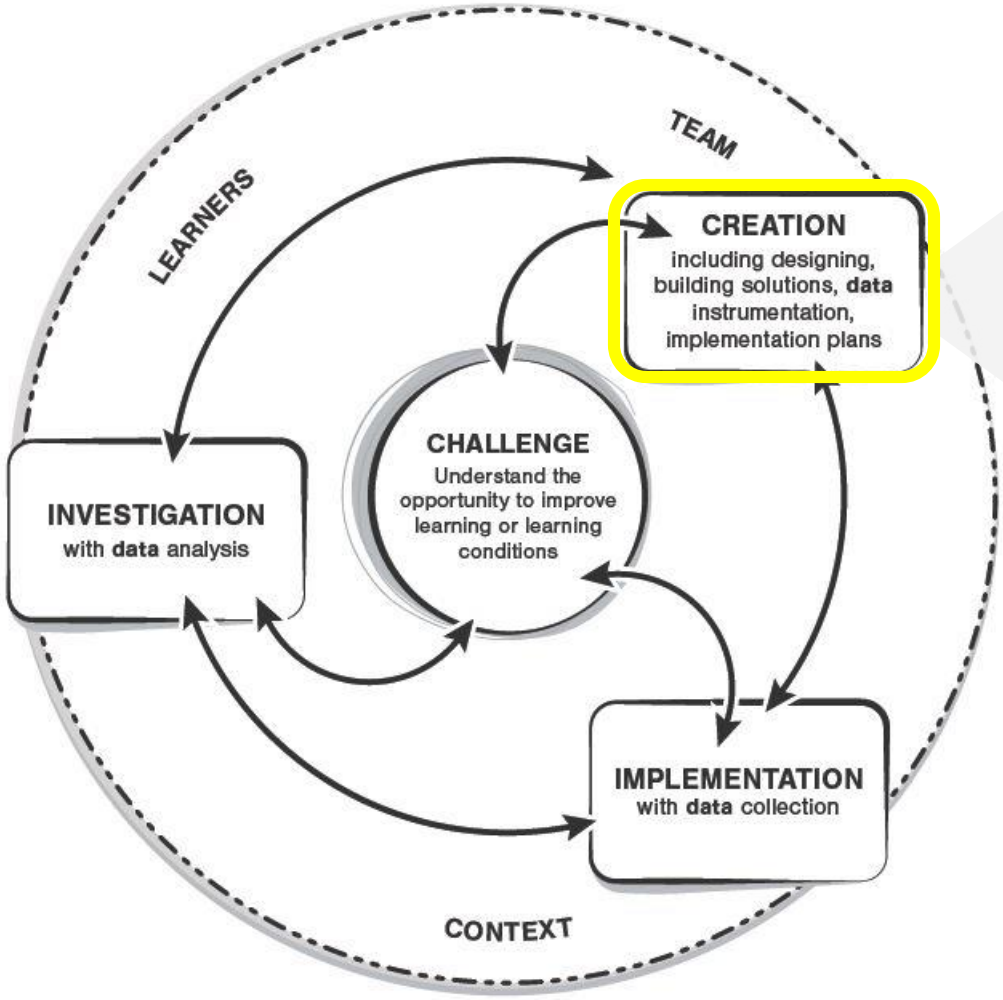

FIGURE 1.1. The learning engineering process

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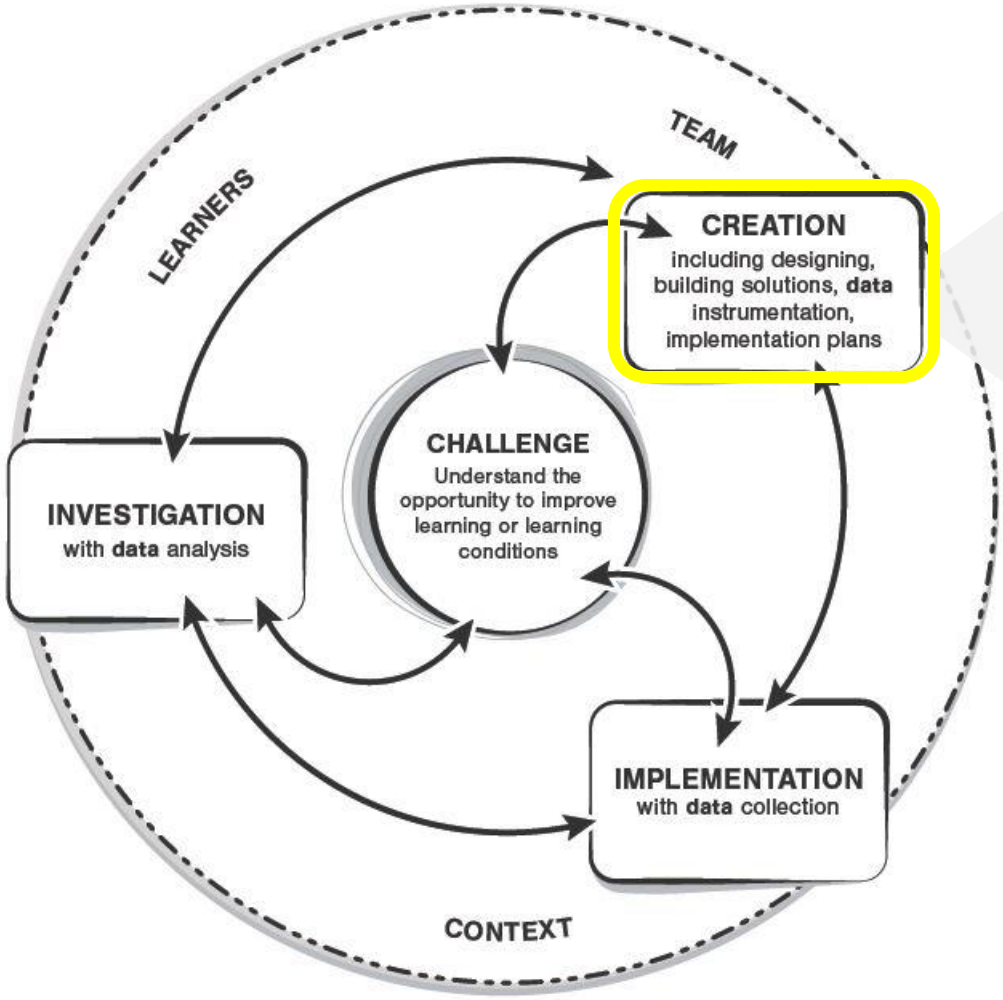
Tracker used throughout creation to note decisions like…

- Video examples of early adopters demonstrating best practices

1st Iteration: Design Decisions



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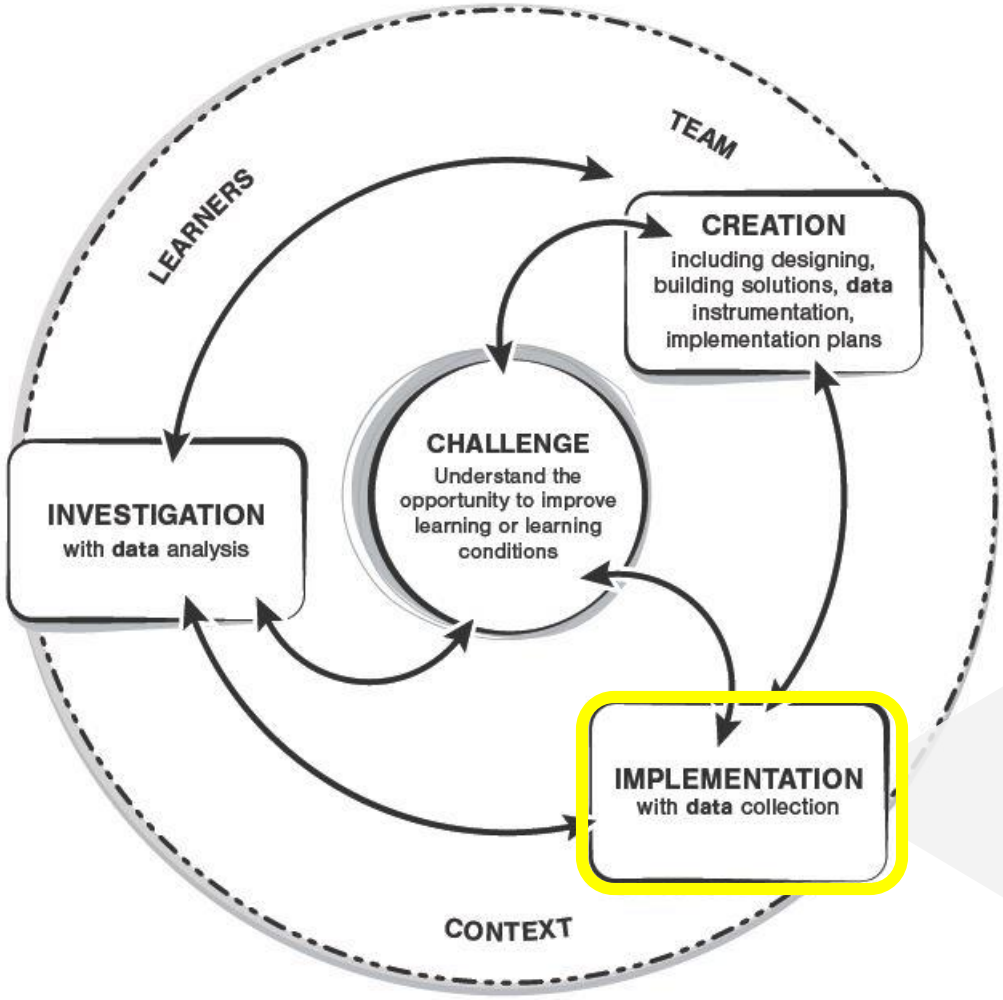
Tracker used throughout creation to note decisions like…

- Video examples of early adopters demonstrating best practices
- Linear sequencing + Quick Start Guide

1st Iteration: Design Results



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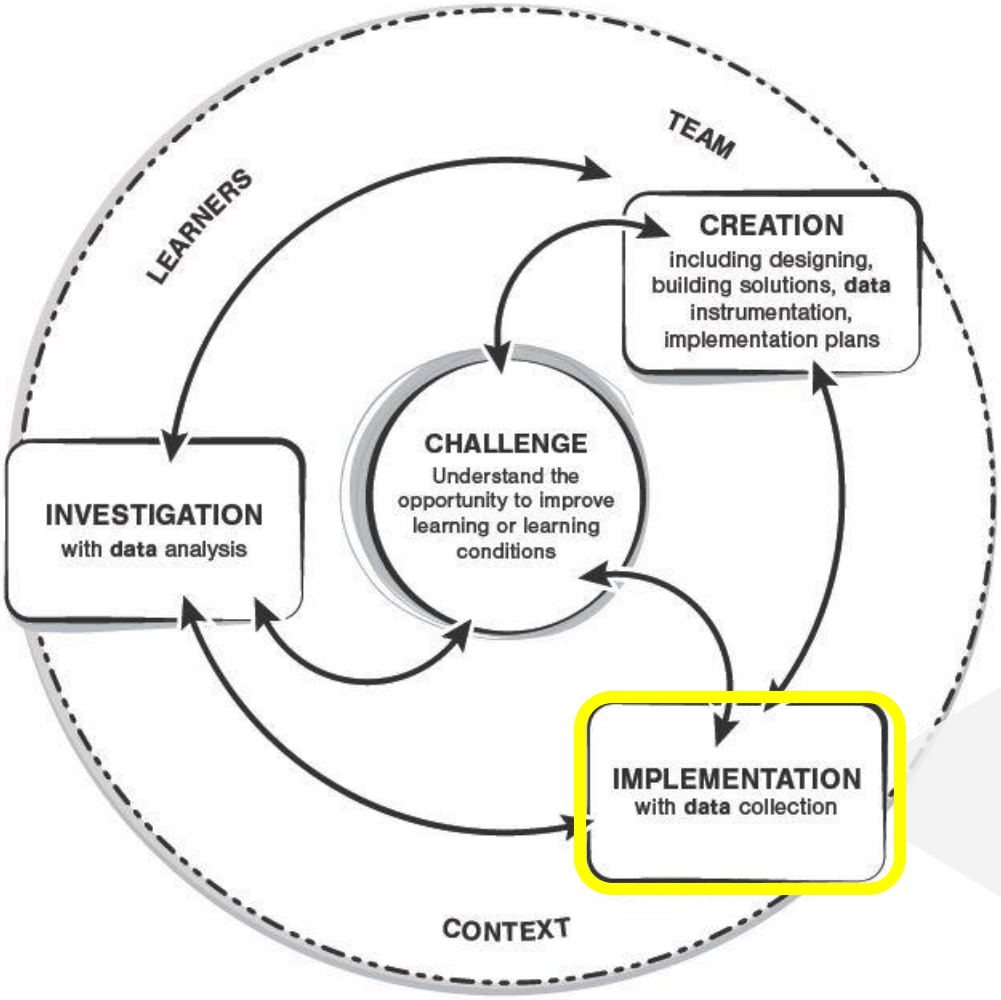
- "Mini" implementation with testers prior to full release

1st Iteration: Design Results



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- "Mini" implementation with testers prior to full release
- Limited studio access → lack of users → lack of usable data

The Central Challenge Revisited

FIGURE 1.1. The learning engineering process

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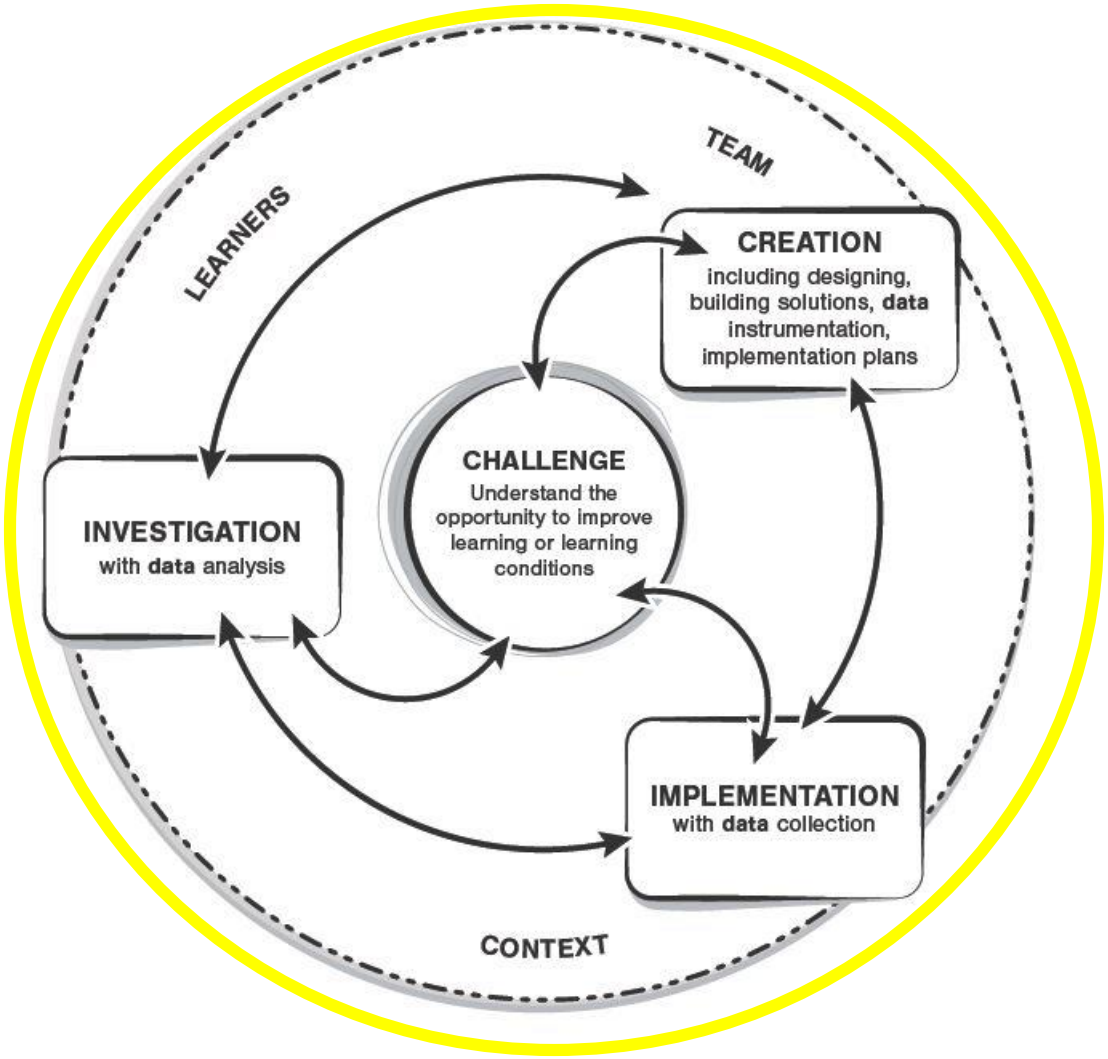
- Same goal of supporting instructors

The Central Challenge Revisited

FIGURE 1.1. The learning engineering process

- Same goal of supporting instructors
- While taking into account new contextual factors

2nd Iteration: Context



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2nd Iteration: Context

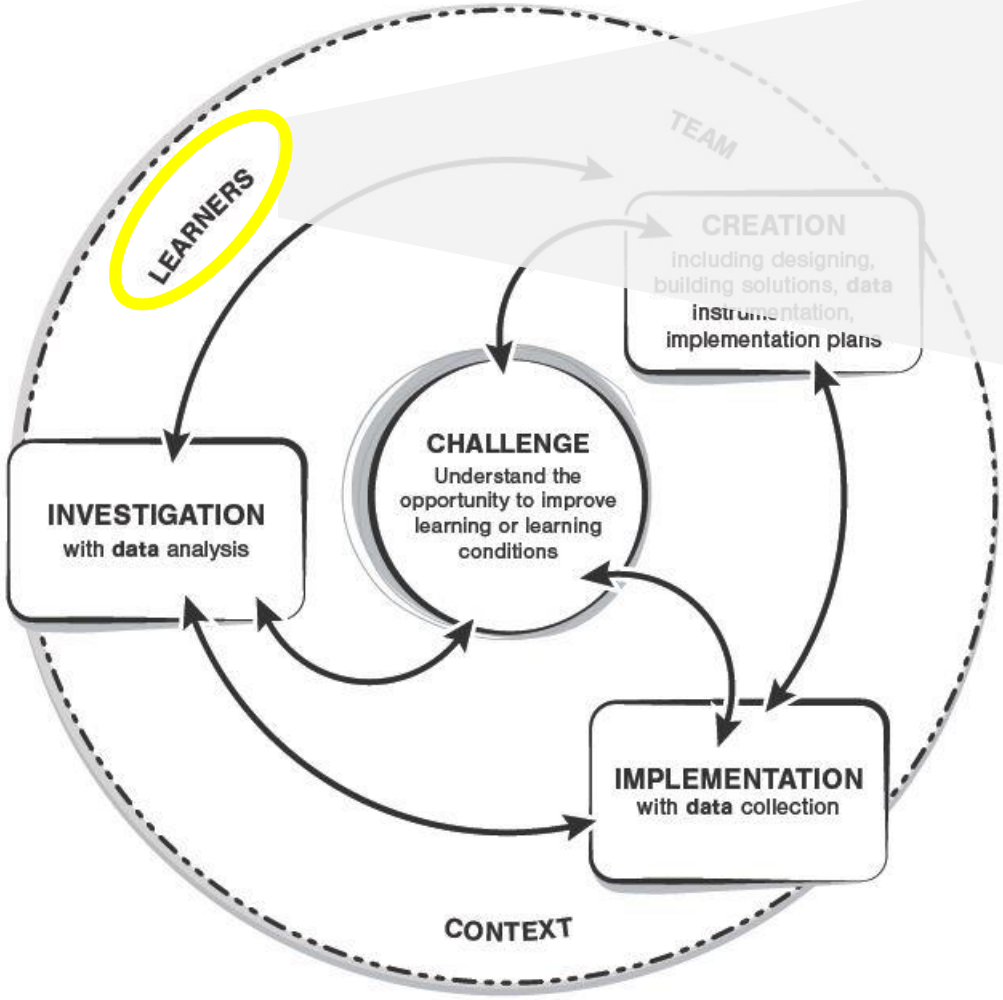

FIGURE 1.1. The learning engineering process

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- Same audience, but changes to access – now co-located with other tech resources

2nd Iteration: Context

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- Same audience, but changes to access – now co-located with other tech resources
- Increased awareness & lowered barriers

2nd Iteration: Context

FIGURE 1.1. The learning engineering process

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- **Timing:** New platform = opportunities to revisit feedback & decisions from 1st iteration

2nd Iteration: Context

FIGURE 1.1. The learning engineering process

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- **Resources:** Canvas platform – connection b/w Lightboard and LMS as suite of tools for teaching

2nd Iteration: Design Decisions

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Entry point: Prior decision about using video clips

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Entry point: Prior decision about using video clips

Revisit resulted in: Added/swapped in more strategically-selected videos (i.e., stronger examples, more variety)

2nd Iteration: Design Decisions

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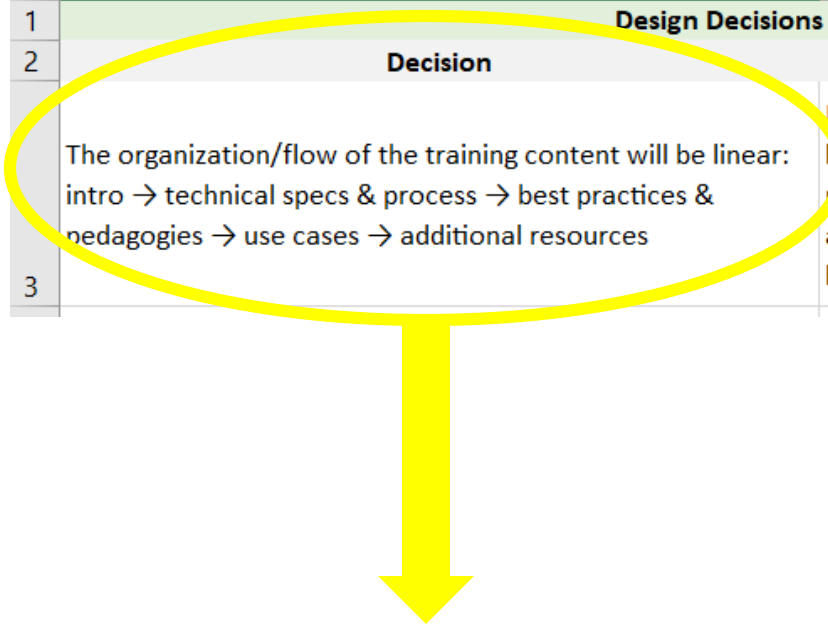

Entry point: Prior decision about linear organization

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Entry point: Prior decision about linear organization

Revisit resulted in: Taking advantage of Canvas's more flexible modular structure to facilitate just-in-time access to resources

2nd Iteration: Design Decisions

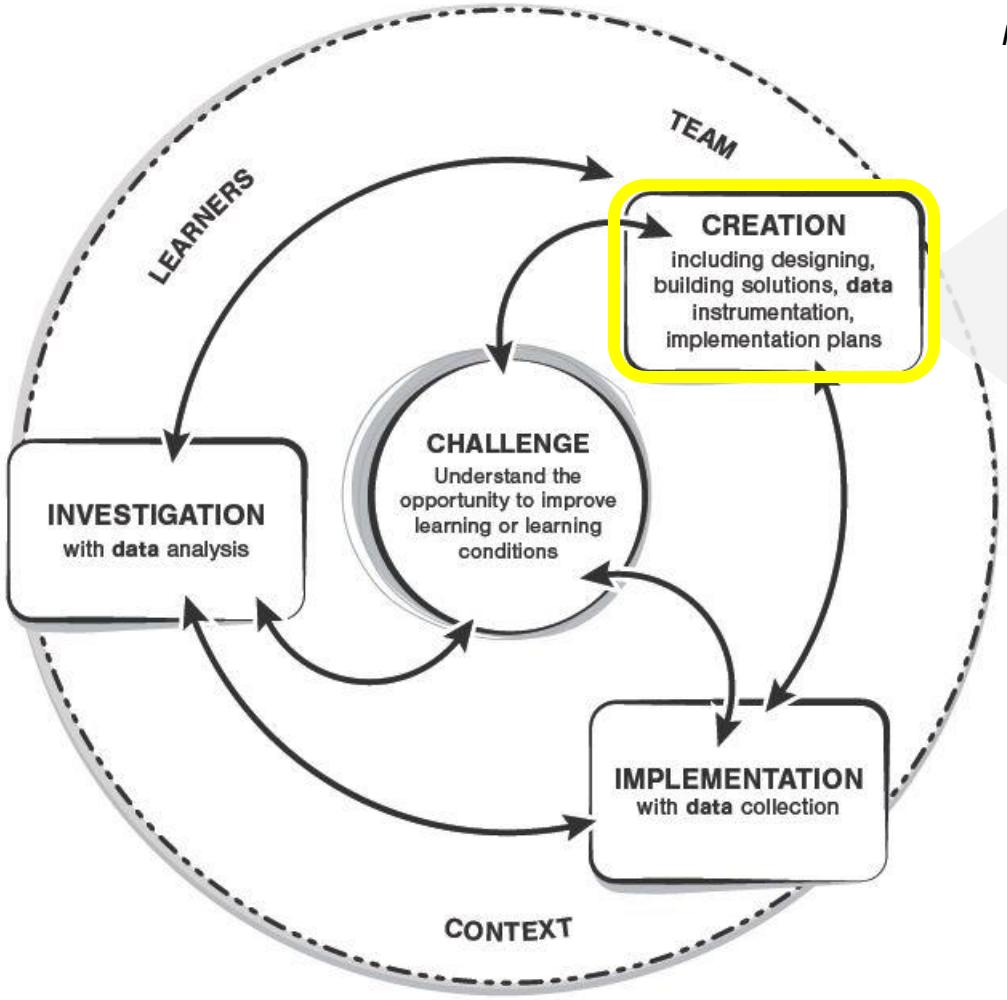

FIGURE 1.1. The learning engineering process

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Tracker used throughout creation to revisit and add decisions like…

- Embed all video clips via Panopto (integrated with Canvas)

2nd Iteration: Design Decisions

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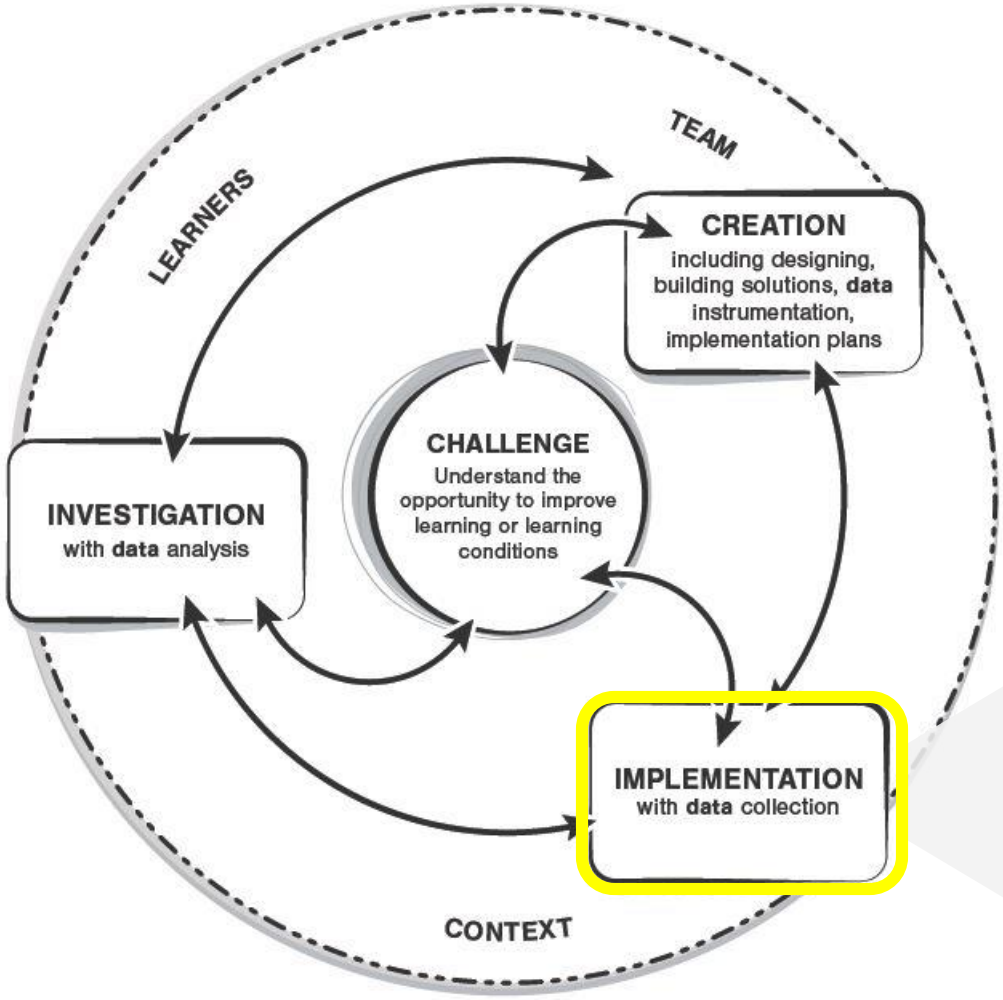
Tracker used throughout creation to revisit and add decisions like…

- Embed all video clips via Panopto (integrated with Canvas)
- Use Canvas surveys for reflection Qs

2nd Iteration: Design Results



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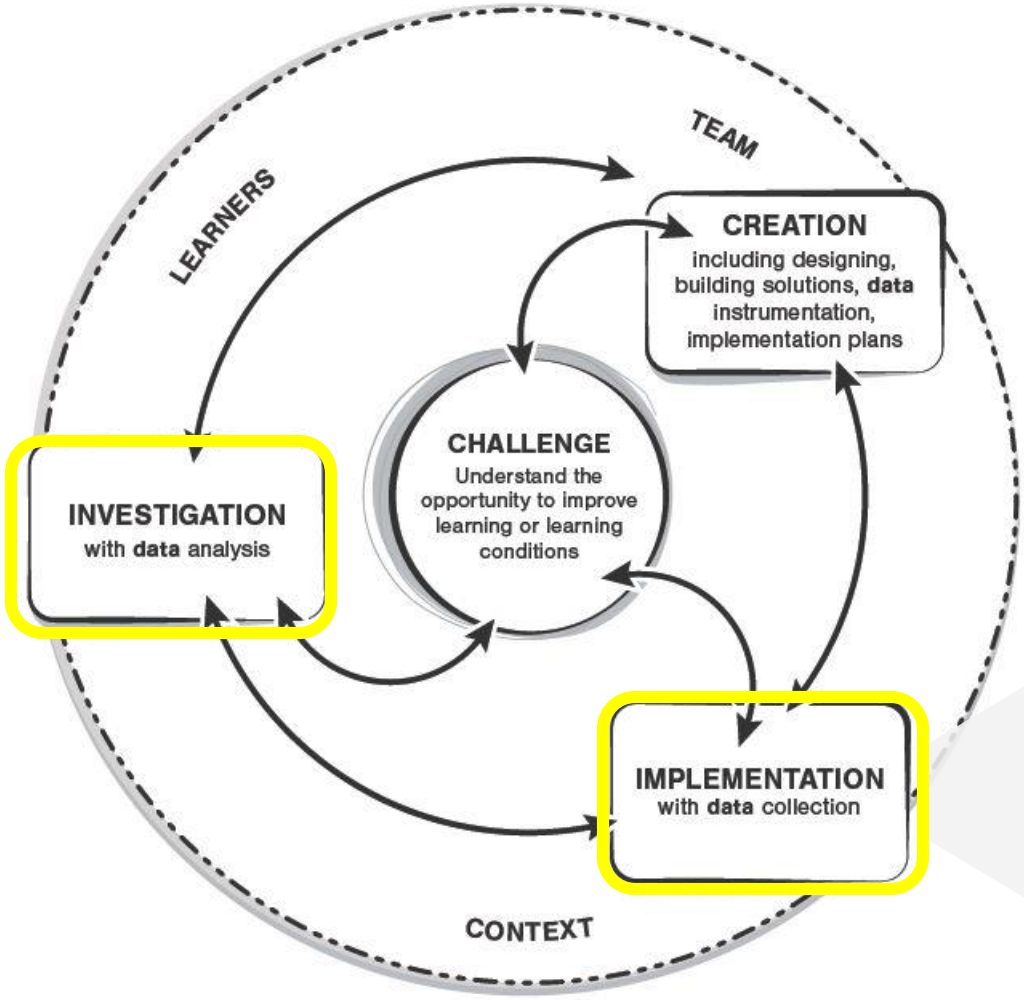
- Data still pending – will be collected from Canvas to capture interactions with platform-specific features leveraged

2nd Iteration: Design Results



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Considerations for Teams

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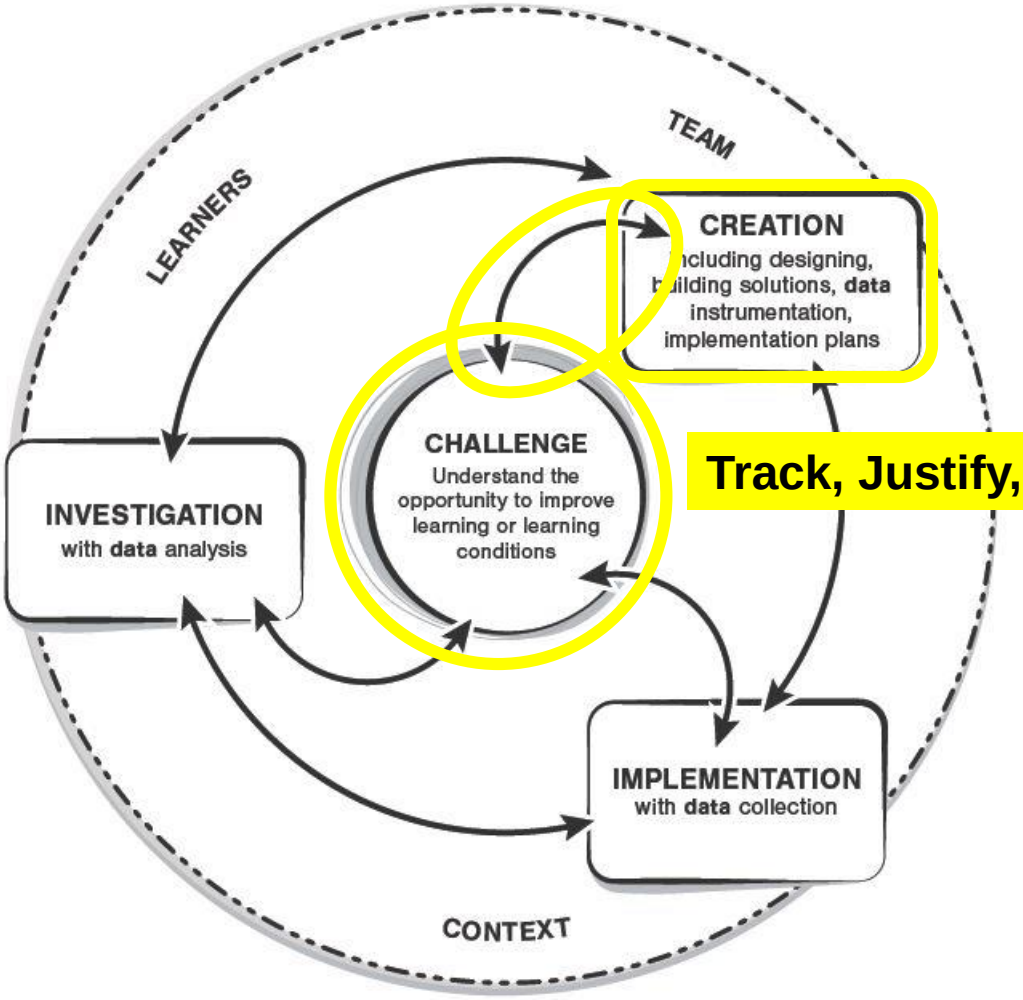

Track, Justify, Flag

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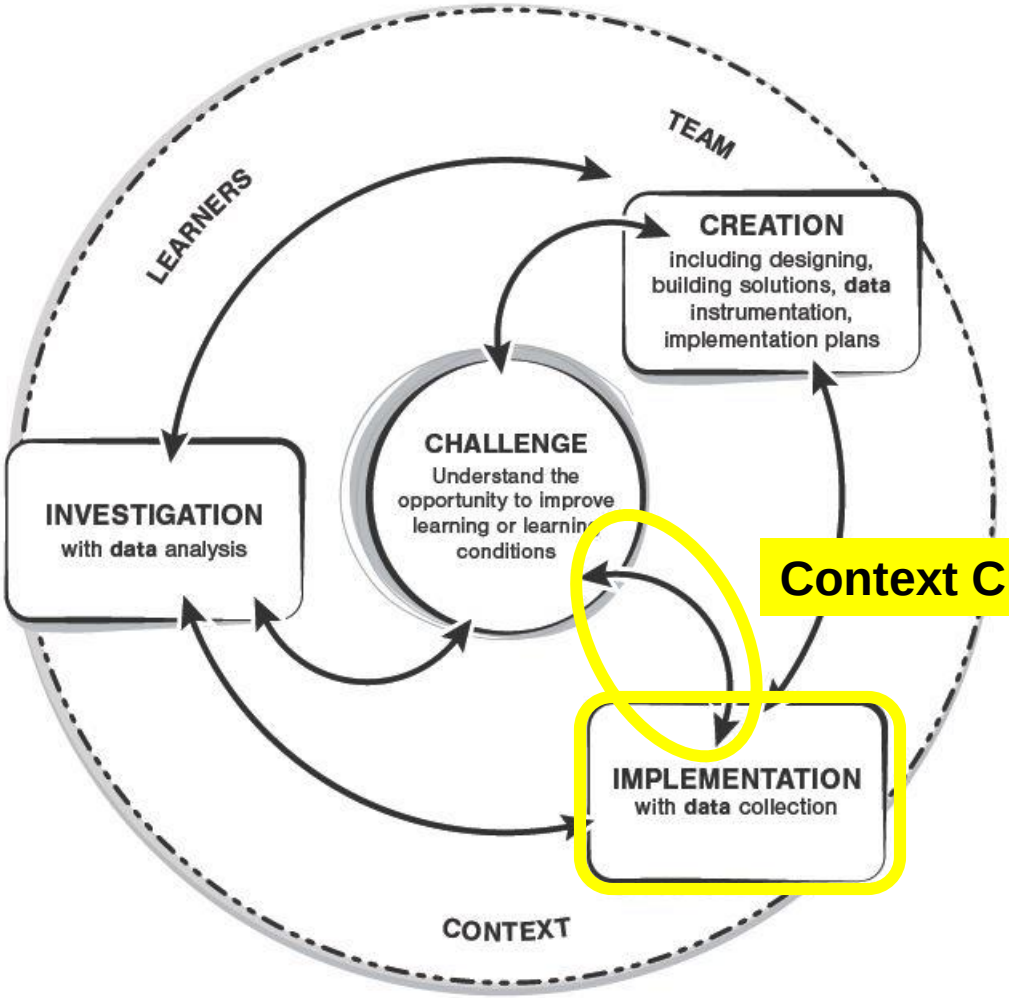
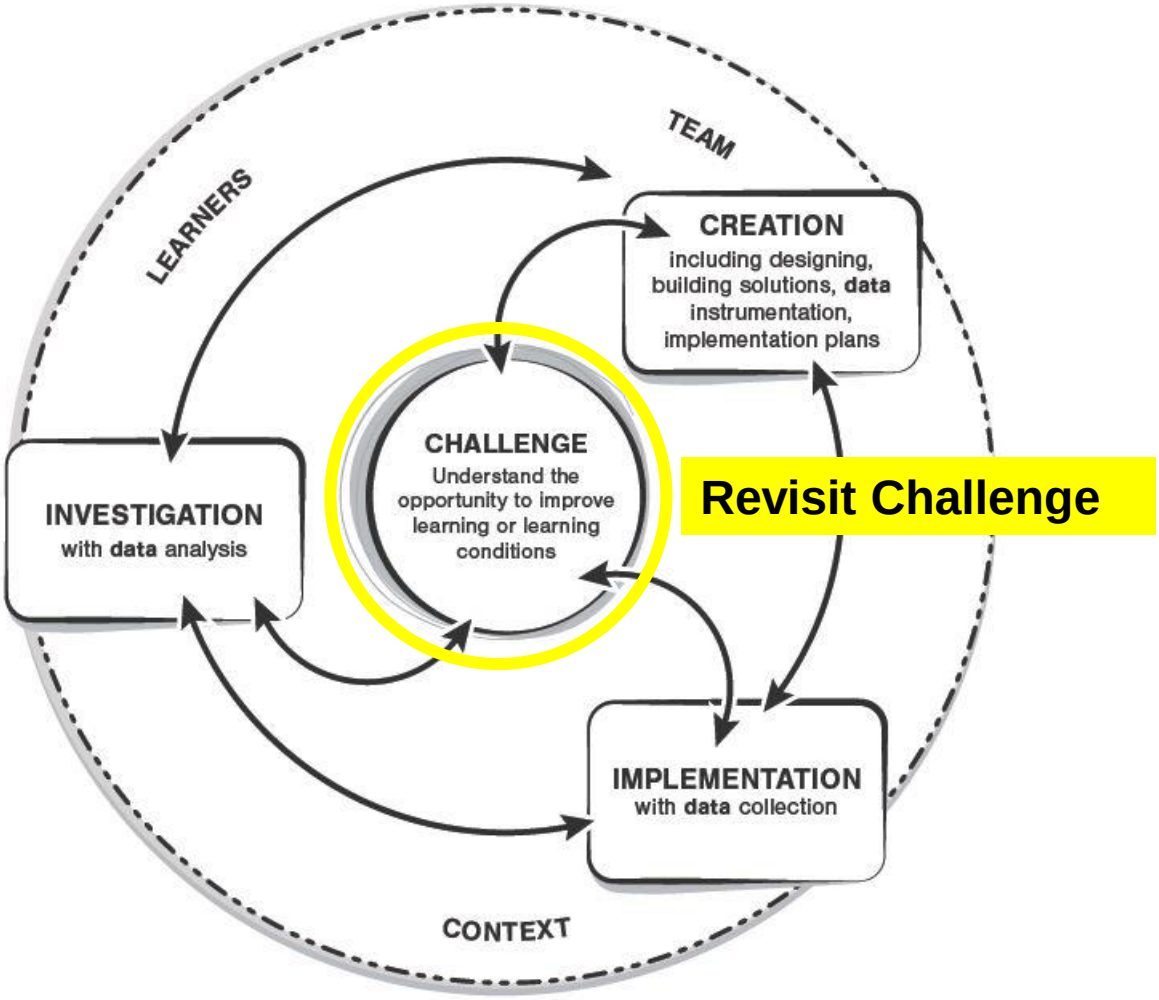
Considerations for Teams



Context Changes

FIGURE 1.1. The learning engineering process

Considerations for Teams



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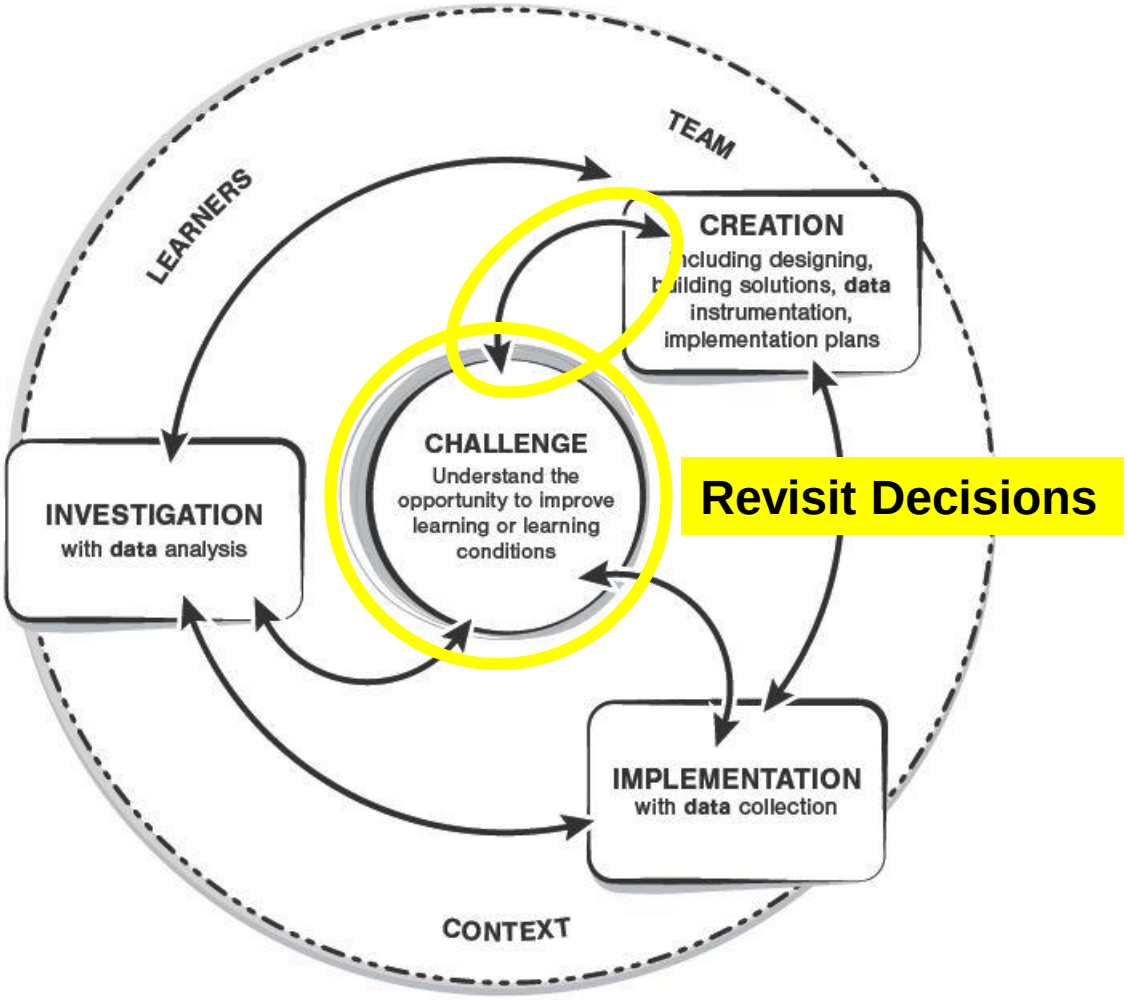

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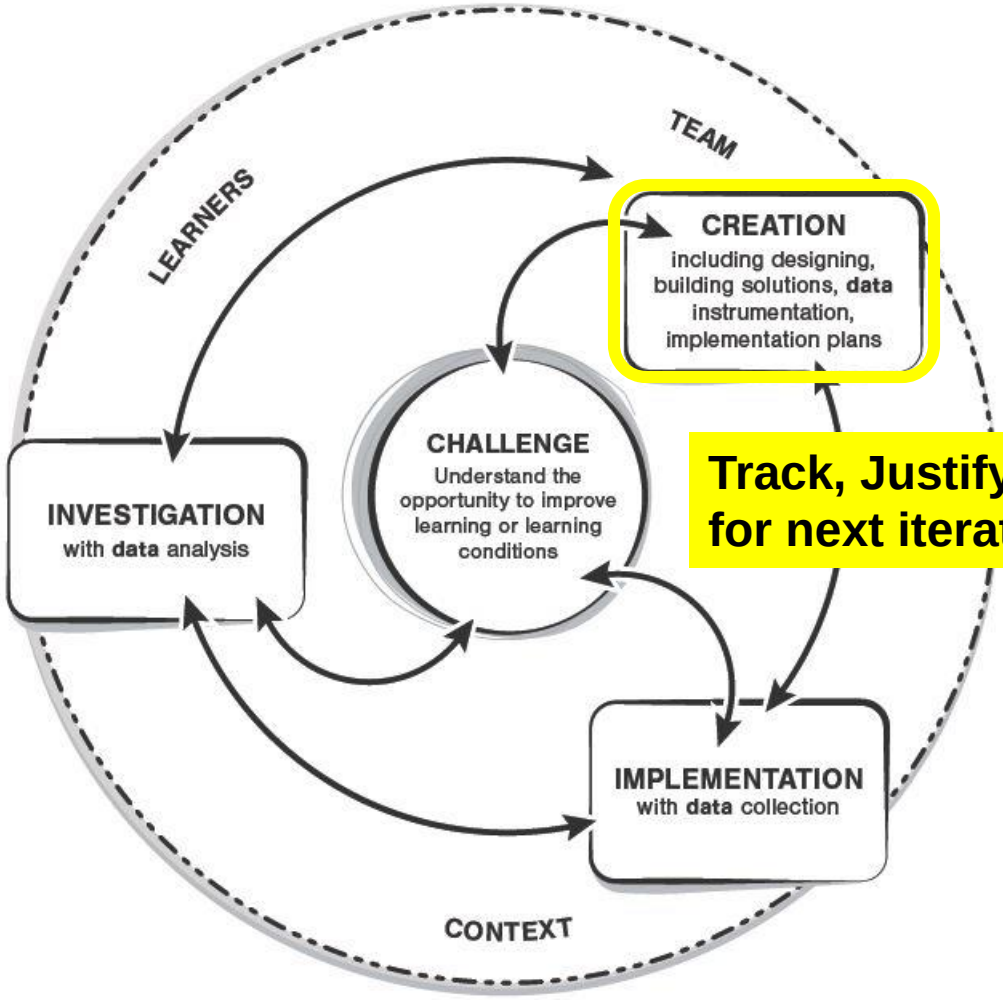

Track, Justify, Flag for next iteration

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