Curriculum Design

Applying engineering design principles to programmes of learning.

Engineers are constantly on the lookout for a better way to do things.
Dinesh Paliwal

School systems should base their curriculum not on the idea of separate subjects, but on the much more fertile idea of disciplines... which makes possible a fluid and dynamic curriculum that is interdisciplinary.
Ken Robinson

How It Works

Curricula define the future. The things that children learn now will guide what they can be and what they can do later on in their lives. Therefore, curriculum design deserves our best thinking and our most effective processes. It's that important. Here we will use Simon Sinek's Golden Circle model in combination with a standard engineering design process as a way to craft a curriculum that is fit-for-purpose, meaningful and engaging.

Knowledge, Skills & Attitudes

Do you deliver someone else's curriculum or have you designed your own? Maybe a combination of the two. Making an effective curriculum requires local, national and global knowledge; skills such as analysis, creativity, evaluation and problem solving; and attitudes of determination and belief that you have the power and influence to shape the future.

1. Define Problem

What specific knowledge, skills and attitudes do you want your pupils to have when they leave you?

How can you best prepare them for the kind of futures they may have?

2. Collect Info.

How well does your existing curriculum solve your problem?

Who else has a curriculum that might work for you?

Do you have the capacity to create this curriculum?

3. Bstorm/Analyse

How, specifically, will knowledge, skills and attitudes be arranged across time?

What leads your progression and continuity: subjects? skills? disciplines? values?

Step 1 Intent

Simon Sinek challenges organisations to define what they do, how they do it but most importantly, why. Ask these questions before designing a curriculum:

WHY - Intent, purpose. Why does our school exist?

HOW - What makes our school different/special?

WHAT - What do we offer to pupils/the community?
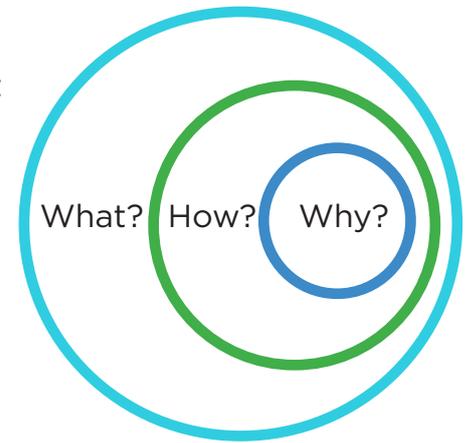
Step 2 Design Process

- Define the problem
- Collect information
- Brainstorm & analyse
- Develop solutions
- Trail and evaluation
- Improve the design

Each step is expanded on below with questions.

Design is not just what it looks like and feels like. Design is how it works.
Steve Jobs

First Steps

Why does your school exist? Express this as a 'so that' statement:
Our school <what/how> so that <why>:

Premium PowerPoint with CPD tasks available for you to use in school
https://www.thinkingclassroom.co.uk/MembersResources/ThinkingClassroomResources/ResourceDetail/tabid/312/ArticleId/812/Curriculum-Design.aspx

4. Develop Sol'ns

What are the possible curriculum designs?

What is the most radical/least radical thing we could do?

How much risk are we prepared to take?

5. Trail & Evaluate

What will we try out, where and for how long?

How will we evaluate?

How will we know that what we've designed matches our intent and solves our problem?

6. Improve Design

What needs to change?

How flexible, dynamic and responsive is our curriculum design?

How will we know if it's NOT effective?