

Lesson Plan

This lesson plan is designed to help you teach using a Common Craft video. Use the information below to introduce the video and then follow the video with discussion questions and other resources.



commoncraft.com/video/agile-methodology

ISTE Standard:

Innovative Designer

Agile Methodology

Explained by Common Craft

Traditionally, software has been developed using a process called Waterfall Methodology. In recent years, a new way using Agile Methodology emerged and fundamentally changed how we think about software development and other projects. This video explains the basics of Agile Methodology.

Learning Outcomes

- Define the terms Agile methodology and Waterfall methodology
- Identify key features of agile methodology
- Describe benefits of using agile methodology for project planning

Discussion Questions

Q #1

How would you determine whether to use agile methodology or waterfall methodology for a software development project?

Q #2

If a client develops additional needs midway through a project, how would those needs affect software development that used agile methodology compared with waterfall methodology?

Knowledge Check Q&A

Q

What is agile methodology?

A

It is an approach to software development with frequent cycles of iteration that plans for change to account for learning from experience.

Q

What is waterfall methodology?

A

It is an approach to software development in which upfront plans are followed throughout the project.

Q

Why does agile methodology give software teams the chance to make their outcomes even better than expected?

A

The iterative process of agile methodology can lead to discoveries that exceed client expectations.

Resources for Learning More

Agile Manifesto

Kent Beck, Mike Beedle, Arie van Bennekum, et al.
"Manifesto for agile software development" 2001

<http://agilemanifesto.org/>

Agile Manifesto

Kent Beck, Mike Beedle, Arie van Bennekum, et al.
"Principles behind the agile manifesto" 2001

<http://agilemanifesto.org/principles.html>

Agile Project Management for Dummies

Mark C. Layton
"Agile project management for dummies cheat sheet" 2012

<http://www.dummies.com/careers/project-management/agile-project-management-for-dummies-cheat-sheet/>

Harvard Business Review

Darrell Rigby, Jeff Sutherland, and Hirotaka Takeuchi
"Embracing agile"
5/2016

<https://hbr.org/2016/05/embracing-agile>

Laboratoria

Rodulfo Prieto
"The agile classroom: Embracing an agile mindset in education"
8/2016

<https://medium.com/laboratoria/the-agile-classroom-embracing-an-agile-mindset-in-education-ae0f19e801f3>