Onshape self-directed resource

This resource outlines a non-linear approach to exploring and developing skills within the Onshape cloud-based CAD platform. This resource is designed to emulate and support an online elective CPD event which took place in term one of the 2020/2021 academic year.

What is Onshape?

Onshape is a cloud-based CAD platform which may be a suitable for Junior Cycle students as it encourages an understanding of the relationship between 2D shapes and 3D form. It may also be a suitable platform to realise and communicate design solutions.

How is this resource structured?

This resource is structured into three parts with both Microsoft and Google Forms and a CPD booklet which aims to develop knowledge and proficiency with Onshape while also considering how Onshape could contribute to the overall student experience in Junior Cycle Graphics. Both Google and Microsoft forms are available in direct engagement and make copy formats, this enables teachers to engage with the resource in its current format or edit the resource to suit their own student's context.

	Google Forms		Microsoft Forms	
	Direct engagement	Make a copy	Direct engagement	Make a copy
Part 1: *Introduction to Onshape*	Link	Link	Link	Link
Part 2: *Modelling geometric solids using Onshape*	Link	Link	Link	Link
Part 3: *Collaborating and using Onshape on multiple devices*	Link	Link	Link	Link

More detail on what is explored in each part can be found on the next page.

How do I know where to start?

On the following page, you will find the main information explored in each part. Choose an appropriate part which will match your prior experience with Onshape. This resource is non-linear and can be engaged with however you see fit.

How can I best engage with the resource?

To best engage with this resource, register for a free Onshape Education Standard Plan account and use the online platform in tandem with either Google or Microsoft Forms. It is also recommended that you have a copy of the CPD booklet which is referenced in the resource.
To register for your free Education Standard Plan, click the icon below.

CPD booklet

The CPD booklet is designed to scaffold engagement with Google and Microsoft Forms. The booklet is referenced directly in the resource.
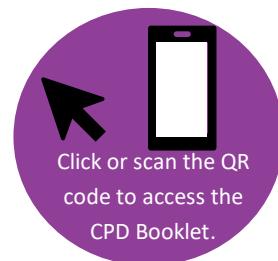
Part 1:

Part 1 is an introduction to Onshape. Topics which will be explored in this section are:

- Onshape signup process.
- Onshape settings and preferences.
- Navigation of the Onshape workspace. Creating a sketch.
- Extrude feature.
- Non-sketch-based features.
- Revolve feature.
- Editing and manipulating parts.
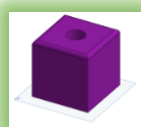
Google Form	Microsoft Form
Direct engagement	Direct engagement
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Part 2:

Part 2 focuses on creating more complex 3D geometric solids. Topics which will be explored in this section are:

- Loft feature.
- Sketch constraints.
- Editing an Onshape part.
- Inserting planes.
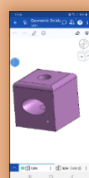- Creating a drawing.
- Exporting and importing.

Google Form	Microsoft Form
Direct engagement	Direct engagement
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Part 3:

Part 3 focuses on the collaboration and sharing of Onshape documents. Topics which will be explored in this section are:

- Sharing and collaboration.
- Keyboard shortcuts.
- Help and Learning Centre.
- Onshape using iOS and Android.
- Exploring the workshop booklet.

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