



TEACHING UNIT PLAN

Visual Arts: DIGITAL MODELING (Architecture and Design)

Name of school	Agrupamento de Escolas de Sátão
Theme of the lesson	Visual Arts: DIGITAL MODELING (Architecture and Design)
Pupils' age range	9th grade (14 – 15 years of age)
Timeline	8 to 10 lessons
Objectives	<ol style="list-style-type: none"> 1. Understand ways that architecture and design can shape and improve the way we live. 2. Engage in the design process by creating a unique floor plan. 3. Think critically to brainstorm multiple design solutions. 4. Develop skills in modelling and drafting in three- dimensions. 5. Introduce new technology and resources. 6. Learn about and experience practices used by professional designers. 7. Think critically to creatively solve unique design challenges. 8. Accurately and successfully, apply the use of scale in a design.
Methods	<p>What do we need from our houses? Does everyone use a house the same way?</p> <p>In this activity, students consider what it means to design for purpose by understanding how diverse families use houses differently and rethinking multiple layouts for the design of a house based on the needs of the people living there. Students engage in the architectural practice of model homes by drafting designs in three-dimensions using SketchUp or Planner 5d. Designing their dream home. Modelling is a practice used by design professionals to workout ideas, revise, critique, and challenge themselves. Taking part in this practice gives insight in to the design profession while providing hands-on opportunities to develop and strengthen skills.</p>
Materials	Pencil and sketchbook.
Used Apps	<p>Access to computers, tablets or smartphones.</p> <p>SketchUp (available free online at: https://www.sketchup.com/)</p> <p>Planner 5d (available free online at: https://planner5d.com/)</p>
Assessment	<p>Automatic recording of mistakes and progress of each student.</p> <p>Oral interaction with students.</p> <p>Presentation of projects.</p>

Remarks	<ul style="list-style-type: none">- easy to motivate pupils- easy to evaluate- individual ideias <p>Powerpoint is a very useful tool to make printscreens of pupils projects to put on display.</p>
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